Draft Maintenance Concept Remains Consistent with Prior Fiscal Year

# STATEMENT OF WORK

# FOR THE REBUILD

# OF THE

# MEDIUM GIRDER BRIDGE SYSTEM

# CONSISTING OF:

MEDIUM GIRDER BRIDGE
NSN 5420-00-172-3520

BRIDGE ERECTION SET
NSN 5420-00-172-3519

LINK REINFORCEMENT SET
NSN 5420-01-139-1503

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# Statement of Work (SOW) for the Rebuild of the Medium Girder Bridge System
NSN 5420-00-172-3520
NSN 5420-00-172-3519
NSN 5420-01-139-1503

1.0 SCOPE. This Statement of Work (SOW), along with Rebuild Standard RS 08676A-50 establishes, sets forth tasks and identifies the work efforts that shall be performed by the Contractor in the Rebuild effort of the Medium Girder Bridge System, hereafter referred to as the MGB. This document contains requirements to restore the MGB to Condition Code "A". Condition Code "A" is defined as "serviceable/issuable without qualification, new, used, repaired or reconditioned materiel which is serviceable and issuable to all customers without limitation or restriction, including materiel with more than six months of shelf-life remaining".

1.1 Background. Rebuild is defined as "That maintenance technique to restore an item to a standard as near as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished through a maintenance technique or complete disassembly of the item, inspection of all parts or components, repairs or replacement of worn or unserviceable elements using original manufacturing tolerances and/or specifications and subsequent reassembly of the items".

2.0 APPLICABLE DOCUMENTS. The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto which is in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be the superseding requirement.

2.1 Military Specifications

| | |
|---|---|
| MIL-C-46168 | Coating, Aliphatic Polyurethane, Chemical Agent Resistant |
| MIL-C-53039 | Coating, Aliphatic Polyurethane, Single Component, Chemical Agent Resistant |

2.2 Military Standards

| | |
|---|---|
| MIL-STD-129 | DoD Standard Practice: Military Marking for Shipment and Storage |
| MIL-STD-130 | Identification Marking of US Military Property |
| MIL-STD-2073-1D(1) | DoD Standard Practice for Military Packaging |

2.3 Other Government Documents And Publications

| | |
|---|---|
| DoD 4000.25-1-M | Military Standard Requisitioning and Issue Procedures (MILSTRIP) Manual |
| DoD 4160.21-M-1 | Demilitarization Manual |
| DoD 4160.21-M | Defense Disposition Manual |
| TM 08676A-23/2 | Unit and Direct Support Maintenance Manual Medium Girder Bridge System |
| TM 08676A-23P/3, USMC Sup1 | Marine Corps Supplement Unit and Direct Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts) for Medium Girder Bridge System |
| TM 08676A-23P/3 | Unit and Direct Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts) for Medium Girder Bridge System |
| RS 08676A-50 | Depot Maintenance Work Requirement for Medium Girder Bridge |
| TM 3080-12 | Corrosion Prevention and Control for Marine Corps Equipment |
| TM 3080-50 | Corrosion Control Procedures Depot Maintenance Activities for Marine Corps Equipment |
| TM 4700-15/1H | Ground Equipment Record Procedures |
| TM 4750-15/1 | Painting and Registration Marking for Marine Corps Combat and Tactical Equipment |

Military Handbooks (For Guidance)

| | |
|---|---|
| MIL-HDBK-61 | Configuration Management Guidance |

2.4 Industry Standards

| | |
|---|---|
| ANSI/ISO/ASQC Q9001-2000 | Quality Management Systems – Requirements |

Industry Standards (For Guidance)

| | |
|---|---|
| ANSI/EIA-649 | National Consensus Standard for Configuration Management |

Copies of Military Standards and Specifications are available from the DoD Single Stock Point, Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, commercial telephone number (215) 697-2179 or DSN 442-2179, or on the Internet at http://www.dodssp.daps.mil. Copies of other government documents and publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracts Department, Code 891, P. O. Drawer 43019, 814 Radford Blvd., MCLC, Albany, Georgia 31704-3019, commercial telephone number (229) 639-6753 or DSN 567-6753. Copies of engineering drawings, if applicable, may be obtained by contacting Supply Chain Management Center, Attn: Code 566-1A, 814 Radford Blvd., STE 20320, Albany, Georgia 31704-0320, commercial telephone number (229) 639-6476 or DSN 567-6476.

3.0 REQUIREMENTS

3.1 General Tasks. In fulfilling the specified requirements, the Contractor shall:

a. Provide materiel, labor, equipment, special equipment/gages/fixtures, facilities and missing/repair parts, necessary to inspect, diagnose, restore, perform required alignment repairs, and test the MGB. Upon completion of Rebuild, the subject item shall be Condition Code "A".

b. Provide all personnel, tools and equipment required to test, inspect, and repair the MGB.

c. Conduct in process and final on-site inspection for witness by Marine Corps Systems Command (MCSC), GTES, Albany, Georgia representatives.

d. Be responsible for all structural, and mechanical requirements associated with the restoration of the MGB.

3.2 Detailed Tasks. The following tasks describe the different phases for Rebuild of the MGB.

3.2.1 Phase I – Pre-Induction Inspection. A Certified Bridge Inspector, certified by Williams Fairey Company, Ltd., shall inspect each component of the MGB. The Contractor shall perform a Pre-Induction Inspection Analysis for each MGB using the RS 08676A-50 as a guide to determine extent of work and parts required. This inspection shall include all items associated with the MGB as found in TM 08676A-23/2 and RS 08676A-50. These findings shall be annotated on a Preshop Analysis Checklist located in Appendix E of RS 08676A-50 and shall be provided to the government upon request by a MCSC, GTES, Albany, Georgia representative.

