

SUBMIT BIDS TO:	CITY OF TUSCALOOSA P.O. BOX 2089 TUSCALOOSA, AL 35403	PURCHASING OFFICE 2201 UNIV. BLVD. TUSCALOOSA, AL 35401	INVITATION TO BID
BID TITLE MEDIUM VOLTAGE CIRCUIT BREAKER SWITCHGEAR			BID NO. 61540370-081825-1
PAGE 1 OF 69 PAGES	BIDS WILL BE OPENED AT 10:00AM CST ON AUGUST 18, 2025, IN THE OFFICE OF THE PURCHASING AGENT, 2201 UNIVERSITY BLVD. TUSCALOOSA, AL 35401 AND MAY NOT BE WITHDRAWN FOR THIRTY (30) DAYS AFTER SUCH DATE & TIME.		ISSUE DATE 07/25/2025
 MAYOR WALTER MADDOX COUNCIL MEMBERS JOSEPH EATMON, SR. KIP TYNER RAEVAN HOWARD JOHN FAILE NORMAN CROW CASSIUS LANIER LEE BUSBY PURCHASING AGENT AMANDA GANN		Vendor Information (SECTION TO BE COMPLETED BY VENDOR) Company Name (Please Print) Phone Number Point of Contact Email Address	

GENERAL CONDITIONS OF INVITATIONS TO BID

1. PREPARATION OF BIDS

Bids will be prepared in accordance with the following:

- (a) Our enclosed Bid forms are to be used in submitting your bid.
- (b) All information required by the Bid form shall be furnished. The bidder shall print or type his name and manually sign the schedule and each continuation sheet on which any entry is made.
- (c) Unit prices shall be shown and where there is an error in extension of price, the unit price shall govern.
- (d) Proposed delivery time must be shown and shall include Sundays and holidays.
- (e) Bidder will not include federal taxes nor State of Alabama sales, excise, and use taxes in bid prices as the City is exempt from payment of such taxes. An exemption certificate will be signed where applicable upon request.
- (f) Bidders shall thoroughly examine the drawings, specifications, schedule, instructions and all other contract documents.
- (g) Bidders shall make all investigations necessary to thoroughly inform themselves regarding plant and facilities for delivery of material and equipment as required by the bid conditions. No plea of ignorance by the bidder of conditions that exist or that may hereafter exist as a result of failure or omission on the part of the bidder to make the necessary examinations and investigations, or failure to fulfill in every detail the requirements of the contract documents, will be accepted as a basis for varying the requirements of the City or the compensation to the vendor.
- (h) Bidders are advised that all City Contracts are subject to all legal requirements provided for in the Purchasing ordinance and/or State and Federal Statutes.

2. DESCRIPTION OF SUPPLIES

- (a) Any manufacturer's names, trade names, brand name, or catalog numbers used in specifications are for the purpose of describing and establishing general quality levels. SUCH REFERENCES ARE NOT INTENDED TO BE RESTRICTIVE. Bids will be considered for any brand which meets the quality of the specifications listed for any items.
- (b) Bidders are required to state exactly what they intend to furnish, otherwise they shall be required to furnish the items as specified.
- (c) Bidders will submit, with their proposal, data necessary to evaluate and determine the quality of the item(s) they are bidding.

3. SUBMISSION OF BIDS

- (a) All bids must be sealed, which means a bid must be enclosed in an envelope or package that is securely closed, not viewable without opening, and labeled as instructed. The envelope must be sealed in a way that reveals any tampering. If using an outer shipping package, the inner envelope must still be sealed and clearly labeled.
- (b) See INSTRUCTIONS TO BIDDERS for detailed instructions about submitting a sealed bid. Telegraphic bids will not be considered.

4. REJECTION OF BIDS

- (a) The City may reject a bid if:
 1. The bidder misstates or conceals any material fact in the bid, or if,
 2. The bid does not strictly conform to the law or requirement of bid, or if,
 3. The bid is conditional, except that the bidder may qualify his bid for acceptance by the City on an "all or none" basis, or a "low item" basis. An "all or none" basis bid must include all items upon which bids are invited.
- (b) The City may, however, reject all bids whenever it is deemed in the best interest of the City. The City may also waive any minor informalities or irregularities in any bid.

GENERAL CONDITIONS OF INVITATIONS TO BID, CONTINUED**5. WITHDRAWAL OF BIDS**

- (a) Bids may not be withdrawn after the time set for the bid opening.
- (b) Bids may be withdrawn prior to the time set for the bid opening.

6. LATE BIDS OR MODIFICATIONS

- (a) Bids and modifications received after the time set for the bid opening will not be considered.
- (b) Modifications in writing received prior to the time set for the bid opening will be accepted.

7. CLARIFICATIONS OR OBJECTION TO BID SPECIFICATIONS

If any person contemplating submitting a bid for this contract is in doubt as to the true meaning of the specifications or other bid documents of any part thereof, he may submit to the Purchasing Agent on or before five (5) days prior to scheduled opening a request for clarification. All such requests for information shall be made in writing and the person submitting the request will be responsible for its prompt delivery. Any objection to the specifications and requirements as set forth in this bid must be filed in writing with the Purchasing Agent on or before five (5) days prior to scheduled opening.

8. DISCOUNTS

- (a) Bidders may offer a cash discount for prompt payment; however, such discounts shall NOT be considered in determining the lowest net cost for bid evaluation purposes. Bidders are encouraged to reflect cash discounts in the unit prices quoted.
- (b) In connection with any discount offered, time will be computed from the date of receipt of supplies or services or from the date a correct invoice is received, whichever is the later date. Payment is deemed to be made on the date of mailing of the check.

9. SAMPLES

Samples, when required, must be submitted within the time specified at no expense to the City of Tuscaloosa. If not destroyed or used up during testing, samples will be returned upon request at the bidder's expense, unless stated otherwise in Special Conditions or Specifications. Each individual sample must be labeled with bidder's name and manufacturer's brand name and number.

10. AWARD OF CONTRACT

- (a) The contract will be awarded to the lowest responsible bidder based upon the following factors: quality; conformity with specifications; purpose for which required; terms of delivery; transportation charges; dates of delivery.
- (b) The city reserves the right to accept and award item by item, and/or by group, or in the aggregate, unless the bidder qualifies his bid by specified limitations. Re Par.4(a)3.
- (c) Prices quoted must be FOB Destination to Tuscaloosa with all transportation charges prepaid unless otherwise specified in the Invitation to Bid.
- (d) A written award of acceptance (Purchase Order), mailed or otherwise furnished to the successful bidder shall result in a binding contract.
- (e) If two or more bids received are for the same total amount or unit price, quality and service being equal, the contract shall be awarded to a local bidder.
- (f) The term of this contract shall be for a period of one (1) year from the date of the Purchase Order.
- (g) Eligibility for Price Adjustment - The City may consider a price adjustment under this contract solely due to a change in tariffs imposed by a governmental authority that directly impacts the cost of a product or a clearly defined component part thereof and only if the vendor fulfills all of the City's conditions and requests for information and documentation. To be eligible for consideration, the request for a price adjustment and the net change in cost attributable to the tariff must exceed five percent (5%) of the total contract price. Adjustment Limitations - Any price adjustment granted under this provision shall be limited to the lesser of: (i) Twenty percent (20%) of the original contract price, or (ii) One-half (50%) of the net increase caused by the tariff. Basis Date for Tariff Adjustment Evaluation - The basis date for evaluating eligibility for tariff adjustments shall be as follows: The latest of five (5) days prior to the bid submission date, proposal submission date, or the date of receipt for the best and final offer, as indicated on the appropriate basis form. Tariff Adjustment Requests - All requests for tariff price adjustments must meet the following requirements:
 - a. **Written Submission:** Requests must be submitted in writing, with a comprehensive cost breakdown detailing how the tariff has affected the total cost of the finished product.
 - b. **Proof of Tariff Payment:** Requests must include official importer receipts or customs documentation demonstrating proof of tariff payment, including the transaction date.
 - c. **Direct Impact Evidence:** Requests will only be considered if they clearly demonstrate that the tariff directly impacts the goods or components being purchased under this contract.
 - d. **Approval Requirement:** All tariff-related price adjustments are subject to the City's sole discretion. Written approval from the City is required prior to implementing any price change. No adjustment will be considered valid until such written approval by the City is provided.

GENERAL CONDITIONS OF INVITATIONS TO BID

- (h) Price Commitment. Awarded bidders must honor the bid prices for the entire contract period. The prices quoted in the bid shall remain firm and unchanged throughout the contract's term, except in the case of adjustments due to tariff actions as described herein. Awarded bidders who fail to honor the bid prices for the full contract term will have their bid award rescinded for the remainder of the awarded contract period. Additionally, such failure may result in the rejection of any future bids submitted by the vendor to the City.
- 11. DELIVERY**
- (a) Deliveries are to be FOB Destination unless otherwise specified in the Invitation to Bids.
- (b) Deliveries are to be made during regular business hours.
- 12. CONDITION OF MATERIALS AND PACKAGING**
- All items furnished must be new and free from defects. No others will be accepted under the terms and intent of this bid. All containers shall be new and suitable for storage or shipment, and price bid shall include standard commercial packaging.
- 13. CLAIMS**
- Successful bidder(s) will be responsible for making any and all claims against carriers for missing or damaged items.
- 14. LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS**
- Bidders shall comply with all local, state, and federal directives, orders and laws as applicable to this bid and subsequent contract(s). Bidders must be eligible to do business in the State of Alabama pursuant to Title 10A of the Code of Alabama. Contract award to purchase the materials covered in this Invitation to Bid and the purchase contract shall be construed and governed by the laws of the State of Alabama and each party hereto agrees to be subject to the jurisdiction of the courts if the State of Alabama.
- 15. PROVISION FOR OTHER AGENCIES**
- Unless otherwise stipulated by the bidder, the bidder agrees when submitting his bid to make available to all City agencies, departments, and in-city municipalities the bid prices he submits, in accordance with the bid terms and conditions, should any said department, agency, or municipality wish to buy under this proposal.
- 16. COLLUSION**
- The bidder, by affixing his signature to this proposal, agrees to the following: "Bidder certifies that his bid is made without previous understanding, agreement, or connection with any person, firm, or corporation making a bid for the same items and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action".
- 17. VARIANCE IN CONDITIONS**
- Any and all special conditions and specifications attached hereto which vary from General Conditions shall have precedence.
- 18. TERMINATION**
- Termination for Convenience. The City may, by written notice, terminate this purchase order, in whole or in part, when it is in the best interest of the City. Any invoice received from the contractor for work performed prior to the notice of termination shall be thoroughly reviewed by the City to verify that no excessive costs are included. The City shall pay the contractor after being terminated for convenience an amount equal to the lesser of: a. The actual cost of any work, labor, or materials actually performed or in place and the actual cost of any labor, equipment, or materials ordered in good faith that could not be canceled, less the salvage value thereof; or b. The pro rata percentage of completion based upon any schedule of payments set forth in the contract, plus the actual cost of any labor, equipment, or materials ordered in good faith that could not be canceled, less the salvage value thereof.

** PRELIMINARY BID TAB WILL BE POSTED ON THE CITY'S WEBSITE ONCE AVAILABLE at <https://www.tuscaloosa.com/bids>.

PLEASE CONTINUE READING THE NEXT PAGE

SPECIAL CONDITIONS**The General Conditions of Invitations to Bid and any Special Conditions stated shall be considered as part of the specifications of the bid.**

Reference to brand names and numbers is descriptive, but not restrictive, unless otherwise specified. Bids on equivalent items meeting the standards of quality thereby indicated will be considered, providing the bid clearly describes the article offered and indicates how it differs from the referenced brands. Descriptive literature and manufacturer's specifications plus any supplemental information necessary for comparison purposes must be submitted with the bid or the bid on that item will be rejected.

Determination as to whether an item submitted for bid meets specifications shall be the sole responsibility of City personnel. Failure to include this information will subject a bid to rejection. Reference to literature submitted with a previous bid or on file with the Division of Purchasing will not satisfy this requirement. The burden is on the bidder to demonstrate that the item bid is equivalent to the item specified in the IFB (Invitation For Bid). Any exceptions taken to any item(s) must be fully explained in written detail on bidders' letterhead and attached to the bid when submitted.

Awards shall be made, or contracts entered into with the lowest responsible bidder(s) meeting all specifications and terms and conditions established by the Division of Purchasing. The Division of Purchasing reserves the right to determine the lowest responsible bidder on the basis of an individual item or group of items. Delivery dates may be a factor in awards.

Questions concerning the bid process should be directed to Amanda Gann at agann@tuscaloosa.com.

Questions concerning Specifications should be directed to Morgan Garner at morgan@garner-engineering.com.

Any addenda issued for this bid will be posted on the City of Tuscaloosa website at <http://www.tuscaloosa.com/bids>. It is the responsibility of the bidder to check this page for any addendums before submitting their bid.

See Appendix A – instructions to Bidders regarding ADEM Supplemental General Conditions for SRF Assisted Projects.

See Appendix B – Supplemental General Conditions for SRF Assisted Public Drinking Water and Wastewater Facilities Construction Contracts.

Switchgear Diagrams

These diagrams provide the design layout for the Medium-Voltage Gas-Insulated Switchgear (GIS) System and additional pieces of electrical equipment to be delivered and commissioned. These diagrams serve as a reference for bidders to understand the technical requirements, equipment interfaces, and system layout for pricing, design verification, and implementation. Any proposed deviations or substitutions must be clearly identified in the bid response. The City reserves the right to reject any bid that fails to demonstrate compatibility with the layout and configuration.

The technical diagrams and drawings will not be included in the publicly accessible IFB documents. Interested bidders may request access to these documents by contacting the project Engineer at:

- **Engineer's Name:** Morgan Garner
- **Phone Number:** 205-469-6098
- **Email Address:** morgan@garner-engineering.com

PLEASE CONTINUE READING THE NEXT PAGE

INSTRUCTIONS TO BIDDERS

Bid Submission Requirements

1. **Completed Bid Forms** – Use the forms included herein to submit your response.
 - a. Use the provided fillable PDF version of the bid forms.
 - b. All forms must be completed in full and returned in the original format. Do not reformat, rearrange, or recreate the bid forms.
 - c. Each page that requires a signature must be signed by an authorized representative.
 - d. Signature fields are intentionally not prefilled in the PDF. It is the bidder's responsibility to sign each applicable page after completing the fillable fields.
 - i. Acceptable methods include wet ink (handwritten) or a verified digital signature.
 - ii. Typed names without authentication are not sufficient.
 - e. Bids that are incomplete, unsigned, or submitted with altered forms may be deemed non-responsive and rejected.
2. **Supporting Documentation** – Include any technical literature, specifications, or other documentation as outlined in this IFB.
3. **Additional Required Items** – Submit any other required items, such as forms, samples, or documents requested in this IFB.
4. **W-9 Form** – Include a completed and signed IRS Form W-9. A blank template is available at: <https://www.irs.gov/pub/irs-pdf/fw9.pdf>.
5. **Acknowledged Addenda** – If applicable, include all completed and signed addenda.
 - a. *It is the bidder's responsibility to monitor the City's official website for issued addenda.* www.tuscaloosa.com/bids
6. **Bid Submission Methods and Bid Envelope Instructions as detailed below MUST be followed.**

Bid Submission Methods

Bidders must choose one of these four bid submissions listed below:

1. Electronic Submission

Bidders may submit complete bid packages as PDF files at: www.centralbidding.com.

