

**MACC STATEMENT OF WORK**

**CONTRACTOR SERVICES**

**FOR**

**Project MUHJ 08-0008**

**Repair King Street and Tabb Creek Bridges**

**(A Companion to Project to Temporarily Relocate Tabb Creek Bridge Utilities)**

**Langley Air Force Base**

**Virginia**

**March 19, 2010**

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**STATEMENT OF WORK FOR  
MULTIPLE AWARD CONSTRUCTION CONTRACT (MACC)  
PROJECT MUHJ 08-0008  
REPAIR KING STREET AND TABB CREEK BRIDGES  
AT  
LANGLEY AFB, VIRGINIA**

**1. GENERAL REQUIREMENTS:**

The following statement of work for the MACC contract is keyed to the General Provisions contained in Attachment 3 to the basic contract and serves to clarify intent within the annotated paragraphs. The requirements identified within the General Provisions shall remain in full affect unless otherwise specifically noted.

**1.1 PERMITTING:** The Contractor shall prepare all permit applications and obtain all necessary permits that are required to complete the work detailed in this Statement of Work. There are existing utilities that are suspended from the Tabb Creek Bridge that must be relocated prior to any Tabb Creek Bridge repair work. The Contractor shall perform the temporary relocation of the utilities that are attached to the Tabb Creek Bridge and make all required repairs to the Tabb Creek Bridge only after all necessary permits are obtained. The relocation of the utilities will allow for the completion of the Tabb Creek Bridge repair work. All work shall be accomplished in accordance with this Statement of Work and the companion Design-Build project Statement of Work to temporarily relocate the existing Tabb Creek Bridge utilities.

**1.2 CURRENT CONDITIONS:**

Project Number MUHJ 08-0008, Repair King Street and Tabb Creek Bridges, LAFB VA

The King Street and Tabb Creek bridges are in a state of disrepair. A Tabb Creek Bridge Evaluation was accomplished by URS Corporation in May 2009 and a subsequent Bridge Inspection Condition Assessment of the King Street and Tabb Creek Bridges was accomplished by PBS&J in May of 2008 and designs to repair the bridges were accomplished under separate contract. The following determinations were made:

**King Street Bridge:** Beam seats that support the existing prestressed concrete girders were repaired in 1996. The beam seats have since degraded severely and are in need of repair. Existing concrete and steel reinforcement with the vicinity of the beam seats also needs to be repaired. In addition, at the south abutment (Gate Entrance) and north abutment (Base Side of bridge near the Officer's Club), the King Street Bridge approach slabs have voids in the structural backfill which should be repaired.

**Tabb Creek Bridge:** At the west approach (MSA End of Bridge) the subgrade and subbase has deteriorated several feet deep beneath the existing pavement. Currently there exists no abutment, approach slab or retaining wall at the west approach of Tabb Creek Bridge. Collapse of pavement is potential for injury to personnel, equipment and disruption to the AF mission. Some of the existing timber piles have deteriorated and need to be repaired. The deteriorated piles limit the load carrying capacity of the Tabb Creek Bridge. The bridge deck is a reinforced concrete superstructure supported on wooden bents. The bents are grouped in a series of four piles joined with a timber and wooden cross bracing. Bolted and welded connections are used to secure the deck to the supporting structure to resist lateral movement and uplift. Repair of the Tabb Creek Bridge will include repair of the existing pile caps in addition to the other required civil work. Before the bridge repairs can be accomplished, there are existing utilities that are suspended from the bridge that must be relocated at some distance of non-interference so that the Tabb Creek Bridge repairs can be executed. In addition, there are several bridge light fixture that have to be removed and salvaged for reuse. The utilities support NASA and LAFB Munitions Storage Area and are critical to each function's operation. Close coordination with both parties (NASA and the MSA Facility Manager) is of utmost importance prior to relocation of the utilities.

### **1.3 BUILD:**

**MUHJ 08-0008 Repair Repair King Street and Tabb Creek Bridges, LAFB VA (a companion to project to relocate Tabb Creek Bridge utilities):** The scope of work for this project includes the following areas at the site that require repair:

#### **King Street Bridge:**

**1.3.1 Approach Slabs:** Repair the existing approach slab at each end of King Street Bridge – North and South Ends – Includes associated excavation, removal, disposal of existing subgrade, subbase and approach slab and replacement of the same. This scope also includes, but is not limited to, protection of existing waterline and supporting contract documents.

