

**STATEMENT OF WORK  
BASIC ORDERING AGREEMENT  
for  
INFRASTRUCTURE SUPPORT FOR METERING, BACKFLOW, AND CROSS  
CONNECTION CONTROL  
at  
UNITED STATES ARMY GARRISON  
FORT STEWART AND HUNTER ARMY AIRFIELD, GEORGIA**

**Introduction/Purpose**

The purpose of the subject document is to execute a Basic Ordering Agreement (BOA) with qualified subcontractors for infrastructure support at Fort Stewart and Hunter Army Airfield, Georgia (FSGA/HAAF) in the areas of backflow prevention (BFP), metering (i.e., water, electrical, gas, etc.) and cross connection control.

Developing and maintaining a sustainable infrastructure is crucial to supporting the operation and missions of FSGA/HAAF. With increased emphasis on energy conservation and environmental stewardship, developing a sustainable infrastructure means designing and maintaining buildings, structures, and support systems with an eye to resource conservation to ensure that future generations will not be left to address the approaching wave of infrastructure needs that will result from aging infrastructure. Ongoing processes of oversight, evaluation, maintenance and replacement are needed to maximize the useful life of infrastructure assets.

For the purposes of this BOA, infrastructure support at FSGA/HAAF is in the areas of water security and energy management.

**Scope of Work**

Subcontractors will be required to provide technical support in the following areas:

1. Program/Project Management and Administration
2. Work Plan Preparation  
Work Plans document the subcontractor's approach for achieving the project objective and proposed work schedule. The Work Plan shall outline how the required tasks will be implemented, and shall include the personnel, facilities, and materials required to plan and conduct project tasks.
  - System Design  
Systems design is the process of defining and developing a system to satisfy specified requirements. The subcontractor may be tasked to include systems design information in project Work Plans that defines the components, modules, specifications, interfaces, and data needed to satisfy specified requirements for water and/or energy systems.
  - QA/QC Plan Preparation

The Quality Assurance/Quality Control Plan describes in comprehensive detail the necessary QA, QC, and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria.

- **H&S Plan Preparation**  
Health & Safety Plans document the hazards and risks that may be encountered during project operations and the measures to be taken to mitigate them. The H&S Plan shall incorporate the elements of the Department of Energy's Integrated Safety Management (ISM) program, and shall include procedures to (1) identify and analyze hazards; (2) develop and implement hazard controls; (3) perform within work controls; and (4) provide feedback and continuous improvement. (Refer to 40 CFR 830, Subpart A)

### 3. Data Collection

Collection of data to support this scope of work includes on-site field surveys of buildings and locations at FSGA and HAAF, and reviews of historic water and energy usages. There are approximately 3100 buildings at FSGA/HAAF that may be included in data collection tasks.

- **Field Surveys**  
The subcontractor may be tasked to perform on-site surveys at FSGA/HAAF related to water security and energy management to determine current equipment and operational status. Examples of field surveys include assessments of facilities for the presence/absence of meters (water, electrical, gas/oil, BTU) and BFP assemblies/devices; and Inflow & Infiltration surveys.
- **Water Usage Determination**  
The subcontractor may be tasked to determine the amount of water used by systems or locations at FSGA and HAAF (i.e., Central Energy Plant, Base housing areas, etc.).
- **Gap Analyses**  
The subcontractor may be tasked to conduct evaluations of facilities and systems at FSGA/HAAF to determine areas that are not compliant with requirements regarding water distribution and security, and energy management.

### 4. Backflow Prevention and Cross Connection Control

- **Cross Connection and BFP surveys**  
The subcontractor shall survey or re-survey buildings/locations at FSGA and HAAF to identify backflow prevention assemblies and devices for installation, testing, repair, or replacement as required.
- **Installation and replacement of BFP devices and assemblies**  
BFP assemblies/devices and associated piping shall be installed in accordance with the Standard Plumbing Code and standard industry practices regarding backflow prevention and cross connection control.

BFP assemblies and devices are to be manufactured by Wilkins, or equivalent.