For technical assistance, contact Central Bidding at (225) 810-4814 or support@centralbidding.com.

2. Commercial Delivery Service (e.g., UPS, FedEx, DHL)

Bidders may submit sealed bids using a commercial delivery service (e.g., UPS, FedEx, DHL).

Physical Delivery Address for Commercial Delivery Service

Amanda Gann, Purchasing Agent

City of Tuscaloosa

2201 University Boulevard, Tuscaloosa, AL 35401

3. Delivery by USPS Mailing Method

*****Important Note on USPS Mailing Method:**

Do not use standard USPS First-Class or regular stamped mail. Bids submitted this way will not be accepted.

*If using the U.S. Postal Service, the bidder **MUST SELECT** a USPS service that includes both tracking and signature confirmation (e.g., Priority Mail with Signature Confirmation).

*The City is not responsible for misrouted or delayed USPS mail, and late submissions will not be accepted under any circumstance.

Mailing Address for USPS is different than the other delivery methods. Address for USPS delivery is

Amanda Gann, Purchasing Agent

City of Tuscaloosa

PO Box 2089, Tuscaloosa, AL 35403

4. Hand Delivery

Bidders may hand-deliver sealed bids to the security desk at the City Hall complex. Entry is located on the 4th level of the Intermodal Facility parking deck, accessible from 7th Street beside Government Plaza. Security will notify Purchasing staff.

Hand Delivery Address

Amanda Gann, Purchasing Agent

City of Tuscaloosa,

2230 7th St, Tuscaloosa, AL 35401

INSTRUCTIONS TO BIDDERS CONTINUED ON NEXT PAGE

INSTRUCTIONS TO BIDDERS, CONTINUED

Bid Envelope Instructions

1. Outer Envelope Labeling Requirements
 - a) Outer Envelope **MUST HAVE THE WORD "BID"** prominently displayed somewhere on the outside envelope
 - b) Outer Envelope **MUST HAVE** Bidder's name and address
 - c) Outer Envelope **MUST HAVE** Bid Title (found on Page 1 of this document)
 - d) Outer Envelope **MUST HAVE** the Date and Time of the Bid Opening (found on Page 1 of this document or as revised by an issued Addenda)
 - 2) **Additional Notes**
 - a) One bid per sealed envelope
 - b) Allow adequate delivery time
 - c) Improperly packaged, labeled, or misrouted envelopes may result in bid rejection
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Bid Opening

The bid opening is open to the public and may be attended in person.

- Bids will be publicly opened and read aloud at the date, time, and location specified on Page 1 of this IFB (or as amended via addendum).
- Only the names of bidders and total base bid amounts (if applicable) will be announced at the opening. Detailed evaluations or award decisions will not be made at that time.
- Bids received after the official deadline will be marked late and returned unopened.
- Bidders are responsible for ensuring that their bids are received by the deadline. No exceptions will be made for late deliveries regardless of the cause.

Bid results will be:

- Posted as a preliminary bid tabulation on the City's website following the opening, which are advertised at www.tuscaloosa.com/bids.

Any changes to the bid submission deadline or opening schedule will be issued through a formal Addendum, which are advertised at www.tuscaloosa.com/bids. Bidders are responsible for monitoring the website for updates.

PLEASE CONTINUE READING THE NEXT PAGE

SPECIFICATIONS

General

This Invitation for Bids (IFB) outlines the requirements for the procurement of Gas Insulated Medium-Voltage Circuit Breaker Switchgear and Associated Electrical Equipment featuring vacuum circuit breakers and associated equipment. The switchgear, rated up to 15 kV, must be suitable for indoor installation and be capable of handling a three-phase, 60 Hz grounded-neutral system. The scope includes the manufacture, factory production testing, and field service assistance during installation and commissioning. The equipment is to be provided by Siemens or Eaton, and must meet industry standards for safety, performance, and reliability. The IFB also includes provisions for equipment assembly, testing, commissioning, and training of the City's maintenance personnel to ensure proper operation and upkeep.

Bidder Qualifications

To be considered for this contract, the bidder must, at a minimum, meet the following qualifications or demonstrate an equivalent level of capability:

1. **Authorized Distributor:** The bidder must be an authorized distributor for Siemens or Eaton. If the bidder is not an authorized distributor, they must provide alternative evidence of a formal partnership or agreement with the manufacturer that ensures they are eligible to supply and commission the equipment. A current letter of authorization is required if applicable.
2. **Experience:** The bidder should have at least 5 years of experience in the supply, installation, and commissioning of medium-voltage gas-insulated switchgear (GIS). If the bidder has less experience, they may demonstrate equivalent experience or relevant industry experience through a list of comparable completed projects.
3. **Certified Personnel:** The bidder should employ factory-certified personnel for installation and commissioning. If factory certification is not available, the bidder may submit evidence of equivalent training or other relevant certifications that demonstrate their personnel are capable of performing the required work to the standards of the manufacturer.
4. **Manufacturer Support:** The bidder must provide confirmation of manufacturer support for commissioning and warranty services. If direct manufacturer support is not available, the bidder may demonstrate alternative arrangements for ensuring access to technical support and warranty services.

Required Documentation:

- **Letter of authorization** from Siemens or Eaton, or evidence of an equivalent partnership.
- **List of completed projects** or evidence of relevant experience.
- **Certification documentation** for factory-trained personnel or equivalent training.
- **Manufacturer support letter**, or proof of alternative support arrangements.

Project Site Address & Delivery Address

Hilliard N. Fletcher Water Resource Recovery Facility, 4010 Reese Phifer Ave. Tuscaloosa, AL 35401

Invoicing and Payment Terms

Submit electronic invoices to accountspayable@tuscaloosa.com. City Managers shall verify contract rates and materials on all invoices prior to authorizing payment of invoices.

PLEASE CONTINUE READING THE NEXT PAGE

Delivery Time And Updates

Delivery time is important. The successful Bidder will be held strictly accountable for the delivery time provided with their bid response.

The awarded bidder is required to provide lead a time/delivery status update the first week of each month. This update should be provided on a monthly basis. This delivery time update will begin from award date until the delivery date. The delivery schedule update information should be emailed no later than the 7th of each month to Owner and Engineer.

In the event the successful Bidder does not meet its delivery time as it has specified the City may take one or more of the following actions:

- a. Terminate the contract for Default
- b. Suspend the vendor from participation in future solicitations

TECHNICAL SPECIFICATIONS**MEDIUM-VOLTAGE CIRCUIT BREAKER SWITCHGEAR****GAS-INSULATED****PART 1 - GENERAL****1.1 SCOPE**

- A. This specification defines the technical requirements for indoor, gas-insulated switchgear (GIS), equipped with vacuum circuit breakers with rated voltage up to 42 kV. This specification covers the design, manufacture, factory production testing and field service assistance during installation and commissioning of SF₆ gas-insulated vacuum circuit breaker switchgear and associated equipment.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections apply to this Section.

1.3 SUBMITTALS

- A. Submit shop drawings and product information in the quantities listed according to the Conditions of the Contract. All transmittals shall be identified by purchaser's name, location and order number.
- B. Approval documents shall include:
 1. General arrangement drawing showing dimensioned elevation and floor plan, foundation details and one-line diagram
 2. Panel arrangement drawing showing layout of devices on the panel doors
 3. Three-line diagrams
 4. Schematics
 5. Nameplate engraving drawings
 6. Electrical bill of material.
- C. Final documents shall include:
 1. Documents listed in 1.3.B above

2. Wiring diagrams
 3. Recommended spare parts list for start-up support
 4. Instruction manual
 5. Test certificates specially for arc resistance.
- D. Product data: Include features, characteristics and ratings of individual circuit breakers and other components.
- E. Shop drawings: Detail equipment assemblies and indicate dimensions, weights, required clearances, method of field assembly, components and location and size of each field connection. Include the following:
1. Nameplate legends
 2. Bus configuration with size and number of conductors in each bus run, including phase and ground conductors of main and branch buses
 3. Current ratings of buses
 4. Short-time and short-circuit ratings and arc-resistant details of switchgear assembly
 5. Detailed wiring diagrams showing wiring for power, signal and control systems including differentiation between manufacturer-installed and field-installed wiring.

1.4 QUALITY ASSURANCE

- A. Manufacturer qualifications: Engage a firm with at least 30 years' experience in manufacturing medium-voltage, gas-insulated, vacuum circuit breaker switchgear. The manufacturer's proposed product shall have been produced for at least 20 years prior to the due date for the equipment proposal. The manufacturer of the switchgear assembly shall also manufacture the medium-voltage circuit breakers.
- B. Comply with requirements of latest revisions of applicable industry standards, specifically including the following:
1. Gas-insulated switchgear.
 - a. IEC 62271-200 - High-voltage switchgear
 - b. IEC 62271-1 - High-voltage common requirements
 - c. IEC 60044-7 – Current transformers
 - d. IEC 60044-8 – Voltage transformers
 - e. ANSI/IEEE C37.20.2 (Where applicable.) – Metal-clad switchgear
 - f. ANSI C37.55 (Where applicable.) – Conformance tests
 - g. UL-Listed (Optional. Availability depends on section detailed requirements.)
 - h. ANSI/IEEE C37.20.7-2017 – Internal arcing tests.
 2. Circuit breakers.
 - a. IEC 62271-100 – High-voltage circuit breakers
 - b. ANSI/IEEE C37.04 - Rating structure for high-voltage circuit breakers
 - c. ANSI/IEEE C37.09 – High-voltage circuit breaker testing
 - d. ANSI/IEEE C37.06 – Preferred ratings for high-voltage circuit breakers

- e. ANSI/IEEE C37.010
- f. ANSI C37.54 (Where applicable.) – Conformance tests.
- 3. Current transformers (CTs).
 - a. ANSI/IEEE C57.13 – Instrument transformers
 - b. IEC 60044-1 – Current transformers
 - c. IEC 60044-8 – Current transformers (electronic).
- 4. Voltage transformers (VTs).
 - a. ANSI/IEEE C57.13 – Instrument transformers
 - b. IEC 60044-2 – Voltage transformers
 - c. IEC 60044-7 – Voltage transformers (electronic).
- 5. Disconnect, isolation and three-position switches.
 - a. IEC 62271-102 – Disconnectors and earthing switches.
- 6. General.
 - a. National Electric Code (NEC)[®] NFPA 70.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver in convenient shipping groups. Shipping groups shall not exceed 10 feet in length.
- B. Outdoor walk-in single-aisle switchgear shall be shipped fully assembled except for necessary shipping splits for transportation and handling.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. The medium-voltage gas-insulated vacuum circuit breaker switchgear assembly shall be type 8DA10 (single-bus) as manufactured by Siemens or pre-approved equal. Approved manufacturers are as follows:
 - 1. Siemens – Top Entry
 - 2. Eaton – Bottom Entry

2.2 RATINGS

- A. System configuration: Switchgear shall be suitable for application in three-phase, three-wire, 60 Hz grounded-neutral system.
- B. Electrical ratings:
 - 1. Rated nominal system voltage, kV: *[4.16]*
 - 2. Maximum design voltage, kV: *[15.0]*
 - 3. Rated main bus current: *[1,200 A]*
 - 4. Rated interrupting (short-circuit) current, kA symmetrical: *[40]*
 - 5. Rated short-time withstand current, kA for 3 sec: *[25]*

6. Rated power-frequency withstand voltage, kV (one-minute): [50]
7. Rated impulse-withstand voltage, kV (BIL): [75]
8. Continuous current rating of the main circuit breaker: [1,200 A]
9. Continuous current rating of the tie circuit breaker: [1,200 A]
10. Continuous current rating of the feeder circuit breaker: [1,200 A]

(Above ratings under 8, 9, and 10 shall be without forced cooling.)

2.3 GENERAL REQUIREMENTS

- A. The medium-voltage, gas-insulated vacuum circuit breaker switchgear shall be metal-enclosed and shall meet ANSI/IEEE C37.20.2 except for differences related to fixed circuit breaker construction, gas insulation, and isolated-phase bus arrangement. The components of the switchgear (for example, circuit breaker, busbar, disconnect switch, grounding switch) shall be in grounded aluminum metal enclosures. The current transformers (CTs) and voltage transformers (VTs) should be outside the gas insulation and easily replaceable. The construction shall withstand forces (repeatedly, without distortion) caused by closing and opening of the circuit breaker. The switchgear shall be capable of withstanding all stresses produced by fault conditions up to and including the rated short-circuit current specified in 2.2.B without damage.
- B. The switchgear shall be classified as arc-resistant with type 2B accessibility, in accordance with ANSI/IEEE C37.20.7-2017 test requirements for full short-circuit rating and from front, lateral, and rear sides.
- C. Each current-carrying component of the equipment shall be capable of continuous operation at the specified ratings without exceeding the maximum temperature rises stated in the ANSI/IEEE and IEC standards.
- D. The switchgear lineup shall be designed and manufactured with provision for future expansion on each side without any gas work. Exception to it is where the arrangement does not allow extension. Manufacturer shall offer future bus extension disconnect switch (if requested in the single-line diagram) in order to avoid de-energization of the main busbar. When extending either end of the switchgear, it shall not be necessary to evacuate the bus extension switch SF₆ gas compartment and remove end panels for the associated busbars. No gas compartment should be affected. The future extension switch shall not add any section to the lineup's length.
- E. The enclosures housing the primary (medium-voltage) components shall be constructed of gas-tight, cast aluminum. Ferrous metal components shall be finished with electrostatically applied paint finish in manufacturer's standard light gray color. Mechanism parts not suitable for painting shall be plated for corrosion resistance.
- F. The medium-voltage enclosure shall be factory assembled and modular in design. Medium-voltage components shall be enclosed in cast aluminum, hermetically sealed, single-pole (phase) enclosures to eliminate the possibility of phase-to-phase faults in the switchgear.
- G. The medium-voltage enclosure shall be pressurized with SF₆ gas to isolate energized components from environmental influences, thus allowing no or long intervals between maintenance. The switchgear shall be designed so that normal service, inspection, maintenance, grounding of high-voltage cables and elimination of electrostatic charges can be carried out safely with adjacent sections energized.
- H. A continuous ground bus shall run the length of a switchgear group for reliable grounding. Each feeder section housing shall be connected to the switchgear ground bus.
- I. Conductors and connectors for the busbars shall be copper, designed to carry rated continuous current at 40 °C ambient temperature and shall withstand the rated short-circuit current specified in 2.2.B. The surfaces of the conductors shall have a smooth finish to prevent any electrical discharges. Disconnect and ground switch contacts shall be silver-plated to provide high conductivity and shall match the rating of the associated busbar or circuit breaker.