**1.3.2 Backwall and Abutment:** Repair existing holes in backwall and backfill backwall/abutment.

**1.3.3 Joint Repair:** Repair existing beam seat, deformed reinforcing bars and joints as noted in the contract drawings.

All repair work of King Street Bridge shall be accomplished in accordance with BCE Drawing Number FY08002 and associate supporting contract specifications and other relative documents.

#### **Tabb Creek Bridge:**

**1.3.4 Removal/Salvage/Re-installation of Tabb Creek Bridge Lighting:** Remove eight (8) existing high mast poles, box lighting fixtures, and power sources – (west side of bridge only). This requirement includes temporarily removing existing poles, light fixtures, light fixture mounts, lamps, ballast equipment, cables, switches, transformers, splices, and other necessary civil and electrical infrastructure work, and related appurtenances.

Store all items securely and protect well for reuse. Re-install all items removed, including any necessary support cables, circuits and hardware that are required to make the lighting system whole and fully functional, after all bridge repairs are complete. Sand, prime and paint all damaged exposed painted surfaces to match existing finish.

**1.3.5 Pile Cap Repair:** Remove reinforced concrete bridge deck and repair pile caps and cross bracing as required by BCE Drawing Number FY08002 and associated contract documents – coordinate associated Design-Build work to relocate existing utilities which entails all earthwork, trenching, temporary removal of all affected conduit, cables, switches, transformers, and other necessary civil and electrical infrastructure work, and related appurtenances per BCE drawings referenced herein and approved Design-Build documents.

**1.3.6 Tabb Creek Bridge Approach Repairs:** Repair both approach slabs (or area of approach) in accordance with BCE Drawing Number FY08002 and associated contract documents. This requirement includes all associated excavations, repairs to subbase and subgrade, repair of backwall, backfill of abutment/backwall, pavement base drain, et cetera and construction of new approaches as indicated in the above referenced contract drawings.

**1.3.7 Pavement Markings:** After all bridge repairs are made, provide appropriate pavement markings in accordance with BCE Drawing Number FY08002 and associated contract documents. All markings shall meet current VDOT and Federal Highway Safety standards.

**1.3.8 Power, Communications, and Equipment Outages:** All necessary power and equipment outages shall be coordinated with the Contracting Officer or his/her representative. **Provide not less than a 2 week notice.** See notification (or coordination) requirements, Paragraph 1.3 and 1.4, of the Design-Build SOW for utility relocation. Same requirements are applicable to this portion of the contract by reference.

**1.3.9 Erosion and Sediment Control:** The Contractor shall provide adequate erosion and sediment controls at all time and shall at all times not allow any dirt, debris, or sediment to enter Tabb Creek during the entire construction operation.

## **2. PROGRAM MANAGEMENT:**

The contractor shall sequence his work to ensure progress efficient for occupancy and use.

### **2.1 COMMENCEMENT, PROSECUTION AND COMPLETION OF SERVICES:**

The Contractor is required to complete the following service requirements: There is no requirement for Title I Services within this scope of services.

### **2.2 SUBCONTRACTORS:**

No variance.

### **2.3 QUALITY CONTROL PLAN:**

No variance.

## **3. RESPONSE REQUIREMENT**

No variance.

**4. DESIGN DOCUMENTS, GENERAL:**

No variance.

**4.1 DRAWINGS, BID SCHEDULE AND COST ESTIMATE:**

No variance.

**4.2 REQUIRED DRAWINGS:**

No variance.

**4.3 RENDERED PERSPECTIVE:**

There is no requirement for architectural renderings within this scope of services.

**4.4 SPECIFICATIONS:**

No variance.

**4.5 CONSTRUCTION COST ESTIMATE BREAKDOWN:**

No variance.

**4.6 PREPARATION OF AF FORM 66, Schedule of Material Submittals:**

No variance.

**4.7 BID SCHEDULE:**

Bid Schedule is attached.

**5. DESIGN ANALYSIS:**

No variance.

**6. CONTRACT DOCUMENTS SPECIAL REQUIREMENTS:**

No variance.