- Testing and certification of BFP devices and assemblies  
The subcontractor shall test and certify new and existing BFP assemblies and devices in accordance with standard industry methods, and State of Georgia environmental rule 391-3-5.13, *Cross Connections*. Test reports shall be completed for all assemblies and devices.

5. System Infrastructure

System infrastructure refers to the buildings or facilities, and ancillary equipment that support water and energy-related systems (e.g., potable water, wastewater, electric, etc.) at FSGA/HAAF.

- Design and Installation  
The subcontractor may be tasked to define the architecture, components, modules, interfaces, specifications, and data needed to satisfy requirements for infrastructure systems that support water security and energy management needs; and implement the system design.
- System repair and replacement  
The subcontractor may be tasked to repair and replace defective portions of, or equipment for, water and energy-related systems. (e.g., industrial waste system lines and manholes, water and electric meters, etc.)
- Inspection and cleaning  
Infrastructure maintenance includes periodic inspection and cleaning to ensure system sustainability. (e.g., industrial waste sewer systems, potable water systems.)
- Site restoration  
Infrastructure maintenance and installation activities may necessitate disturbing paved and/or grassed areas at FSGA/HAAF. All disturbed areas shall be restored or re-established by replacing pavement/sidewalks, and grass/turf.

6. Meters (i.e., water, electric, gas/oil, BTU)

- Installation and replacement  
Subcontractor may be tasked to determine appropriate sizes and types, and install meters to meet energy management requirements at FSGA/HAAF.
- Remote data acquisition capability  
Meters installed in support of this BOA shall be capable of acquiring data remotely, and shall be compatible with pulse-type metering systems.

7. Data Management

The subcontractor shall be tasked to manage, store, and ensure the quality of data collected during activities performed under this BOA. The FSGA/HAAF Backflow Prevention Program database is an existing database that shall be utilized to document results of activities related to BFP assemblies and devices.

- Electronically locate BFP assemblies/devices and meters

The subcontractor shall be required to electronically locate all BFP assemblies and devices, and meters (water, electric, gas/oil, BTU) using Global Positioning System (GPS) equipment.

- Maintain and update electronic database inventory of BFP assemblies and devices and meters

The FSGA/HAAF Backflow Prevention Program database is an existing database that shall be utilized to document results of activities related to BFP assemblies and devices. A unique barcode identification number shall be assigned and attached to each new BFP assembly. BFP devices shall be assigned a unique photo file number. Examples of forms to be used for BFP inventory, inspection, and testing are attached for reference.

8. Reporting (data assessment, data management, recommendations, etc.)  
The subcontractor shall be tasked to generate project summary reports that describe the work completed under each task order. Project summary reports shall clearly define the procedures used; survey results; locations of equipment installed, repaired, tested, or certified; data assessment and data management procedures; and recommendations.

Technical support requirements may be in the form of project specific tasks and technical staff augmentation.

### **Company(s) Supplied Services**

The BOA will be executed directly with qualified subcontractors to support the scope of work at United States Army Garrison, Fort Stewart and Hunter Army Air Field, Georgia. The qualified subcontractors will have the expertise and required certifications/licenses to support the requirements of this Statement of Work:

- Master Plumber(s) licensed in the State of Georgia
- Backflow prevention assembly testing certification by the Georgia Statewide Backflow Prevention Assembly Certification Program, as approved by the Georgia EPD, the American Backflow Prevention Association (ABPA), the American Society of Sanitary Engineers (ASSE) or the University of Florida TREEO Center
- Hazardous Waste Operations and Emergency Response (HAZWOPER) training per 29 CFR 1910.120

### **Period of Performance**

Five years.

### **Labor Categories**

The labor rates will be established for the following labor categories:

Management  
Program

Project

Plumbing

Master Plumber

Plumber

Certified Cross Connection Control Inspector

Certified Backflow Protection Assembly Tester

Field Operations

Technician

BFP Technician

Cross Connection Control Technician

Information Technology

Specialists

Data Entry

Administration

Word Processor

Office

Clerk

Secretary

Miscellaneous

**Budget**

No dollars are committed in the BOA. Work is assigned on a task order basis.