- J. The front of each switchgear section shall consist of four separate compartments for the following main components:
1. Protective relays and controls located in the top compartment. Terminal blocks, CT connections, VT connections, and miscellaneous control devices shall be located in this compartment. Connection terminal blocks for purchaser's external connections will be located in this compartment. Operation of the switchgear shall not be affected by opening any of the low-voltage compartment doors.
 2. Three-position switch operating mechanism with all serviceable items accessible from the front.
 3. Circuit breaker operating mechanism with all serviceable items accessible from the front.
 4. The lower compartment shall be available for additional mounting of low-voltage components or external connection, if required.
- K. Circuit breaker and three-position switch disconnect switch shall have a mimic diagram of sufficient size. The mimic shall be black in color to contrast with the switchgear finish and be plainly visible to an operator. Mimic diagrams shall show circuit breakers, disconnect switches, grounding switches and busbar connections. Busbar VTs or busbar cable connections should also be shown. The mimic diagram shall be on the front of each section in conjunction with the mechanical switch and circuit breaker position indicators.
- L. SF₆ gas compartment: Each busbar to circuit breaker gas compartment shall be suitably divided into separate sections that are isolated by gas-tight bushings. The division of compartments shall consider the effects of faults within the compartments such that in the event of an internal fault, a pressure relief device operates before internal pressure exceeds the design limit of the compartment. The individual gas-sealed compartments shall be capable of being separately evacuated for inspection or maintenance while keeping the adjacent compartments pressurized to rated pressure. Leakage of gas from the switchgear enclosures shall not exceed 0.1% of the gas per compartment per year.
- M. Switchgear feeders shall be compartmentalized in single-phase, isolated-phase construction, with:
1. A minimum of four gas compartments per standard feeder without optional equipment.
 2. If SF₆ gas-insulated busbar voltage transformers are specified, these shall be installed in separate gas housings, isolated from the main busbar by gas-tight bushings with their own gas monitoring and pressure relief system. Busbar voltage transformers shall be furnished with a three-position switch and primary fuses.
- N. The gas compartments shall be provided with ring type seals at intersections between compartments and at positions where sliding or rotating shafts enter a compartment. The seals shall be capable of withstanding the gas pressure of the compartments under all service conditions. Seals shall be O-Ring type.
- O. Pressure relief devices: Each gas compartment shall be provided with a pressure relief device to limit the pressure in the event of an internal fault. Designs without pressure relief are not acceptable. The pressure relief devices shall be designed such that discharges resulting from internal faults shall be directed away from locations where personnel may be present. The preferred location for the busbar pressure relief shall be such that gases are exhausted through the top of the enclosures. All pressure relief device designs shall be proven by arc-fault design tests in accordance with IEC 62271-200 and ANSI/IEEE C37.20.7 standards.
- P. Insulation: Sulfur-hexafluoride (SF₆) gas and epoxy cast-resin insulating materials shall be employed for the insulation of primary conductors of each phase from the grounded metal enclosure. The insulating gas shall be pressurized higher than atmospheric pressure. Solid insulators shall be non-hygroscopic, epoxy cast-resin, free from voids and contaminants. The contour of the insulators shall be such that a uniform voltage gradient is produced over the entire surface. Epoxy cast-resin bushing-type insulators shall be provided at the intersections between compartments. The bushing-type insulators will support the live conductors and (where necessary) provide a gas-tight barrier between compartments. The design of the gas-tight bushing-type insulator shall be such that it is possible to inspect, maintain, or pressurize each gas section individually without interfering with adjacent gas sections.

- Q. Gas monitoring: The gas compartment shall be provided with a gas pressure manometer. Two dry contacts provided on each manometer shall change state if the pressure falls below preset limits. These manometers shall work without any auxiliary supply and provide the real SF₆ gas pressure inside the gas chambers. A separate gas monitoring system is required for each of the following:
1. Each main busbar phase (phases A, B, and C).
 2. Each set of busbar voltage transformer (VTs), if required. (Three-phase VT compartments shall be monitored together.)
 3. Each circuit breaker. (Three-phase interrupter compartments monitored together.)
- R. The switchgear shall have all the operations from the front of the switchgear. There shall not be a need of rear access for any work. For medium voltage cable termination, switchgear shall be designed for access from top entry and top exit.
- S. The guaranteed leakage rate of each individual gas compartment must be less than 0.1% p.a. over the lifetime of the switchgear.
- T. Each section shall include voltage detectors to indicate phases "L1, L2, and L3". The voltage detectors shall be connected to each phase on the cable side. The indicators shall be located on front of the section. It may be noted that this unit shall also be suitable to be used for interlocking of grounding switches (voltage-free condition), whenever sections are not equipped with VTs.
- U. All of the live parts, including the busbars, should be in continuous SF₆ insulation without any other insulation in between.

2.4 VACUUM CIRCUIT BREAKER

- A. The circuit breakers shall be vacuum type. Gas, oil, or air blast circuit breakers will not be accepted. The circuit breaker shall be designed to withstand impacts and vibrations under rated and short-circuit current conditions. The vacuum interrupters shall be made from a metal alloy that will withstand high switching duties and shall include ceramic insulators securely fused to the end fittings. The moving contact activating rod shall be carried on bellows, protected from the sputtering of molten metal during switching operation by a shield. The terminals of the vacuum interrupters shall be supported using epoxy cast resin supports or bushings. Each circuit breaker shall be provided with a suitable mechanically operated indicating device, marked OPEN and CLOSED in wording or symbols. The indicating device shall always be visible from the front of the panel. Circuit breaker operating mechanisms shall be of the motor charged, stored-energy type and equipped with a spring-charged indicator. Circuit breaker mechanisms shall be trip free and designed for operation from a control power source rated
[48 Vdc]
- B. The circuit breakers shall be rated in accordance with ANSI/IEEE C37.06 and IEC 62271-100 and shall have the ratings specified in section 2.2.B of this specification. The rated operating sequence (duty-cycle) shall be O-15 sec-CO or O-0.3 sec-CO-3 min-CO per ANSI/IEEE C37.04 and related IEC standards and the overall switchgear short-time rating shall be two seconds per ANSI/IEEE C37.20.2 clause 5.4.5. The circuit breaker short-time rating shall be three seconds per ANSI/IEEE C37.04 and related IEC standards. The circuit breakers shall be designed to withstand the transient recovery voltage (TRV) that occurs during the interruption of load currents and short-circuit currents within its rating. The vacuum circuit breakers shall not produce excessive overvoltage as a result of current chopping. The design shall reduce the current chopping value to less than 5 A.
- C. The circuit breaker operating mechanism shall be located at the front of the circuit breaker section, allowing access from the front of the switchgear while the primary equipment is in service at any time. All mechanical parts shall be adequately sized to ensure consistent operation of the mechanism when subjected to forces due to specified short-

circuit currents. The maximum difference in opening time between the three poles shall not be more than two milliseconds. It shall be possible to lubricate and service the moving or auxiliary parts of the mechanism by removing the front cover plate.

- D. Closing shall be accomplished by means of a motor-charged, spring-operated, stored-energy type mechanism with electrical release. In case of no auxiliary supply, it shall be possible to operate the circuit breaker manually with **manual** charging of the spring without dismantling any parts / mechanism. It shall not be possible for the circuit breaker to close unless the closing spring is fully charged. A visual, mechanical indicating device shall be provided to indicate the status of the stored-energy closing spring. The indicator shall show charged symbol when the mechanism is fully charged (ready-to-close the circuit breaker) and a discharged symbol when it is in any other condition. Provisions for manually charging the closing spring shall be provided. Tripping (opening) of the circuit breaker shall be by means of a spring, that is automatically charged when the circuit breaker is closed.
- E. The operating mechanism shall be provided with a shunt release and the necessary auxiliary switches. An operations counter shall be fitted to the mechanism and designed to indicate the total number of opening operations. The operating mechanism shall be provided with the following control and interlocking features:
1. Local manual close and trip by mechanical push buttons shrouded to prevent inadvertent operation
 2. The operating mechanism shall automatically recharge the closing spring after the completion of a closing operation
 3. A control power cutoff switch for disconnection of the control power
 4. Local electrical close and trip at the circuit breaker
 5. Local-remote selector switch at the circuit breaker with provisions for connection to Purchaser's supervisory control system, if required
 6. Operations counter.

2.5 DISCONNECTING AND GROUNDING SWITCH

- A. To isolate the circuit breaker and feeder from the system, a three-phase, three-position (CONNECTED-OPEN-READY-TO-GROUND) switch shall be utilized.
- B. The three-position switches shall be in each separate phase of the bus compartment such that when in the DISCONNECTED or GROUNDED position, no live parts are accessible in the interrupter compartment when the main bus is energized.
- C. It should be possible to have motorized mechanism of three-position switches with interlocking for grounding function. In the case of no auxiliary supply, it should be possible to operate the three-position switch manually with manual charging of the spring without dismantling any parts / mechanism.
- D. Access to the three-position switch operating means shall be mechanically and electrically blocked when the circuit breaker is in the CLOSED position to prevent mis-operation. It shall not be possible to switch directly from CONNECTED to GROUNDED position. A keyed selector shall prohibit simultaneous access to manual disconnect and grounding switch operating means. The grounding position shall allow for safely grounding the feeder circuit by closing of the circuit breaker. The ratings of the three-position switch shall be coordinated with the system ratings. Means shall be provided to allow for visual confirmation of the switch position from the front of the switchgear using a portable computer. The switch positions shall be clearly visible. If view windows are furnished, they shall be illuminated and accessible without opening any access doors. This provision shall be available for use with the switchgear energized. All operations shall be performed without requiring the opening of any doors.

- E. The manually operated mechanism for the three-position switch shall require one operating handle for changing the switch position from CONNECTED to DISCONNECTED (OPEN). A different handle shall be required for changing the switch position from DISCONNECTED to READY-TO-GROUND position. A mechanism operated position indicator shall be located on the front of the switchgear panel and indicate CONNECTED-OPEN-READY-TO-GROUND. Additionally, a mechanical indicator shall be visible from the rear of the switchgear. This flag indicator shall be located on the main shaft of the switch operator.
- F. The three-position switch operating mechanism shall be provided with the following control features:
1. Local manual operation of the three-position switch, utilizing two separate operating handles, provided as accessories.
 2. Optional: If an electrically operated mechanism is provided, manual operation shall block electrical operation. The operating mechanism shall allow local and remote electrical operation of the disconnect switch with automatic cutoff when switch has reached complete travel between positions.
 3. Auxiliary switches as required for interlocking and remote indication.
 4. The position of the switches shall have a means of visual verification according to NFPA 70. The use of permanently installed micro-cameras and a laptop computer shall be acceptable.
- G. Where two switching devices (for example, circuit breaker and three-position switch) require interlocking, the interlocks shall be designed to prohibit simultaneous operation of the devices. The interlock system shall prevent either device from being blocked in an intermediate or undefined position. The system shall operate effectively for either electrical switching commands or manual.

2.6 CURRENT TRANSFORMERS (CTs)

- A. CTs utilized with the GIS shall be low-voltage, toroidal type, free from dielectric-stressed cast-resin components and shall be located outside the gas-tight enclosure.
- B. Each main circuit breaker shall have one set of CTs, [1,200:5 A]
- C. Each feeder circuit breaker shall have one set of CTs, [1,200:5 A]
- D. Each tie circuit breaker shall have one set of CTs, [1,200:5 A]
- E. All CTs shall be installed around the outside of the cast aluminum phase housings or around the feeder cables so that the CT is free of dielectric and thermal stress. CTs shall be located on the cable termination side of the circuit breaker.
- F. CTs shall be multi-ratio (MR) as shown on the drawings and shall have a short-circuit ratings not less than that of the associated switchgear. They shall be capable of carrying the rated primary current for a period of one minute with the secondary windings open-circuited as specified in IEEE C57.13 or related IEC 60044-1 standards.

2.7 VOLTAGE TRANSFORMERS (VTs)

- A. VT ratings and locations shall be as indicated on the drawings. They shall comply with the requirements of this section. VTs shall be according to ANSI/IEEE C57.13 or related IEC 60044-2 standards.
- B. Busbar VTs single-phase, inductive VTs shall be housed outside gas but having connections in individual SF₆ gas-filled compartments or shall be solid-insulated, metal-enclosed and mounted on the top of the appropriate busbar phase enclosure.
- C. Each busbar VT shall be primary fused (current limiting type) to avoid a bus shutdown resulting from a VT failure. The current limiting fuses shall be in a SF₆ gas-insulated housing or solid-insulated metal housing.

- D. The busbar VTs shall be equipped with a three-position switch (CONNECTED-OPEN-READY-TO-GROUND) to allow for maintenance on the busbar VT or fuses without de-energizing the switchgear.
- E. The busbar voltage transformer and fuse housings for each phase shall be connected by a piping system, resulting in an individual gas-compartment and monitoring system for each busbar voltage transformer/fuse set. The pressure shall be monitored by means of a manometer on the front of the switchgear, if they shall be SF₆ gas insulated.
- F. For evacuating and gas filling the busbar voltage transformer, fuse system or replacement of a manometer (pressure gauge), a separate valve with identification label shall be provided.
- G. Each single-phase busbar VT/fuse enclosure shall be provided with its own pressure relief device.
- H. All secondary leads for VTs shall be wired to a molded-case circuit breaker, located in a corresponding low-voltage compartment.

2.8 CABLE TERMINATIONS

- A. The design of the cable terminations (inclusive of its accessories) shall meet the design objectives of the gas-insulated switchgear, including electrical ratings, loss of SF₆ gas, "safe-to-touch", etc. Cable termination system shall be outer cone type, such as MV-CONNEX from PFISTERER Kontaktsysteme GmbH plug-in cable termination system or approved equivalent. The design of the complete cable termination shall be suitable for the switchgear short-circuit current and BIL as specified. Cable termination system shall be plug-in type as per DIN 47637 and EN 50181 standards.
- B. The number of cables, size, and type for each incoming and outgoing feeder shall be shown on the drawings or provided as an Appendix to this specification. Each termination kit shall include suitable tinned copper braid for connection of the cable ground shield. A copper lug shall be crimped at one end of each grounding braid. A suitable shipping cover shall be provided and fitted securely at each cable termination point in the switchgear. These covers should only be removed just prior to field termination of cables. Shipping covers must be replaced with dielectric-rated cable plugs or dielectric rated covers prior to energization.
- C. Cable preparation and assembly of termination tool kits shall be the responsibility of the purchaser or the purchaser's installing contractor.

2.9 METERING AND RELAYING

- A. Multifunction digital-meters shall be UL-Listed or UL-Recognized, microprocessor-based units suitable for three- or four-wire systems. Units shall be mounted on the instrument compartment door and as follows:
 - 1. For incoming monitoring for main circuit breakers, Siemens model [9810] multifunction power meter with [Modbus RTU/TCP] communication protocol shall be provided.
 - 2. For feeder circuit breakers, Siemens model 7SJ85 multifunction relay.
 - 3. [Modbus RTU] communication protocol shall be provided.
- B. Multifunction protective relaying. Microprocessor-based three-phase relays shall be UL-Listed or UL-Recognized and shall be provided as follows:
 - 1. Main circuit breakers.
 - a. The relays shall be Siemens type 7SJ82 or 7SJ85 bay controller or equivalent. The relays shall include the following protection functions: 50/51, 50N/51N, 67/67N, 27, 59, 81O/U and 25 or as per ANSI as indicated on the single-line diagram.
 - b. The relays shall provide monitoring of the CT and VT circuits and alarm on circuit failure.