**7. APPLICABLE CODES AND REGULATIONS:**

In addition to Special Conditions Section 01 11 00, Paragraphs 1.5 and 1.12.3, the following information and criteria are made a part of this contract by reference:

- A.** Unified Facilities Criteria (UFC) 1-200-01 General Building Requirements
- B.** UFC 1-900-01 Selection of Methods for the Reduction, Reuse and Recycling of Demolition Waste
- C.** UFC 3-220-01N Geotechnical Engineering Procedures for Foundation Design of Buildings and Structures
- D.** UFC 3-270-04 Concrete Repair
- E.** UFC 3-300-10N Structural Engineering, with Changes 1-2
- F.** UFC 3-310-01 Structural Load Data
- G.** UFC 3-320-05A Structural Design Criteria for Structures Other Than Buildings
- H.** UFC 3-600-01, Fire Protection Engineering for Facilities
- I.** ASCE 7 Minimum Design Loads for Buildings and Other Structures

- J. AISC Manual of Steel Construction, 13th Edition
- K. ACI 318-05 Building Code Requirements for Structural Concrete and Commentary
- L. National Design Specification for Wood Construction
- M. National Electrical Code (NEC)
- N. National Fire Protection Association Codes (NFPA) – latest edition
- O. ANSI C-2, National Electrical Safety Code (QIESC)
- P. Life Safety Code, NFPA 101
- Q. Applicable Unified Facilities Guide Specifications
- R. Air Force Instruction AFI 31-101 ACC SUP 1, The Air Force Installation Security Program
- S. Air Force Joint Manual AFJMAN 32-1082, Facilities Engineering Electrical Exterior Facilities
- T. Air Force Handbook 32-1084 Facility Requirements
- U. Langley AFB Electrical, Fire, and Communications Design Standards -- latest edition
- V. Air Force Engineering Technical Letter ETL 01-1, Reliability and Maintainability (R&M) Design Checklist
- W. Air Force Instruction AFI 31-101 ACC SUP 1, The Air Force Installation Security Program
- X. Air Force Joint Manual AFJMAN 32-1082, Facilities Engineering Electrical Exterior Facilities

## 8. GOVERNMENT POINT OF CONTACTS

<u>Name</u>	<u>Rank</u>	<u>Unit Symbol</u>	<u>Phone</u>
Willie E. Williams (Project Manager)	Civ	633 CES/CEPM	(757) 764-1386
Weisheit, Edward (MSA)	CMSgt	633 EMS/MXMW	(757) 764-5553
Taber Knight	MSgt	633 ABW/SEW	(757) 764-5059
Dwayne Weston	Civ	633 CS/SCXP	(757) 764-7199
Douglas Smith	Civ	NASA	(757) 864-5756
National Aeronautics and Space Administration (NASA)			

## 9. DELIVERABLES

**9.1 ELECTRONIC DOCUMENT REQUIREMENTS:** The Contractor shall provide electronic as-built information on compact disk compatible with Langley's Geobase database system for electronic record of work as well as a hardcopy set of as-built drawings on 4-Mil Mylar. Provide 24x36 full size as-built drawings based on Tri-Lateral Services Standard. All documents provided in either electronic or hardcopy form shall be developed and provided in accordance with the deliverable requirements of Section 01 11 00 SPECIAL CONDITIONS, Paragraph 1.22.

The A-E is required to submit the documents in accordance with the deliverable requirements of Section 01 11 00 SPECIAL CONDITIONS.

Any questions regarding data collection efforts, deliverable formats or deliverable specifications should be addressed to the Geo Integration Office, contact information:

**633 Civil Engineer Squadron** - SSgt Christopher Hobbins, 633 CES/CEPT  
37 Sweeney Boulevard; Room 224  
Langley AFB, VA 23665  
**(757) 764-9725**

**9.2 SUBMITTAL DELIVERIES:** All submittals shall be express delivered/overnight mailed to the following:

**633 Contracting Squadron** – 1stLt Brian Chin, 633 CONS/LGCB  
74 Nealy Avenue, Langley AFB, VA 23665  
Commercial (757) 764-7681, DSN 574-7681  
Data Fax (757) 764-4071  
Email: brian.chin@langley.af.mil

**\*\*\* END OF STATEMENT OF WORK \*\*\***