- c. The relays shall provide a graphic mimic display visually indicating the position (OPEN/CLOSED) of the circuit breaker, protection function trip and metering data. Unlimited user-configurable Human Machine Interface (HMI) screens shall allow the user to create unique single line displays with a simple tool or from an existing library.
 - d. The relays shall provide key locking to prevent unauthorized switching either local or remote.
 - e. The relays shall be capable of internally performing main-tie-main auto-transfer and auto-restore functions.
 - f. The relays shall have programmable logic capabilities to permit use in protection and control systems. Programming software must be compliant with IEC 61131 standard for PLC programming.
 - g. The relays shall have a modular communications processor to permit field change between ETH Modbus, Profinet, ETH DNP3.0, IEC 60870-5-103, and IEC 61850 protocols.
 - h. The relays shall be capable of running IEC61850+Modbus TCP or IEC61850+DNP3.0 simultaneously on the same communication module. The relays shall be able to support either RS-485, RJ45, or fiber-optic communications.
 - i. The relays shall provide complete sequence-of-events recording, time stamped in milliseconds. The relays shall provide oscillography (waveform) capture, with configurable pre- and post-fault data capture times.
 - j. The relays binary inputs shall be provided with chatter blocking and filter time. The chatter blocking shall block a binary input indication and prevent the generation of indications when the signal cannot be interpreted. The filter time indicates how long a signal must be present before it shall be interpreted as an indication. This shall serve to suppress short, intermittent changes. These two features shall be available and settable separately for each binary input indication.
 - k. The relays shall provide four protection settings groups. Setting group changes shall be available locally through front function key and binary input; remotely through operator or service communication interface using a personal computer and via system interface (i.e., Profinet, Modbus ETH, DNP3.0 ETH, IEC61850, etc.).
 - l. The relay should be a modular relay in case additional binary inputs, outputs, communication modules, CTs, VTs need to be added.
 - m. The relay should have the capability of multi-feeder protection in case the application needs to be customized.
 - n. The relay shall have the possibility to install a redundant power supply.
 - o. The relay shall provide the flexibility to add or remove any additional function protections that may be required for the same type of application, such as Transformer Protection, Breaker Protection, etc.
2. Bus protection – full differential protection shall not be required if Siemens type 8DA10 or 8DB10 is used.
- a. The relays shall be Siemens type 7UT87 or equivalent. The relay shall be low-impedance percentage differential relays.
 - b. The relays shall have three restraint winding inputs.
 - c. The relays shall have a through-fault restraint setting to prevent tripping due to high-current external faults.
 - d. The relays shall have a CT monitoring element to block differential trip if a CT secondary circuit has failed and shall provide alarm function.

- e. The relays shall provide complete sequence-of-events recording, time stamped in milliseconds. The relays shall provide oscillography (waveform) capture, with configurable pre- and post-fault data capture times.
 - f. The relay shall have the capability to be applied as single-phase bus relays.
 - g. The relays shall have a modular communications processor to permit field change between ETH Modbus, Profinet, ETH DNP3.0, IEC 60870-5-103, and IEC 61850 protocols.
 - h. The relays shall be capable of running IEC61850+Modbus TCP or IEC61850+DNP3.0 simultaneously on the same communication module. The relays shall be able to support either RS-485, RJ45, or fiber-optic communications.
 - i. The relay shall be able to detect the CT saturation.
 - j. The relay shall provide the flexibility to add or remove any additional function protections that may be required for the same type of application, such as Transformer Protection, Breaker Protection, etc.
3. [Feeder protection with communications.
- a. The relays shall be Siemens type 7SJ82 protective relay or equivalent. The relays shall provide the following functions: 50/51, 50N/51N, 67, 64, 87N, 37, 49, 46, 27, 59, 81O/U, 50BF, 46, 47, 25, 79, and 21FL.
 - b. The relays shall monitor the CT circuits and alarm on circuit failure.
 - c. The relays shall be capable of being used in a reverse interlocking bus protection scheme.
 - d. The relays shall have nine programmable function keys to replace control switches.
 - e. The relays shall have programmable logic capabilities to permit use in protection and control systems. Programming software shall be compliant with IEC 61131 standard for PLC programming.
 - f. The relays shall have a modular communications processor to permit field change between ETH Modbus, Profinet, ETH DNP3.0, IEC 60870-5-103 and IEC 61850 protocols.
 - g. The relays shall be capable of running IEC61850+Modbus TCP or IEC61850+DNP3.0 simultaneously on the same communication module. The relays shall be able to support either RS-485, RJ45, or fiberoptic communications.
 - h. All relay terminal blocks including CT blocks shall be pluggable to ensure ease of relay replacement and maintenance testing.
 - i. The housing shall be a sealed, dustproof environment for the relay internal electronics. Head build up must be dissipated through the surface area of the steel enclosure. The relays thus shall be designed to maintain their tested insulation characteristic standards per IEC, IEEE, even if deployed in environments not covered in IEEE C37.90 "usual service conditions."
 - j. The relay shall provide the flexibility to add or remove any additional function protection that may be required for the same type of application, such as Transformer Protection, Breaker Protection, etc.]
4. Generator circuit breaker protection – simple overcurrent with communications.
- a. The relays shall be Siemens type 7UM85. The relays shall provide the following protection functions: 21, 25, 27, 59, 51V, 81, 32/32R, 40, 78, 87G, 46, and 51G.
 - b. The relays shall provide current differential protection for the generators.
 - c. The relays shall monitor the CT and VT circuits and alarm on circuit failure.

- d. The relays shall have programmable logic capabilities to permit use in protection and control systems. Programming software shall be compliant with IEC 61131 standard for PLC programming.
 - e. The relays shall recognize and alarm CT open circuit or short circuit conditions.
 - f. The relays shall support either RS-485 or fiberoptic communications.
 - g. The relays shall have modular communication for simple integration into SCADA systems. The communication protocol shall be [Modbus ETH] running simultaneously at the same communication module.
 - h. The relays shall be capable of running IEC61850+Modbus TCP or IEC61850+DNP3.0 simultaneously on the same communication module. The relays shall be able to support either RS-485, RJ45, or fiber-optic communications.
 - i. The relay needs to provide the flexibility to add or remove any additional function protection that may be required for the same type of application such as Transformer Protection, Breaker Protection, etc.
5. Software/data information – relay software.
- a. The relay shall be configured through Windows®-based software current up to Windows 10 Professional.
 - b. The relays shall provide complete sequence-of-events recording, time stamped in milliseconds under all conditions. The relays shall provide oscillography (waveform) capture, with configurable pre- and post-fault data capture times. All internally and externally generated binary values shall be configurable to appear in the custom generated fault. Information containing time, date, interrupted current amperes per phase, time in pickup, trip open, close or user-programmed status points, etc., shall be displayed.
 - c. Logging of system and protective events, last 2,000 events (accessible via front USB port and rear service communications port used to connect to a personal computer).
 - d. Log of last eight faults (maximum five second record time) containing date and time stamps, pickup and tripping signals, interrupted current amperes, voltage, etc. The analog quantities displayed in the oscillography shall have the option for viewing in either primary or secondary quantities.
 - e. Fault records shall be in the industry standard COMTRADE format that shall be imported or exported.
 - f. The relay shall provide four protection settings groups. Setting group changes shall be available locally through front function key and binary input; remotely through operator or service communication interface using a personal computer and via system interface (Profinet, Modbus ETH, DNP3.0 ETH, IEC61850, etc.).
 - g. All logging settings, annunciations, fault records, binary I/O and LED assignments must have easy to print options and easy file transfer capabilities.
 - h. Relay software shall have feature for archiving or retrieving an entire project that includes all subfolders and relay files in one simple to use feature.
 - i. A measurement supervision feature shall be providing for monitoring external current and voltage transformers connected to the relay.
 - j. The software shall have the capability of entering the settings in both primary and secondary quantities.
 - k. The current transformer polarities shall be reversible using a setting in the software when it becomes necessary.
 - l. The software shall include a commissioning tool for all hardware (BI/BO/LEDs) and SCADA mapped points.

- m. The software shall be compatible with earlier version relay firmware releases.
 - n. The software shall have a capability to assign an IP address to the relay allowing for a web browser commissioning tool feature to view relay information online.
6. Automatic transfer scheme: (if required)
- a. The main circuit breaker protection relay bay controller shall be factory programmed to operate a three circuit breaker transfer (main-tie-main) scheme as indicated on the drawings accomplished through the logic program capability and digital input and output capability of the protection relay/bay controller.
 - b. The main circuit breaker relay/bay controllers shall control and monitor the position of the two main circuit breakers and the tie circuit breaker as defined on the drawings. The status of each circuit breaker shall be monitored from each main circuit breaker.
 - c. When the voltage and/or frequency protection reaches the transfer setting and maintains that value for the programmed delay period, the automatic transfer sequence shall be initiated.
 - d. The transfer shall not occur unless the source to receive the load has voltage and frequency within the specified ranges and is not in overcurrent pickup.
 - e. Phase rotation shall be determined by the relays and shall match between sources prior to transfer.
 - f. All time delays range and incremental adjustment shall be programmable via software. Settings shall be adjustable at the LCD display and keypad or via software of the normal power supply relay.
 - g. An external three-position momentary-type test switch shall be provided for the test-automatic-reset modes. The test mode shall simulate one source failure. The reset position shall bypass the time delays on either the initial transfer to or retransfer to normal.
 - h. LED indicating lights on the front of both the normal power main circuit breaker relays shall be set and labeled as follows:
 - 1.) Circuit breaker closed
 - 2.) Alternate source circuit breaker closed
 - 3.) Normal source available
 - 4.) Alternate source available
 - 5.) Trip
 - 6.) Pickup
 - 7.) Local control
 - 8.) Automatic control
 - i. One of the function keys on the front of the relay/bay controller for each main circuit breaker shall be labeled Metering. The factory default metering display shall be displayed on the LCD screen by pressing the Metering function key. The screen shall display voltage per phase, current per phase, power functions including watts, vars and VA, power factor, and frequency.

2.10 CONTROL WIRING

- A. Factory installed, complete with bundling, lacing and protection where necessary and complying with the following:

1. Flexible conductors of No. 14 AWG for wires across hinges, control and CT and VT circuits and for interconnections between shipping units.
2. Conductors sized according to NEC® NFPA 70 for the duty required.

2.11 ACCESSORIES

- A. Voltage indication test LEDs: three voltage indication test LEDs suitable for verification of voltage present at the cable side of the circuit breaker to work with the installed LRM voltage indication system.
- B. Operation tools: set of operation tools shall be provided such as one operation handle for the disconnect switch, one operation handle for grounding switch, one charging handle for circuit breaker, two selector keys, touch-up paint and grease packs.
- C. Video monitor: one laptop computer, one copy of software to view the micro-cameras and required one firewire and one USB 2 cable **shall be provided for verification of three-position switch position.**

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General electrical contractor or switchgear installer shall install switchgear in accordance with manufacturer's written instructions and the following specifications. It is mandatory that the installing contractor or switchgear installer shall utilize a factory-trained and certified service representative to supervise the installation and commissioning of the MV GIS.

3.2 ADJUSTMENTS AND CLEANING

- A. Protective-relay settings: Set relays in accordance with the purchaser's coordination study (not part of this Contract).
- B. Inspect interior and exterior of installed switchgear. Remove paint splatters and other spots, dirt and debris. Touch-up scratches and mars of finish to match original finish.

3.3 TESTING

- A. The switchgear furnished under this specification shall be fully tested and documented by certified production test reports in accordance with IEC 62271-200.
- B. As a minimum, the following production tests shall be conducted for the medium-voltage portion of the switchgear in accordance with IEC 62271-200:
 1. Power-frequency voltage (high-potential) test one minute
 2. Dielectric test of auxiliary circuit
 3. Measurement of the resistance of the main circuit
 4. Partial discharge test
 5. Mechanical operation test
 6. Pressure test of gas-filled compartments
 7. Gas tightness test of factory gas-filled compartments as per shipping splits
 8. Test of auxiliary devices
 9. Verification of the correct wiring
 10. Measurement of gas condition after filling.

- C. All of the type test certificates / reports shall be submitted at the time of offering if required.

3.4 FIELD QUALITY CONTROL

- A. Field inspection and testing shall be performed by manufacturer at a later date during installation.
- B. Visually inspect for physical damage.
- C. Perform site tests as specified in manufacturers' instruction manuals.
- D. Touch-up paint to repair any damaged surfaces using manufacturer-furnished paint. Leave remaining touch-up paint with owner.
- E. Verify operation of interlocks.
- F. Perform power-frequency withstand voltage tests in accordance with ANSI/IEEE C37.20.2, clause 6.5.

3.5 WARRANTY

- A. Equipment manufacturer shall warrant that all goods supplied are free of non-conformities in workmanship and materials for one year from date of initial operation, but not more than 18 months from date of shipment.

3.6 DEMONSTRATION

- A. Switchgear manufacturer shall provide a factory-authorized service representative for a period of three days to train Owner's maintenance personnel in the following:
1. In procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventive maintenance
 2. Review data in the instruction manuals.
- B. Schedule training with Owner with at least three weeks advance notice.

END OF SECTION

8DA 10 COMMISSIONING PROJECT SPECIFCS

8DA 10 – Siemens provided Commissioning Services

Uncrate switchgear and check for physical damage (check after others uncrate). Check filled gas chambers for leakage and compared to factory filling.

- ☐ Check the bill of material against actual equipment inventory and notify the factory of any missing items.
- ☐ Verify switchgear drawings are present for each section of the lineup.
- ☐ Verify all ground connections are made between splits.
- ☐ Check voltage transformer secondary connections.
- ☐ Make sure inter-panel control wires are connected through shipping splits.
- ☐ Check all control wire connections for proper crimps and good connection to terminal blocks before control voltage is applied.
- ☐ After shipping splits are assembled, check torque of all bus connections and housings.
- ☐ Apply control power. By use of schematics, verify control circuits operate as designed. Verify accessories are working properly.

- ☐ By using the camera system, check disconnect switches in every position and adjust as necessary. If disconnects are motor operated, verify electrical operation by schematics.
- ☐ Verify electrical interlocks between disconnects, breakers, and possible external field wiring points. Use jumpers when external wiring is not complete.
- ☐ Mechanically Trip and Close the operator and confirm indicators and interlocks are working properly.
- ☐ Confirm LOTO interlocks are operating correctly.
- ☐ Inspect breaker operator by removing front breaker cover and checking for loose parts.
- ☐ Perform gas leak check on the switchgear with a high-quality gas sniffer.
- ☐ When applicable, assist with installation of ship loose items.
- ☐ Electrically trip and close the breaker with the control switch. Check indication lights, charging indicator and open close indicators.
- ☐ After chambers are filled with gas, perform AC hi-pot test for one minute to include all high-voltage compartments. Short capacitive voltage indicator plugs for AC test. Refer to the installation/operation manual for test voltage. Voltage transformers must be disconnected, and dummy plugs should be installed in any open cable terminations before the hi-pot test. The test is pass or fail.
- ☐ After gas chambers have settled for 48 hours, perform gas quality and dewpoint tests. Dewpoint must be -15° C or less, and quality must be 90% or higher, however, refer to the instruction manual for the latest requirements. Exception-for waiting times less than 48 hours, record elapsed time on protocol sheets.
- ☐ Perform resistance measurement across any bus splits and through circuit breakers to confirm no loose connections are present.
- ☐ Current Transformers Ratio and Polarity-Saturation
- ☐ Protective relays-Test all enabled protective functions and trip logic
- ☐ Test Equipment Included
 - ☐ Relay Test Set, CT Test Set, AC High-potential Test Set, 10kV Insulation Resistance Test set, 10A Digital Low Resistance Ohm
 - ☐ Meter, Gas Analyzer
 - ☐ Optional testing not included in this proposal for 8DA/B
 - ☐ Current Transformers
 - ☐ Burden of the circuit (Non-standard)
 - ☐ Protective relays
 - ☐ Coordination (Non-standard)
 - ☐ Programming (Non-standard)
 - ☐ Battery System
 - ☐ Impedance testing
 - ☐ Load bank testing (Non-standard)

- ☐ Test equipment for Optional Testing -Battery Impedance Test Set

Informal Operations and Maintenance Training

The objective of this training is to provide the customer's maintenance and engineering personnel with sufficient knowledge to perform the basic operation and maintenance on the equipment, along with the knowledge to perform this work in a safe manner. A majority of the training will be hands on in front of the equipment, hence the need for small class sizes. This training is not intended to prepare the customer's personnel to perform major repairs, major maintenance, or programming. This course is not intended to meet any required Federal, State or Industry educational standards.

Training Clarifications

- ☐ Training is limited to the Equipment listed in this proposal
- ☐ Customer to provide classroom space, seating, and normal training aids, such as lunch, breaks, restrooms, overhead projectors, etc.
- ☐ Class size is limited to 8 students per day.
- ☐ Students need to provide their own safety equipment and PPE.
- ☐ All students should be prepared to handle the equipment or at a minimum be prepared to be near it during operation.
- ☐ Customer to provide free and clear access to the equipment so that it can be utilized for actual demonstration. If the equipment is energized this will limit the amount training that can be performed due to safety restrictions. Control power (when applicable) is preferred to be installed and functioning.
- ☐ Training is strictly restricted to the above SOW, does not include PLC Controls, HMI's, DCS Systems, Communications Protocols, etc.
- ☐ Training will not include any certifications, attendee log or documentation of completion.
- ☐ Training binders will not be provided. Digital information can be distributed upon request.
- ☐ Waiver required for video recording of training
- ☐ If certification and/or formal training is required, contact Siemens Power Academy:
<https://www.siemens.com/global/en/products/energy/energy-automation-and-smart-grid/training-programs.html>

8DA 10 – Customer Responsibility

1. Providing installation equipment and personnel. This includes but is not limited to:

- a. Transportation of equipment
- b. Lifting of equipment
- c. Connection of shipping splits and ship loose items

2. Designate an on-site representative to serve as the contact for technical inquiries and coordination of activities. This representative will also assist Siemens in developing an organized sequence of work and to advise site-specific safety requirements and lockout procedures.

3. Schedule services within the lead time requirements of this offer.

4. Provide all required site-specific access authorizations and safety training on a timely basis. Cost and schedule impacts will apply if customer-provided access authorization or training is delayed.

5. Provide sufficient advance notice of any necessary changes in outage schedule or equipment availability to facilitate

effective work planning by Siemens.

6. Establish necessary safe work clearances around adjacent energized equipment, as required by Siemens.
7. Perform lock-out and tag-out of equipment per industry standards and allow Siemens personnel and subcontractors to apply their own locks, as deemed necessary for safety.
8. Demonstrate live/dead/live in the presence of Siemens Field Service Engineer/s.
9. Apply system grounds per applicable safety code requirements & remove when work is complete.
10. Perform all required switching (opening and closing of breakers, switches, etc.) to de-energize equipment and electrically isolate as required for servicing and permit a continuous progression of work.
11. Make equipment continuously available for the required time to complete the subject services.
12. Provide security for the work area, customer's processes, and all areas to be accessed & used by Siemens.
13. Provide indoor, secure, environmentally controlled storage & laydown areas as required for staging of Siemens materials and tools.
14. Make all service entry disconnect arrangements and pay all associated costs for services provided by the local utility company for electrical power, water, gas, etc. switching, if applicable.
15. Unless explicitly stated, provide any set point data for quoted work to be completed prior to the FSE being on site.
16. Provide, install, operate & remove any temporary power necessary for customer processes and operations.
17. Provide all necessary electrical power for Siemens' test instruments and equipment within 25' of the area where the work will be performed.
18. Provide control power source as may be required for equipment functional testing.
19. If required, provide manpower and equipment (fork truck, etc.) to unload and move Siemens' equipment to the work area. Provide same services for loading out after completion of the work.
20. Coordinate all other contractor operations at the site to avoid interference with Siemens' work. Changes to the schedule or delays caused by others will result in schedule impacts and will be cause for additional charges.
21. Provide water and restroom facilities for Siemens and subcontractor personnel.
22. Obtain local jurisdiction electrical alteration/construction permit, if required.
23. Cover the cost of all special training required to perform site work.

8DA 10 – Siemens Responsibility

1. Order management.
2. Equipment required to perform scope of work.
3. Assisting the customer's installation of the GIS equipment.
4. GIS Gas work
5. Commissioning field engineering services.
6. Field Service Report with details of the commissioning scope of work.

8DA 10 – Clarifications

1. This proposal is made in accordance with the definitions set forth below in Proposal Definitions.
2. One (1) hour per FSE is designated for site specific safety training requirements.
3. Siemens personnel and/or any of its subcontractors will not be responsible for removing any equipment from service and/or returning any equipment to service (actual powering off and powering on of equipment).
4. Testing and inspection of Siemens equipment that is not stored according to the Siemens instruction manual will be considered Additional Work.
5. Only de-energized equipment will be serviced.
6. Siemens reserves the right to work only when safety practices are acceptable to Siemens. Costs associated with any delays caused by disposition of substandard safety conditions will be outside the scope of this quotation and invoiced in accordance with the Additional Work article.
7. Siemens will hold daily safety meetings prior to all work on a site, at shift changes or if the project scope of safety issues change. All affected Siemens employees, subcontractors, and customer personnel shall attend this daily safety meeting.
8. Siemens personnel will provide and apply their own individual locks to breakers/switches in addition to Customer's locks for circuits that are locked out during equipment installation or servicing.
9. All customer-provided deliverables shall be provided on a timely basis. Cost and schedule impacts will apply if customer deliverables are furnished late.

END OF TECHNICAL SPECIFICATIONS

PLEASE CONTINUE READING THE NEXT PAGE

BIDDER'S RESPONSE FORM

MESSAGE TO BIDDERS: Please review your bid documents for accuracy, completeness, required documentation/information is enclosed, and necessary signatures before submitting. Please label the outer mailing/shipping package with the bid information as directed.

One Year Warranty

The manufacturer's standard warranty shall warrant that all goods supplied are free of non-conformities in workmanship and materials for one year from date of initial operation, but not more than 18 months from date of shipment.

3 Year Optional: Provide a price for an additional 2 years of coverage under the same warranty above.

5 Year Optional: Provide a price for an additional 4 years of coverage under the same warranty above.

		TOTAL BID AMOUNT	TOTAL BID AMOUNT	TOTAL BID AMOUNT
Line Item	Description	With One Year Standard Warranty	With 3 Year Optional Warranty	With 5 Year Optional Warranty
1.	MEDIUM VOLTAGE SWITCHGEAR and ASSOCIATED EQUIPMENT			
Line Item	Description			Response
2.	Does bid meet all specifications? Yes/No is required by bidder. If answering no, bidder must include with their bid a full explanation of all exceptions.			
3.	Delivery Date. Response is required by bidder. Provide a date for delivery or detail the number of calendar days after receipt of order for delivery.			
4.	Does product meet the Buy American Act. Response is required by bidder. Provide a written response with bid stating product meets the Buy American Act.			

BIDDER'S RESPONSE FORM

MESSAGE TO BIDDERS: Please review your bid documents for accuracy, completeness, required documentation, and necessary signatures before submitting. Please label the outer mailing/shipping package with the bid information as directed.

BIDDER INFORMATION			
Company Name		Contact Name	
Email Address		Telephone Number	
Physical Business Address		Mailing Address for Payments	
Authorized Signature		Payment Terms	

Awarded bidder(s) will be required to obtain a City of Tuscaloosa business license in order to provide goods and/or services in response to this bid and subsequent contract(s). Inquiries regarding business license requirements should be directed to the City's Revenue & Financial Services Division at (205) 248-5200. Failure to obtain and maintain the required city business license(s) may result in rescinding of bid award and contract termination.

Note: By signing this contract, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom.

FAILURE TO COMPLETE ALL OF THE ABOVE WITH AN AUTHORIZED SIGNATURE MAY SUBJECT BID TO REJECTION.

Appendix A

Instructions to Bidders

Regarding ADEM Supplemental General Conditions For SRF Assisted Projects

INTRODUCTION

This bid is funded by the State Revolving Fund Loan Program (SRF). ADEM is required to include the Supplemental General Conditions for SRF projects in SRF project bid packages. There are several instructions within these conditions that are applicable to construction projects. In this case, the bid is for equipment procurement and there is no construction component for this bid. The construction component will come at a later date closer to the arrival of the long lead time electrical equipment – generators and switch gears. Below are instructions on sections of the Supplemental General Conditions that may generate questions because the bid is equipment procurement.

II- Bonds and Insurance

- Performance Bond – Performance Bond is not required for this project because it is not a construction bid.

III- Utilization of Disadvantaged Business Enterprises (DBE)

- Applicable to sub-agreement awards. Owner will solicit to certified Service Centers. Supplier or Prime Contractor is required to solicit potential DBE for supplies, construction and/ or services if they sub out work or materials.

IV- Six Affirmative Steps for Good Faith DBE (MBE-WBE) Solicitation

- Please note per this section, “If the successful bidder plans to subcontract a portion of the project, the bidder must submit to owner within 10 days after bid opening, evidence of affirmative steps taken to utilize small, minority and women’s businesses.

Contractor requirements for this section are prompted when subcontracting "a portion of the project".

V-Documentation Required from Loan Recipient (Owner) and Contractor

- Owner will work with contractor after the bid opening to compile applicable documentation.

VII- DBE Compliance Form

- Form to be completed by owner and submitted to ADEM representative by owner after bid opening.

VIII - EPA Form 6100-2 DBE Subcontractor Participation Form (Page SGC-10)

- Form is to be completed by Prime Contractor and returned to owner after bid as NA if no subcontractors are used.

IX – EPA Form 6100-3 DBE Subcontractor Performance Form

- Form is to be completed by Prime Contractor and returned to owner after bid as NA if no subcontractors are used.

X- EPA Form 6100-4 DBE Subcontractor Utilization Form

- Form is to be completed by Prime Contractor and returned to owner after bid as NA if no subcontractors are used.

SGC-16 & SGC-17

- Owner will fill this out at end of the reporting year. This is not applicable to bid.

XII – Changes to Approved DBE Compliance Form

- This form is to be completed by the owner with input from Prime Contractor if applicable after the award of the bid.

XIII - Certification Regarding Equal Employment Opportunity

- Part of the required documentation for Item V. The low, responsive, responsible bidder must forward this item to the loan recipient (owner) no later than 10 days after bid opening.

XIV – Debarred Firms Certifications

- Part of the required documentation for Item V. The low, responsive, responsible bidder must forward this item to the loan recipient (owner) no later than 10 days after bid opening.

XV- Davis Bacon and Related Acts

- Not applicable to equipment procurement bid.

XVI – American Iron and Steel Requirement

- This is requirement of the equipment procurement. During the project, this certification must be submitted with reimbursement request to ADEM. Payment will not be made to contractor unless there is an executed certification American Iron and Steel form submitted with invoice.

XVII Project Sign Detail – CWSRF

- This is not applicable to an equipment procurement. During the construction project to install the generators this sign will be in-place. This will be covered in the future construction project.

XVIII – Project Sign Detail – DWSRF

- Not applicable – this detail is for Drinking Water projects.

XIX – Construction Contract Requirements

- Owner / Engineer will complete this section as applicable.

XIX – Project Review and Cost Summary

- Owner / Engineer will complete this section as applicable.

Appendix B

**State of Alabama
Alabama Department of Environmental Management
State Revolving Fund (SRF) Loan Program**



SRF Section
Permits and Services Division
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463

(334) 271-7793
(334) 271-7950 FAX

Supplemental General Conditions for SRF Assisted

Public Drinking Water and Wastewater
Facilities Construction Contracts



SRF Project Number: _____

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I – ADEM Special Conditions

1. Construction within State rights-of-way shall be in accordance with the Alabama Department of Transportation policies and procedures.
2. Construction is to be carried out in compliance with applicable NPDES permits and in a manner that prevents bypassing of raw wastewater flows during construction. If bypassing is anticipated, the ADEM NPDES Enforcement Branch (334-271-7975) shall be advised in advance and the contractor shall take all necessary steps to minimize the impacts of bypassing.
3. Siltation and soil erosion shall be minimized during construction. The contractor shall obtain an NPDES storm water permit for construction if required.
4. The owner shall provide and maintain competent and adequate supervision and inspection.
5. ADEM and EPA shall have access to the site and the project work at all times.
6. These Special Conditions shall supersede any conflicting provisions of this contract.
7. A project sign is required. See Parts XVII and XVIII, pages SGC-36 – SGC-37, for more information.

II – Bonds and Insurance

Bonding requirements shall comply with Alabama Act No. 97-225. Provisions of the Act are summarized below:

1. Bid Bond – Not less than 5% of either the owner's estimated cost or of the proposed prime contractor's bid up to a maximum of \$10,000. The bid guarantee shall consist of a cashier's check drawn on an Alabama bank or a bid bond executed by a surety company duly authorized and qualified to make bonds in the State of Alabama.
2. Performance Bond – In an amount not less than 100% of the contract price.
3. Payment Bond – Payable to the awarding authority, shall be executed in an amount not less than 50% of the contract price.

In addition to the insurance requirements elsewhere in the specifications, the owner or the contractor, as appropriate, must acquire any flood insurance made available by the Federal Emergency Management Agency as required by 40 CFR 30.600 (b), if construction will take place in a flood hazard area identified by the Federal Emergency Management Agency.

III – Utilization of Disadvantaged Businesses Enterprises (DBEs)

It is the policy of the State Revolving Loan Fund (SRF) to promote a "fair share" of sub-agreement awards to small, minority, and/or women-owned businesses for equipment, supplies, construction, and services. Compliance with these contract provisions is required in order for project costs to be eligible for SRF funding. *The "fair share" objective is a goal, not a quota.* DBE (Disadvantaged Business Enterprise) is an all-inclusive business classification, which includes MBE (minority business enterprises and/or WBE (women business enterprises) and is used synonymously when these entities are referenced individually or collectively.

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Failure on the part of the apparent successful bidder to submit required information to the Loan Recipient (Owner) may be considered (by the Loan Recipient (Owner)) in evaluating whether the bidder is responsive to the bid requirements. The project objectives for utilization of Minority Business Enterprises (MBEs) and Women's Business Enterprises (WBEs) are as follows:

Commodities (Supplies)	MBE 4%	WBE 11%
Contractual (Services)	MBE 8%	WBE 30%
Equipment	MBE 5%	WBE 20%
Construction	MBE 2.5%	WBE 3%

For purposes of clarification:

- This objective applies to any Federally assisted procurement agreement in excess of \$10,000.
- This objective necessitates three responsibilities; separate solicitations must be made of small and minority and women's business enterprises.
- A minority business is a business, at least 51 percent of which is owned and controlled by minority group members (Black; Hispanic; Asian American; American Indian; and, any other designations approved by the Office of Management and Budget).
- A women's business is a business, at least 51 percent of which is owned and controlled by one or more women.
- The control determination will revolve around the minority or woman owner's involvement in the day-to-day management of the business enterprise.
- Solicitation should allow adequate time for price analysis. ADEM recommends that contact be made no later than 15 days before bid opening.
- Efforts taken to comply with this objective must be documented in detail; maintain records of firms contacted, including any negotiation efforts to reach competitive price levels, and awards to the designated firms.
- ADEM recommends that the Loan Recipient (Owner) or proposed Prime Contractor utilizes the services of the Minority Business Development Service Centers. These Centers are funded by the U.S. Department of Commerce to provide technical, financial and contracting assistance to minority and women's business enterprises. These Centers are located in a number of Regional cities.
- Use of the services provided by these Centers does not absolve the Loan Recipient (Owner) or proposed Prime Contractor from pursuing additional efforts to meet this objective.

IV – Six Affirmative Steps for Good Faith DBE (MBE-WBE) Solicitation

The Loan Recipient (Owner) shall follow the six affirmative steps found in the SRF application when using loan funds to procure sources of supplies, construction and services.

If the successful bidder plans to subcontract a portion of the project, the bidder must submit to the owner within 10 days after bid opening, evidence of the affirmative steps taken to utilize small, minority and women's businesses. These six affirmative steps or 'good faith efforts' are required methods to ensure that DBEs have the opportunity to compete for procurements funded by EPA financial assistance dollars. Such affirmative steps are described as follows:

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. This will include placing DBEs on solicitation lists and soliciting them whenever there are potential sources.

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2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.

3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. This will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.

4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.

5. Use the resources, services, and assistance of the AL Department of Transportation (ALDOT), Small Business Administration (SBA), and the Minority Business Development Agency of the Department of Commerce (MBDA).

6. If the Contractor awards subcontracts, it must take the steps described in items (1) through (5) listed above.

V – Documentation Required from Loan Recipient (Owner) and Contractor

The low, responsive, responsible bidder must forward the following items, in duplicate, to the loan recipient (owner) no later than 10 days after bid opening. The Loan Recipient (Owner) shall transmit one (1) copy of its DBE documentation of the prime contractor solicitation and one (1) copy of the prime contractor's/bidder's DBE documentation of all subcontractor solicitation to the SRF Section within 14 days after bid opening.

1. SRF project number and project name/loan name*. (*not contract name)
2. List of all subcontractors (DBE and non-DBE) with name, address, telephone number, estimated contract dollar amount and duration. If there are to be no subcontractors, please indicate such in a letter on company letterhead.
3. List of any subcontract work yet to be committed with estimate of dollar amount and duration of contract.
4. MBE-WBE (DBE) Documents - See Part V, page SGC-6.
5. Debarred Firms Certification – See Part XIV, page SGC-25.
6. Certification Regarding Equal Employment Opportunity – See Part XIII, page SGC-24.

The Loan Recipient (Owner) shall submit annual MBE/WBE Utilization Reports (EPA Form 5700-52A, pages SGC-16 - SGC-17) within 30 days of the end of the annual reporting period (October 30th, i.e. by November 30th). Submit reports directly to:

Laketa Ross, Accountant
Administrative Section
Fiscal Branch
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463

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The proposed Prime Contractor must submit the following items to the Loan Recipient (Owner):

1) **DBE Compliance Form.** The Loan Recipient (Owner) must submit this information to the SRF Section to demonstrate compliance with the DBE requirements. ADEM's approval is required prior to award of the construction contract and commencement of any SRF-funded construction. (Page SGC-8)

2) **Certification Regarding Equal Employment Opportunity.** This form is required of the proposed prime contractor (re: all subcontracts executed) and should be submitted with the prime proposed contractor's MBE-WBE solicitation submittal to the Loan Recipient (Owner). (Page SGC-24)

3) **Debarred Firms Certification.** This form is required of the proposed prime contractor (re: all subcontracts executed) and should be submitted with the prime proposed contractor's MBE-WBE solicitation submittal to the Loan Recipient (Owner). (Page SGC-25)

4) **EPA Form 6100-2 DBE Subcontractor Participation Form.** This form gives a DBE subcontractor the opportunity to describe the work the DBE subcontractor received from the proposed prime contractor, how much the DBE subcontractor was paid, and any other concerns the DBE subcontractor might have. The proposed prime contractor must provide this form to each DBE subcontractor for the DBE subcontractor's submittal to the SRF Section's MBE-WBE Compliance Staff (to be forwarded to EPA's DBE Coordinator). (Page SGC-10)

5) **EPA Form 6100-3 DBE Subcontractor Performance Form.** This form captures an intended DBE subcontractor's description of work to be performed for the proposed prime contractor and the price of the work. The proposed prime contractor must provide this form to each DBE subcontractor for the DBE subcontractor's submittal to the SRF Section's MBE-WBE Compliance Staff (to be forwarded to EPA's DBE Coordinator). (Page SGC-12)

6) **EPA Form 6100-4 DBE Subcontractor Utilization Form.** This form captures the proposed prime contractor's intended use of all identified DBE subcontractors and the estimated dollar amount of the work. The proposed prime contractor must provide this form to each DBE subcontractor for the DBE subcontractor's submittal to the SRF Section's MBE-WBE Compliance Staff (to be forwarded to EPA's DBE Coordinator). (Page SGC-14)

7) **EPA Form 5700-52 A MBE/WBE Utilization Reports (DBE Annual Report), if applicable.** The Loan Recipient (Owner) must submit this information to the SRF Section within 30 days of the end of the annual reporting period (October 30th), i.e., by November 30th). (Pages SGC-16 - SGC-17)

8) **Changes to Approved DBE Compliance Form, if applicable.** If any changes, substitutions, or additions are proposed to the subcontractors included in previous Department approvals, the Owner must submit this information to the Department for prior approval in order for the affected subcontract work to be eligible for SRF funding. (Page SGC-23)

9) **Certified Payrolls.** These should be submitted to the Loan Recipient (Owner), at least, monthly for the prime contractor and all subcontractors. The Loan Recipient (Owner) must maintain payroll records and make these available for inspection. Please note that DBEs, MBEs, and WBEs must be certified in writing by EPA, SBA, or DOT (or by state, local, Tribal, or private entities whose certification criteria match EPA's). Depending upon the certifying agency, a DBE may be classified as a Disadvantaged Business Enterprise (DBE), a Minority Business Enterprise (MBE), or a Women's Business Enterprise (WBE). Written certification as a DBE (MBE or WBE) is required in order to be counted toward the Loan Recipient/Owner's MBE-WBE accomplishments.

The documentation of these good faith solicitation efforts must be detailed in order to allow for satisfactory review. Such documentation might include fax confirmation sheets, copies of solicitation letters/emails, printouts of the online solicitations, printouts of online search results, affidavits of publication in newspapers, etc. The proposed prime contractor is strongly encouraged to follow up each written, fax, or email solicitation with, at least, 1 logged phone call.

The proposed prime contractor must employ the six affirmative steps to subcontract with DBEs, even if the proposed prime contractor has achieved its fair share objectives.

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The prime contractor must employ the six affirmative steps to subcontract with DBEs, even if the proposed prime contractor has achieved its fair share objectives. If a DBE subcontractor fails to complete work under the subcontract for any reason, the proposed prime contractor must notify the Loan Recipient (Owner) in writing prior to any termination and must employ the six 'good faith efforts' described above if using a replacement subcontractor. Any proposed changes from an approved DBE subcontractor must be reported to the Loan Recipient (Owner) and to the SRF Section on the Changes to Approved Subcontractors Form prior to initiation of the action. EPA Forms Nos. 6100-3 and 6100-4 must also be submitted to the SRF Section for new DBE subcontracts.

-

VI – Resources for Identifying MBE-WBE (DBE) Contractors/Subcontractors

The following organizations may provide assistance in soliciting DBE participation:

City of Birmingham
Office of Economic
Development
ATTN: **Monique Shorts**,
Economic Specialist
710 20th Street North
Birmingham, Alabama
35203
Ph: (205) 254-2799
Fax: (205) 254-7741
Monique.shorts@bimimg.hamai.gov

U.S. Small Business
Administration
<http://www.pro-net.sba.gov>

National Association
of Minority
Contractors (NAMC)
<https://namcatlanta.org/>

Alabama Department
of Transportation
ATTN: **John Huffman**
1409 Coliseum Boulevard
Montgomery, Alabama
36130
Ph: (334) 244-6261
<http://www.dot.state.al.us>

U.S. Department of
Commerce
Minority Business
Development Agency
ATTN: **Donna Ennis**
75 5th Street NW,
Suite 300
Atlanta, Georgia 30308
Ph: (404) 894-2096
<http://www.mbd.gov/>

Governor's Office of
Minority and Women's
Business Enterprises
Hilda Lockhart,
STEP Project Director
401 Adams Avenue
Suite 360
Montgomery, Alabama
36130
Ph: (334) 242-2220

Birmingham Construction
Industrial Authority ATTN:
Ashley Ort or **Kimberly
Bivins**
601 37th Street South
Birmingham, Alabama
35222
Ph: (205) 324-6202
aort@bcia1.org
kbaylorbivins@bcia1.org

NOTE:

- (1) The Loan Recipient (Owner) and the proposed Prime Contractor shall use the necessary resources to identify and directly solicit no less than three (3) certified DBE/MBE/WBE companies to bid in each expected contract/subcontract area. If a diligent and documented search of ALDOT, SBA, and MBDA directories does not identify three (3) potential certified DBE/MBE/WBE firms, then the proposed Prime Contractor shall post an advertisement in, at least, one (1) of the other online or print resources. Whenever possible, post solicitation for bids or proposals should be posted/advertised for a minimum of 30 calendar days before the bid or proposal closing date.
- (2) Expenditures to a DBE that acts merely as a broker or passive conduit of funds, without performing, managing, or supervising the work of its subcontract in a manner consistent with normal business practices may not be counted.
- (3) The proposed Prime Contractor should attempt to identify and first solicit DBEs in the geographic proximity of the project before soliciting those located farther away.
- (4) In addition, our SRF DBE Compliance Staff is readily available for assistance, as follows:
Laketa Ross at (334) 271-7727 or laketa.ross@adem.alabama.gov OR Diane Lockwood (DBE Coordinator) at (334) 271-7815 or dpl@adem.alabama.gov.

Appendix B**VII – DBE Compliance Form**

NOTE: FOR DBE COMPLIANCE, ONE (1) COPY OF THIS FORM (WITH ALL INFORMATION OUTLINED) IS REQUIRED (WITH THE LOAN RECIPIENT (OWNER)'S DBE SUBMITTAL) FOR EACH PR&CS REVIEW. THE LOAN RECIPIENT (OWNER) AND PROPOSED PRIME CONTRACTOR SHOULD ENSURE THAT THIS INFORMATION IS COMPLETE PRIOR TO THE PR&CS SUBMITTAL TO THE SRF SECTION.

Loan Recipient: _____ SRF Loan (Project) Number: _____

CERTIFICATIONS:

I certify that the information submitted on and with this form is true and accurate and that this company has met and will continue to meet the conditions of this construction contract regarding DBE solicitation and utilization. I further certify that criteria used in selecting subcontractors and suppliers were applied equally to all potential participants and that EPA Forms 6100-2 and 6100-3 were distributed to all DBE subcontractors.

(Proposed Prime Contractor Signature) Date _____

(Printed Name and Title)

I certify that I have reviewed the information submitted on and with this form and that it meets the requirements of the Loan Recipient's/Owner's State Revolving Fund loan contract.

(**Only ONE (1) signature required below.)

(Signature of Loan Recipient (Owner)) Date _____

OR**

(Loan Recipient's (Owner's) Representative's Signature, (P.E.)) Date _____

(Printed Name and Title)

GENERAL INFORMATION:

Loan Recipient (Owner) Contact: _____

Loan Recipient (Owner) Phone Number/Email: _____

Consulting Engineer Contact: _____

Consulting Engineer Phone Number/Email: _____

Proposed Prime Contractor: _____

Proposed Prime Contractor Contact: _____

Proposed Prime Contractor Phone Number/Email: _____

Proposed Prime Contract Amount: \$ _____

Proposed Total DBE/MBE Participation: \$ _____ Percentage: ____% Goal: 2.5%

Proposed Total WBE Participation: \$ _____ Percentage: ____% Goal: 3.0%

Appendix B

Please ensure the following is submitted in the *full* DBE submittal (with the DBE COMPLIANCE FORM (page SGC-8)):

- (1) List of all committed and uncommitted subcontractors by trade, including company name, address, telephone number, contact person, dollar amount of subcontract, and DBE/MBE/WBE status. Indicate in writing if no solicitations were made because the contractor intends to use only its own forces to accomplish the work.
- (2) Proof of certification (certificate or letter) by EPA, SBA, DOT (or by state, local, Tribal, or private entities whose certification criteria match EPA's) for each subcontractor listed as a DBE, MBE, or WBE.
- (3) Documentation of solicitation effort for prospective DBE firms, such as fax confirmation sheets, copies of solicitation letters/emails, printout of the online solicitations, printouts of online search results, affidavits of publication in newspapers, etc. The prime contractor is strongly encouraged to follow up each written, fax, or email solicitation with at least 1 logged phone call. Whenever possible, post solicitation for bids or proposals should be for a minimum of 30 calendar days before the bid or proposal closing date.
- (4) Justification for not selecting a certified DBE subcontractor that submitted a low bid for any subcontract area.
- (5) Certification By Proposed Prime Contractor or Subcontractor Regarding Equal Opportunity Employment. (Page SGC-24)
- (6) Debarred Firms Certification. (Page SGC-25)
- (7) EPA Form 6100-2 DBE Subcontractor Participation Form for each proposed certified DBE subcontractor.* (Page SGC-10) (*This form is completed by the proposed prime contractor. It is signed by each proposed subcontractor only.)
- (8) EPA Form 6100-3 DBE Subcontractor Performance Form for each DBE subcontractor.** (Page SGC-12) (**This form is completed by the proposed prime contractor and signed by each proposed certified subcontractor and the proposed prime contractor per subcontract.)
- (9) EPA Form 6100-4 DBE Subcontractor Utilization Form to summarize all DBE subcontracts/subcontractors.*** (Page SGC-14) (***)This form is completed and signed by the proposed prime contractor only.)

NOTE:

ALL DBE contractors selected must have a current DBE certificate or letter of certification by an approved certifying agency.

Loan Recipient (Owner) DBE Submittal

At minimum, the Loan Recipient (Owner)'s DBE submittal should always consist of a cover letter (*preferred, but optional*) and a VII - DBE Compliance Form (page SGC-8) and DBE solicitation documentation (i.e., DBE solicitation list(s) with source(s) of list(s) clearly identified, contractor contact information and results/outcomes of each solicitation (or of the overall solicitation effort, if all results/outcomes were the same), documentation of solicitation method (i.e., copies of emails, phone logs, faxes, etc.).

Prime Contractor DBE Submittal

At minimum, the Prime Contractor's DBE submittal should always consist of a cover letter (*preferred, but optional*) and DBE solicitation documentation (i.e., DBE solicitation list(s) with source(s) of list(s) clearly identified, subcontractor contact information and results/outcomes of each solicitation (or of the overall solicitation effort, if all results/outcomes were the same), documentation of solicitation method (i.e., copies of emails, phone logs, faxes, etc.) OR a "No Subcontractors" Letter (*if none will be utilized*) and a List of ALL (DBE/non-DBE) subcontractors contracted/yet to be contracted and ALL EPA 6100 Forms described above (DBE subcontractors selected or not) and Certification Regarding Equal Employment Opportunity and Debarred Firms Certification.

Appendix B**VIII - EPA Form 6100-2 DBE Subcontractor Participation Form**

OMB Control No: 2090-0030

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Participation Form**

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. This form gives a DBE¹ subcontractor² the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g., in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the EPA DBE Coordinator at any time during the project period of performance.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Received from the Prime Contractor Involving Construction, Services , Equipment or Supplies	Amount Received by Prime Contractor

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

EPA FORM 6100-2 (DBE Subcontractor Participation Form)

Appendix B**VIII - EPA Form 6100-2 DBE Subcontractor Participation Form**

OMB Control No: 2090-0030

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Participation Form**

Please use the space below to report any concerns regarding the above EPA-funded project:

Subcontractor Signature	Print Name
Title	Date

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Appendix B**IX - EPA Form 6100-3 DBE Subcontractor Performance Form**

OMB Control No: 2090-0030

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Performance Form**

This form is intended to capture the DBE¹ subcontractor's² description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractors bid or proposal package.

Subcontractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Prime Contractor Name		Issuing/Funding Entity:	

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor

DBE Certified By: ☐ DOT ☒ SBA	Meets/ exceeds EPA certification standards?
☐ Other: _____	☐ YES ☐ NO ☐ Unknown

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

Appendix B**IX - EPA Form 6100-3 DBE Subcontractor Performance Form**

OMB Control No: 2090-0030

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Performance Form**

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	Date

Subcontractor Signature	Print Name
Title	Date

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Appendix B**X - EPA Form 6100-4 DBE Subcontractor Utilization Form**

OMB Control No: 2090-0030

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form**

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE¹ subcontractors² and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name		Project Name	
Bid/ Proposal No.	Assistance Agreement ID No. (if known)	Point of Contact	
Address			
Telephone No.		Email Address	
Issuing/Funding Entity:			

I have identified potential DBE certified subcontractors	☐ YES	☐ NO	
If yes, please complete the table below. If no, please explain:			
Subcontractor Name/ Company Name	Company Address/ Phone/ Email	Est. Dollar Amt	Currently DBE Certified?

Continue on back if needed

¹ A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

² Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

Appendix B**X - EPA Form 6100-4 DBE Subcontractor Utilization Form**

OMB Control No: 2090-0030

**Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form**

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	Print Name
Title	Date

The public reporting and recordkeeping burden for this collection of information is estimated to average three (3) hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Appendix B

OMB CONTROL NO. 2030-0020

**U.S. ENVIRONMENTAL PROTECTION AGENCY
MBE/WBE UTILIZATION UNDER FEDERAL GRANTS
AND COOPERATIVE AGREEMENTS**

**PART I OF II
(PAGES SGC-16 & SGC-17)**

FOR COOPERATIVE AGREEMENTS OR OTHER FEDERAL FINANCIAL ASSISTANCE WHERE THE COMBINED TOTAL OF FUNDS BUDGETED FOR PROCURING SUPPLIES, EQUIPMENT, CONSTRUCTION OR SERVICES EXCEED \$150,000. PART 1: PLEASE REVIEW INSTRUCTIONS BEFORE COMPLETING																			
1A. FEDERAL FISCAL YEAR (Oct 1- Sep 30) 20____	1B. REPORT TYPE ☐ Annual ☐ Last Report (Project completed)																		
1C. REVISION OF A PRIOR YEAR REPORT? ☐ No ☐ Yes, Year _____ IF YES, BRIEFLY DESCRIBE THE REVISIONS YOU ARE MAKING:																			
2A. EPA FINANCIAL ASSISTANCE OFFICE ADDRESS (ATTN: DBE COORDINATOR)	3A. RECIPIENT NAME AND ADDRESS																		
2B. EPA DBE COORDINATOR Name: Email: Phone: Fax:	3B. RECIPIENT REPORTING CONTACT Name: Address: Phone: Email:																		
4A. FINANCIAL ASSISTANCE AGREEMENT ID NUMBER (SRF State Recipients, refer to Instructions for Completion of blocks 4A, 5A and 5C)	4B. FEDERAL FINANCIAL ASSISTANCE PROGRAM TITLE OR CFDA NUMBER:																		
5A. TOTAL ASSISTANCE AGREEMENT AMOUNT EPA Share: \$ _____ Recipient Share: \$ _____ ☐ N/A (SRF Recipient)/Loan Amount: \$ _____	5B. If NO procurements and NO accomplishments were made this reporting period (by the recipients, sub-recipients, loan recipients, and prime contractors), CHECK and SKIP to Block No. 7. (Procurements are all expenditures through contract, order, purchase, lease or barter of supplies, equipment, construction, or services needed to complete Federal assistance programs. Accomplishments, in this context, are procurements made with MBEs and/or WBEs.) ☐																		
5C. Total Procurements This Reporting Period (Only include amount not reported in any prior reporting period) Total Procurement Amount \$ _____ (Include total dollar values awarded by recipient, sub-recipients and SRF loan recipients, including MBE/WBE expenditures.)																			
5D. Were sub-awards issued under this assistance agreement? Yes ☐ No ☐ Were contracts issued under this assistance agreement? Yes ☐ No ☐																			
5E. MBE/WBE Accomplishments This Reporting Period Actual MBE/WBE Procurement Accomplished (Include total dollar values awarded by recipient, sub-recipients, SRF loan recipients and Prime Contractors.)																			
<table border="1"> <thead> <tr> <th></th> <th>Construction</th> <th>Equipment</th> <th>Services</th> <th>Supplies</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>\$MBE:</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>0.00</td> </tr> <tr> <td>\$WBE:</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>0.00</td> </tr> </tbody> </table>			Construction	Equipment	Services	Supplies	Total	\$MBE:	_____	_____	_____	_____	0.00	\$WBE:	_____	_____	_____	_____	0.00
	Construction	Equipment	Services	Supplies	Total														
\$MBE:	_____	_____	_____	_____	0.00														
\$WBE:	_____	_____	_____	_____	0.00														
6. COMMENTS: (If no MBE/WBE procurements, please summarize how certified MBEs/WBEs were notified of the opportunities to compete for the procurement dollars entered in Block 5C and why certified MBEs/WBEs were not awarded any procurements during this reporting period.)																			
7. NAME OF RECIPIENT'S AUTHORIZED REPRESENTATIVE	TITLE																		
8. SIGNATURE OF RECIPIENT'S AUTHORIZED REPRESENTATIVE	DATE																		

EPA FORM 5700-52A available electronically at https://www.epa.gov/sites/production/files/2014-09/documents/epa_form_5700_52a.pdf

OMB CONTROL NO.: 2030-0020

If reporting DBE procurement, please enter the Loan Project Number and the information in the grid below, as applicable. If no additional DBE procurement to report, please enter the Loan Project Number and enter 'N/A' in the black box below.

PART II.

MBE/WBE PROCUREMENTS MADE DURING REPORTING PERIOD

SRF Financial Assistance Agreement Number:

PART II OF II
(PAGES SGC-1

[illegible]

Type of Product or Service Codes: 1 = Construction 2 = Supplies 3 = Services 4 = Equipment

Appendix B

Instructions:

A. General Instructions:

MBE/WBE utilization is based on 40 CFR Part 33. The reporting requirement reflects the class deviation issued on November 8, 2013, clarified on January 9, 2014 and modified on December 2, 2014. EPA Form 5700-52A must be completed annually by recipients of financial assistance agreements where the combined total of funds budgeted for procuring supplies, equipment, construction or services exceeds \$150,000. This reporting requirement applies to all new and existing awards and voids all previous reporting requirements.

In determining whether the \$150,000 threshold is exceeded for a particular assistance agreement, the analysis must focus on funds budgeted for procurement under the supplies, equipment, construction, services or "other" categories, and include funds budgeted for procurement under sub-awards or loans

Reporting will also be required in cases where the details of the budgets of sub-awards/loans are not clear at the time of the grant awards and the combined total of the procurement and sub-awards and/or loans exceeds the \$150,000 threshold.

When reporting is required, all procurement actions are reportable, not just the portion which exceeds \$150,000.

If at the time of award the budgeted funds exceed \$150,000 but actual expenditures fall below, a report is still required.

If at the time of award, the combined total of funds budgeted for procurements in any category is less than or equal to \$150,000 and is maintained below the threshold, no DBE report is required to be submitted.

Recipients are required to report 30 days after the end of each federal year, per the terms and conditions of the financial assistance agreement.

Last reports are due October 30th or 90 days after the end of the project period, whichever comes first.

MBE/WBE program requirements, including reporting, are material terms and conditions of the financial assistance agreement.

B. Definitions:

Procurement is the acquisition through contract, order, purchase, lease or barter of supplies, equipment, construction or services needed to accomplish Federal assistance programs.

A contract is a written agreement between an EPA recipient and another party (also considered "prime contracts") and any lower tier agreement (also considered "subcontracts") for equipment, services, supplies, or construction necessary to complete the project. This definition excludes written agreements with another public agency. This definition includes personal and professional services, agreements with consultants, and purchase orders.

A minority business enterprise (MBE) is a business concern that is (1) at least 51 percent owned by one or more minority individuals, or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more minority

Appendix B

individuals; and (2) whose daily business operations are managed and directed by one or more of the minority owners. In order to qualify and participate as an MBE prime or subcontractor for EPA recipients under EPA's DBE Program, an entity must be properly certified as required by 40 CFR Part 33, Subpart B.

U.S. citizenship is required. Recipients shall presume that minority individuals include Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, or other groups whose members are found to be disadvantaged by the Small Business Act or by the Secretary of Commerce under section 5 of Executive order 11625. The reporting contact at EPA can provide additional information.

A **woman business enterprise (WBE)** is a business concern that is, (1) at least 51 percent owned by one or more women, or, in the case of a publicly owned business, at least 51 percent of the stock is owned by one or more women and (2) whose daily business operations are managed and directed by one or more of the women owners. In order to qualify and participate as a WBE prime or subcontractor for EPA recipients under EPA's DBE Program, an entity must be properly certified as required by 40 CFR Part 33, Subpart B.

Business firms which are 51 percent owned by minorities or women, but are in fact not managed and operated by minorities or females do not qualify for meeting MBE/WBE procurement goals. U.S. Citizenship is required.

Good Faith Efforts

A recipient is required to make the following good faith efforts whenever procuring construction, equipment, services, and supplies under an EPA financial assistance agreement. These good faith

efforts for utilizing MBEs and WBEs must be documented. Such documentation is subject to EPA review upon request:

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local and Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
5. Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce.
6. If the prime contractor awards subcontracts, require the prime contractor to take the steps in paragraphs (a) through (e) of this section.

Appendix B**C. Instructions for Part I:**

1A. Specify Federal fiscal year this report covers. The Federal fiscal year runs from October 1st through September 30th (e.g. November 29, 2014 falls within Federal fiscal year 2015)

1B. Specify report type. Check the annual reporting box. Also indicate if the project is completed.

1C. Indicate if this is a revision to a previous year and provide a brief description of the revision you are making.

2A-B. Please refer to your financial assistance agreement for the mailing address of the EPA financial assistance office for your agreement.

The "EPA DBE Reporting Contact" is the DBE Coordinator for the EPA Region from which your financial assistance agreement was originated. For a list of DBE Coordinators please refer to the EPA OSBP website at http://epa.gov/osbp/dbe_cord.

3A-B. Identify the agency, state authority, university or other organization which is the recipient of the Federal financial assistance and the person to contact concerning this report.

4A. Provide the Assistance Agreement number assigned by EPA. A separate report must be submitted for each Assistance Agreement.

***For SRF recipients:** In box 4a list numbers for ALL OPEN Assistance Agreements being reported on this form.

4B. Refer back to Assistance Agreement document for this information.

5A. Provide the total amount of the Assistance Agreement which includes Federal funds plus recipient matching funds and funds from other sources.

***For SRF recipients only:** SRF recipients will not enter an amount in 5a. SRF recipients should check the "N/A" box.

5B. Self-explanatory.

5C. Provide the total dollar amount of ALL procurements awarded this reporting period by the recipient, sub-recipients, and SRF loan recipients, including MBE/WBE expenditures, not just the portion which exceeds \$150,000. For example: Actual dollars for procurement from the procuring office; actual contracts let from the contracts office; actual goods, services, supplies, etc., from other sources including the central purchasing/ procurement centers).

***NOTE:** To prevent double counting on line 5C, if any amount on 5E is for a subcontract and the prime contract has already been included on Line 5C in a prior reporting period, then report the amount going to MBE or WBE subcontractor on line 5E, but exclude the amount from Line 5C. To include the amount on 5C again would result in double counting because the prime contract, which includes the subcontract, would have already been reported.

***For SRF recipients only:** In 5c please enter the total annual procurement amount under all of your SRF Assistance Agreements. The figure reported in this section is not directly tied to an individual Assistance Agreement identification number. (SRF state recipients report state procurements in this section)

Appendix B

5D. State whether or not sub-awards and/or subcontracts have been issued under the financial assistance agreements by indicating "yes" or "no".

5E. Where requested, also provide the total dollar amount of all MBE/WBE procurement awarded during this reporting period by the recipient, sub-recipients, SRF loan recipients, and prime contractors in the categories of construction, equipment, services and supplies. These amounts include Federal funds plus recipient matching funds and funds from other sources.

6. If there were no MBE/WBE accomplishments this reporting period, please briefly how certified MBEs/WBEs were notified of the opportunities to compete for the procurement dollars entered in Block 5C and why certified MBEs /WBEs were not awarded any procurements during this reporting period.

7. Name and title of official administrator or designated reporting official.

8. Signature, month, day, and year report submitted.

D. Instructions for Part II:

For each MBE/WBE procurement made under this financial assistance agreements during the reporting period, provide the following information:

1. Check whether this procurement was made by the recipient, sub-recipient/SRF loan recipient, or the prime contractor.

2. Check either the MBE or WBE column. If a firm is both an MBE and WBE, the recipient may choose to count the entire procurement towards EITHER its MBE or WBE accomplishments. The recipient may also divide the total amount of the procurement (using any ratio it so chooses) and count those divided amounts toward its MBE and WBE accomplishments. If the recipient chooses to divide the procurement amount and count portions toward its MBE and WBE accomplishments, please state the appropriate amounts under the MBE and WBE columns on the form. **The combined MBE and WBE amounts for that MBE/WBE contractor must not exceed the "Value of the Procurement" reported in column #3**

3. Dollar value of procurement.

4. Date of procurement, shown as month, day, year. Date of procurement is defined as the date the contract or procurement was awarded, not the date the contractor received payment under the awarded contract or procurement, unless payment occurred on the date of award. (Where direct purchasing is the procurement method, the date of procurement is the date the purchase was made)

5. Using codes at the bottom of the form, identify type of product or service acquired through this procurement (e.g., enter 1 if construction, 2 if supplies, etc.).

6. Name, address, and telephone number of MBE/WBE firm.

Appendix B

**This data is requested to comply with provisions mandated by: statute or regulations (40 CFR Parts 30, 31, and 33 and/or 2 CFR Parts 200 and 1500); OMB Circulars; or added by EPA to ensure sound and effective assistance management. Accurate, complete data are required to obtain funding, while no pledge of confidentiality is provided.

The public reporting and recording burden for this collection of information is estimated to average 1 hour per response annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclosure or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2136), 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB Control number in any correspondence. Do not send the completed form to this address.

Appendix B**XII – Changes to Approved DBE Compliance Form**

NOTE: THIS FORM IS REQUIRED OF THE LOAN RECIPIENT (OWNER) (WITH THE PRIME CONTRACTOR'S INPUT) FOR DBE COMPLIANCE **ONLY** IF A SUBCONTRACTOR/SUPPLIER/VENDOR IS SOUGHT AND/OR PROCURED **AFTER** THE CONTRACT ATA (APPROVAL-TO-AWARD) HAS BEEN ISSUED. IT IS SIMILAR TO THE DBE COMPLIANCE FORM (PAGE SGC-8) IN THAT IT IS THE COVER/SUMMARY FORM USED TO DOCUMENT THE ADDITIONAL DBE SOLICITATION AND/OR REVISE THE ORIGINAL DBE APPROVAL STATUS.

Loan Recipient: _____ Loan (Project) Number: _____

CERTIFICATIONS:

I certify that the information submitted on and with this form is true and accurate and that this company has met and will continue to meet the conditions of this construction contract regarding DBE solicitation and utilization. I further certify that criteria used in selecting subcontractors and suppliers were applied equally to all potential participants and that EPA Forms 6100-2 and 6100-3 were distributed to all DBE subcontractors.

(Prime Contractor Signature) Date _____

(Printed Name and Title)

*I certify that I have reviewed the information submitted on and with this form and that it meets the requirements of the Loan Recipient's/Owner's State Revolving Fund loan contract. (*Only ONE (1) signature required below.)*

(Signature of Loan Recipient (Owner)) Date _____

OR*

(Loan Recipient's (Owner's) Representative's Signature, (P.E.)) Date _____

(Printed Name and Title)

GENERAL INFORMATION: (Please attach additional pages to address 1 through 5, as needed.)

- (1) If an approved subcontractor is terminated or replaced, please identify this company and briefly state the reason.
- (2) For new or additional subcontractors, list name, trade, address, telephone number, contact person, dollar amount of subcontract and DBE status.
- (3) Attach proof of certification by EPA, SBA, DOT (or by state, local, Tribal or private entities whose certification criteria match EPA's) for each subcontractor listed as a DBE, MBE or WBE.
- (4) Attach documentation of solicitation effort for prospective DBE firms, such as fax confirmation sheets, copies of solicitation letters/emails, printouts of the online solicitations, printouts of online search results, affidavits of publication in newspapers, etc. The prime contractor is strongly encouraged to follow up each solicitation with, at least, one (1) logged phone call. Whenever possible, post solicitation for bids or proposals should be for a minimum of 30 calendar days before the bid or proposal closing date.
- (5) Provide justification for not selecting a certified DBE subcontractor that submitted a low bid for any subcontract area.

Appendix B**XIII – Certification Regarding Equal Employment Opportunity**

The prime contractor is required to comply with Executive Order 112-46 of September 24, 1965 entitled "Equal Employment Opportunity" as amended by Executive Order 11375 of October 13, 1967.

The contract for the work under this proposal will obligate the prime contractor and its subcontractors not to discriminate in employment practices.

The prime contractor shall not maintain or provide for his/her employees the facilities, which are segregated on a basis of race, creed, color or national origin, whether such facilities are segregated by directive or on a de facto basis.

The prime contractor must, if requested, submit a compliance report concerning their employment practices and policies in order to maintain his/her eligibility to receive the award of the contract.

The prime contractor must be prepared to comply in all respects with any contract provisions regarding non-discrimination stipulated in conjunction with labor standards.

PRIME CONTRACTOR'S CERTIFICATION:

Prime Contractor's Name: _____

Address: _____

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause. Yes____ No____
2. Compliance Reports were required to be filed in connection with such contract or subcontract. Yes____ No____
3. Bidder has filed all compliance reports due under applicable contract requirements. Yes____ No____

If answer to item 3 is "No", please explain in detail on reverse side of this certification.

Certification - The information above is true and complete to the best of my knowledge and belief.

Signature of Prime Contractor: _____

Title: _____

Date: _____

Appendix B**XIV – Debarred Firms Certification**

All prime construction contractors shall certify that Subcontracts have not and will not be awarded to any firm that is currently on the General Service Administration's Master List of Debarred, Suspended and Voluntarily Excluded Persons, in accordance with the provisions of ADEM Administrative Code 335-6-14-.35. Debarment action is taken against a firm for noncompliance with Federal Law.

All bidders shall complete this certification in duplicate and submit both copies to the Loan Recipient (Owner) with the bid proposal. The Loan Recipient (Owner) shall transmit one copy to the SRF Section within 14 days after the bid opening.

Project Name/Loan Name*:

(*not Contract Name)

SRF Project No.:

The undersigned hereby certifies that the firm of _____

_____ has not and will not award a subcontract, in connection with any contract awarded to it as the result of this bid, to any firm that is currently on the General Service Administration's Master List of Debarred, Suspended, and Voluntarily Excluded Persons.

Signature of Prime Contractor:

Title:

Date:

Appendix B

XV – Davis-Bacon and Related Acts

Labor Standards Provisions for Federally Assisted Contracts

Wage Rate Requirements Under FY 2013 Continuing Appropriation

I. Requirements under the Consolidated and Further Continuing Appropriations Act, 2013 (P.L. 113-6) For Subrecipients That Are Governmental Entities:

The following terms and conditions specify how recipients will assist EPA in meeting its Davis-Bacon (DB) responsibilities when DB applies to EPA awards of financial assistance under the FY 2013 Continuing Resolution with respect to State recipients and subrecipients that are governmental entities. If a subrecipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. If a State recipient needs guidance, the recipient may contact Cynthia Y. Edwards at Edwards.Cynthiay@epa.gov or at 404-562-9340 of EPA, Region 4 Grants and SRF Management Section, for guidance. The recipient or subrecipient may also obtain additional guidance from DOL's web site at <http://www.dol.gov/whd/>

1. Applicability of the Davis- Bacon (DB) prevailing wage requirements.

Under the FY 2013 Continuing Resolution, DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the recipient State before authorizing work on that site.

2. Obtaining Wage Determinations.

(a) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

(i) While the solicitation remains open, the subrecipient shall monitor www.wdol.gov weekly to ensure that the wage determination contained in the solicitation remains current. The subrecipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the subrecipient.

(ii) If the subrecipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the subrecipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor www.wdol.gov on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the subrecipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from www.wdol.gov into the ordering instrument.

(c) Subrecipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

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(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

3. Contract Subcontract Provisions.

(a) The Recipient shall insure that the subrecipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project under the DWSRF financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or the FY 2010 appropriation, the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's web site, www.dol.gov.

(ii)(A) The subrecipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

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(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient (s) to the State award official. The State award official will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request and the local wage determination, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(2) Withholding.

The subrecipient(s), shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

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(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the subrecipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <https://www.dol.gov/agencies/whd/forms/wh347> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the subrecipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the subrecipient(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

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(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program.

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If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

(5) Compliance with Copeland Act requirements.

The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

(6) Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

(7) Contract termination: debarment.

A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

(9) Disputes concerning labor standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and Subrecipient(s), State, EPA, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

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4. Contract Provision for Contracts in Excess of \$100,000.

(a) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages.

In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages.

The subrecipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Subrecipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

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5. Compliance Verification

(a) The subrecipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(8), all interviews must be conducted in confidence. The subrecipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(b) The subrecipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, the subrecipient should conduct interviews with a representative group of covered employees within two weeks of each contractor or subcontractor's submission of its initial weekly payroll data and two weeks prior to the estimated completion date for the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. Subrecipients shall immediately conduct necessary interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence.

(c) The subrecipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The subrecipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the subrecipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Subrecipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB. In addition, during the examinations the subrecipient shall verify evidence of fringe benefit plans and payments there under by contractors and subcontractors who claim credit for fringe benefit contributions.

(d) The subrecipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Subrecipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <https://www.dol.gov/agencies/whd/contact/local-offices>.

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(Insert applicable wage rate determination here.)

Wage Rates are county specific for *Heavy Construction* and can be found at:
<https://sam.gov/content/wage-determinations>

Appendix B

XVI – American Iron and Steel Requirement

Section 4.13 Compliance with 2014 Appropriations Act. (a) The Loan Recipient agrees to comply with all federal requirements applicable to the Authority Loan (including those imposed by P.L. 113-76, Consolidated Appropriations Act (the "2014 Appropriations Act") and related SRF Policy Guidelines) which the Loan Recipient understands includes, among other things, requirements that all of the iron and steel products used in the Project are to be produced in the United States ("American Iron and Steel") unless (i) the Loan Recipient has requested and obtained a waiver from the U.S. Environmental Protection Agency pertaining to the Project or (ii) the Authority has otherwise advised the Loan Recipient in writing that the Buy American Requirement is not applicable to the Project. .

(b) The Loan Recipient also agrees to comply with all recordkeeping and reporting requirements under the Clean Water Act (codified generally under 33 U.S.C. §1251 et seq.) (the "Clean Water Act"), including any reports required by a federal agency or the Authority such as performance indicators of program deliverables, information on costs and Project progress. The Loan Recipient understands that (i) each contract and subcontract related to the Project is subject to audit by appropriate federal and state entities, and (ii) failure to comply with the Clean Water Act and this Agreement may be an Event of Default hereunder that results in a repayment of the Authority Loan in advance of the maturity of the Evidence of Indebtedness and/or other remedial actions.

The Loan Recipient agrees to cause all contractors and subcontractors to comply with (through the inclusion of appropriate terms and conditions in all contracts, subcontracts and lower tiered transactions, such terms and conditions to be in substantially the form set forth in connection with the development and construction of the project

The Contractor acknowledges to and for the benefit of the _____, Alabama ("Purchaser"), and the Alabama Water Pollution Control Authority or the Drinking Water Finance Authority (the "State Authority") that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel") including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State Authority that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State Authority. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State Authority to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State Authority resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State Authority or any damages owed to the State Authority by the Purchaser). While the Contractor has no direct contractual privity with the State Authority, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State Authority is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State Authority.

Appendix B**XVII – Project Sign Detail - CWSRF**

 ADEM Alabama Department of Environmental Management	STATE OF ALABAMA Honorable (name), Governor	
ALABAMA WATER POLLUTION CONTROL AUTHORITY POLLUTION CONTROL PROJECT		
(NAME OF OWNER) (NAME OF PROJECT)		
\$(amount) STATE REVOLVING FUND LOAN		
(NAME OF CONTRACTOR) • CONTRACTOR (NAME OF ENGINEER) • CONSULTING ENGINEER		
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT U.S. ENVIRONMENTAL PROTECTION AGENCY		

1. Sign is to be constructed of ½" MDO plywood, 4' x 8'. Alternate materials may be used if approved by ADEM prior to use.
2. Paint with two (2) coats oil-base enamel before lettering.
3. Background color white; lettering black.
4. Lettering may be painted or vinyl. All lettering sizes to be proportionate to sign layout.
5. Sign shall be attached to 4" x 4" x 8' treated posts. Alternatives may be used if approved by ADEM prior to use.
6. Sign shall be placed in prominent location, easily readable from existing street or roadway.
7. Sign shall be maintained in good condition until completion of project.

Appendix B**XVIII – Project Sign Detail - DWSRF**

	STATE OF ALABAMA Honorable (Name), Governor	
	ALABAMA DRINKING WATER FINANCE AUTHORITY INFRASTRUCTURE PROJECT (NAME OF OWNER) (NAME OF PROJECT) \$(amount) STATE REVOLVING FUND LOAN (NAME OF CONTRACTOR) • CONTRACTOR (NAME OF ENGINEER) • CONSULTING ENGINEER ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT U.S. ENVIRONMENTAL PROTECTION AGENCY	

1. Sign is to be constructed of ½" MDO plywood, 4' x 8'. Alternate materials may be used if approved by ADEM prior to use.
2. Paint with two (2) coats oil-base enamel before lettering.
3. Background color white; lettering black.
4. Lettering may be painted or vinyl. All lettering sizes to be proportionate to sign layout.
5. Sign shall be attached to 4" x 4" x 8' treated posts. Alternatives may be used if approved by ADEM prior to use.
6. Sign shall be placed in prominent location, easily readable from existing street or roadway.
7. Sign shall be maintained in good condition until completion of project.

Appendix B**XIX – Construction Contract Requirements**

This checklist is to be completed by the Loan Recipient (Owner)/Engineer when submitting plans and specifications to the SRF Section for review. It affirms to the SRF reviewer that the Loan Recipient (Owner)/Engineer has addressed these items (in boilerplate form) within the specifications manual.

Contract Page No.	Satisfied Yes/No	
_____	_____	Bid Advertisement (including date, time, and location of bid opening).
_____	_____	Bid Bond.
_____	_____	Performance Bond (100%).
_____	_____	Payment Bond (Not less than 50%).
_____	_____	Contract Length.
_____	_____	Liquidated Damages.
_____	_____	Liability Insurance (including workman's comp, public liability, and builder's risk, if applicable).
_____	_____	Method of Award (i.e. lowest, responsive, responsible bidder).
_____	_____	Air testing of gravity sewers (if applicable).

Within 14 days after the bid opening, the Loan Recipient (Owner)/Engineer is to prepare the Project Review and Cost Summary (per the PR&CS Checklist, page SGC-39) and submit it to the SRF Section of ADEM. Upon completion of review, a written ATA (Approval-to-Award) will be issued.

NOTE:

The Loan Recipient (Owner) assumes all financial risk, if the construction contract is awarded prior to the issuance of an ATA letter by the SRF Section.

Appendix B**XX – Project Review and Cost Summary**

ADEM Alabama Department of Environmental Management	SRF Project Review and Cost Summary	Form Revised 07-2021
This form is to be completed and submitted (with supporting documentation) to the SRF Section within 14 days after bid opening. Following satisfactory review, an ATA (Approval-to-Award) letter will be issued. After the ATA is issued/award of the contract, a pre-construction conference should be scheduled (<u>with the SRF Project Manager in attendance</u>). <u>A complete, bound set of the executed contract documents manual should be forwarded to the SRF Section for review and written approval following the pre-construction conference.</u> Loan Recipient: _____ Project Number: _____ Project Name: _____ Contract Number: _____ Contract Name: _____ 1. Date of plans and specifications concurrence letter from ADEM-SRF Section: _____ Date of construction permit issuance from ADEM-DW Branch: _____ 2. Attach copies of the following documents: ___ a. Bid advertisement with certification by publisher and date(s) of publication. ___ b. Certified bid tabulation. ___ c. Proposal of the selected bidder. ___ d. Bid bond. ___ e. Engineer's letter to the loan recipient recommending award of the contract. If the award is made to other than the low bidder, provide justification. ___ f. Site certificates for the project, if not previously submitted with the SRF loan application. ___ g. <u>DBE Documentation from the loan recipient (owner) and the prime contractor.</u> Utilization, solicitation and documentation requirements (with a list of required documents) are discussed in detail in Parts III - V (pages SGC-3 - SGC-23) of the ADEM <i>SRF Supplemental General Conditions</i> for SRF Assisted Public Drinking Water and Wastewater Facilities Construction Contracts. ___ h. Copy of the wage determination used in bidding. ___ i. Any addenda that have been issued after ADEM review of the plans and specifications. Comments: _____ _____ _____		