3.2.2 Phase II – Rebuild. After Pre-Induction and Inspections have been completed, repair of the MGB shall be accomplished by the contractor in accordance with this SOW and RS 08676A-50.

a. Deficiencies noted on the Pre-Shop Analysis Checklist, during Phase I shall be repaired/replaced. A Contractor produced list of defective parts and assemblies repaired and replaced shall be made available by the contractor upon request by a MCSC, GTES, Albany, Georgia representative.

b. Pre-Shop Analysis Checklist. Information recorded on the Pre-Shop Analysis Checklist shall be used as a guide to repair the MGB system in accordance with this SOW.

c. Repairs. Each component of the MGB shall be repaired only if a repair procedure for the component is contained in TM 08676A-23/2 or RS 08676A-50, otherwise components shall be replaced.

**Warning**

The Contractor should be thoroughly familiar with the contents of RS 08676A-50 and TM 08676A-23/2 before attempting any repair procedures on the MGB. It is imperative that all cautions and warnings are strictly adhered to at all times. Failure to follow all cautions, warnings, repair and testing procedures can result in serious injury or death to personnel.

d. Demilitarization. Components found to be unserviceable or non-repairable shall be disposed of in accordance with DoD 4160.21-M-1 and DoD 4160.21-M. Disposal shall be the responsibility of the contractor after receiving authorization from Code MCSC, GTES, Albany, Georgia.

e. Data Plate. Each repaired MGB shall meet the requirements of RS 08676A-50.

f. Hardware

(1) Replace broken, unserviceable and/or missing hardware to include mechanical assemblies, nuts, bolts, screws, washers, turn lock fasteners, mandatory replacement items, safety, and one-time use items, in accordance with the TM 08676A-23/2 or RS 08676A-50. Unserviceable is defined as any of the above that failed to function properly as stated in TM 08676A-23/2 or RS 08676A-50.

(2) Ensure proper hardware locking devices are present on all moving mechanical assemblies as prescribed in TM 08676A-23/2 or RS 08676A-50.

(3) Hardware normally supplied with commercial parts shall not be used. Authorized replacement parts are listed in TM 08676A-23P/3, Marine Corps Supplement TM 08676A-23P/3 and RS 08676A-50.

g. Cleaning. All cleaning shall be accomplished on the MGB using the steps and procedure requirements listed in RS 08676A-50. Appendix C of RS 08676A-50 contains a list of expendable and durable items needed to operate and maintain the MGB.

h. Grit Blasting. All grit blasting shall be accomplished on the MGB using the steps and procedure requirements listed in RS 08676A-50.

i. Welding. No welding repair shall be accomplished on the MGB by anyone unless they meet the certification requirements of RS 08676A-50 and the weld procedure is listed as a repair procedure in RS 08676A-50. All welding repairs shall meet the aging requirements listed in RS 08676A-50 without exception or deviation.

(1) Preparation. All new parts and the associated parent metal are to be prepared in accordance with RS 08676A-50. It is imperative that all sealed components be purged using the procedures outlined in RS 08676A-50.

(2) Remove the bitumen/naphtha coating externally and internally where applicable in accordance with RS 08676A-50.

**Explosion Hazard**

Hollow sealed components of MGB are coated internally with a bitumen/naphtha solution. Some naphtha is retained in the bitumen when component is sealed and may be driven off when the temperature of the component is raised. When the "driven off" naphtha mixes with the air already contained within the component, it can create an explosive mixture and the welding process is sufficient to ignite it.

j. Painting/Coating. No painting/coating repair shall be accomplished on the MGB by anyone unless the painting/coating meets the requirements of RS 08676A-50 to include metal conditioning and surface preparation listed in the paint procedures in RS 08676A-50.

k. Corrosion. For corrosion prevention and treatment use TM 3080-12 and TM 3080-50.

l. Data Plates. All required data plates and decals shall be in place and shall be legible. Each repaired MGB shall have a Rebuild data plate affixed to the main unit in close proximity to the existing data plate. The data plate shall meet the requirements of MIL-STD-130 and TM 4750-15/1 and shall contain the Equipment Serial Number, date of Rebuild, Date of SOW, SOW number, and Company name of contractor completing work.

m. Painting/Coating (Exterior/Interior). If painting/coating is required, the MGB shall be cleaned in accordance with TM 3080-50, Chapter 4, and coated with Aliphatic Polyurethane Coating, in accordance with MIL-C-46168 or MIL-C-53039.

3.2.3 Phase III - Inspection, Testing and Acceptance

a. The Contractor shall conduct Inspection, Testing and Acceptance of the MGB in accordance with RS 08676A-50.

b. The Contractor shall be responsible for conducting required tests and shall ensure representatives from MCSC and Contractor maintenance personnel, are available to complete the final acceptance. Acceptance tests shall be held at the Contractor Facility. MCSC, Code GTES, Albany, Georgia representatives shall be given a minimum of two weeks notice prior to beginning acceptance testing. The test area shall be cleared of all equipment parts, components, etc., not required for the test.

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCSC, Code GTES, Albany, Georgia representatives may require the Contractor to repeat tests, or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

d. Acceptance Testing/Operational Tests on all MGB repaired under the provisions of this SOW shall be accomplished, by the contractor, in accordance with RS 08676A-50. Operational tests are to be conducted on each MGB upon completion of repairs and prior to the equipment being returned to stock, to insure the unit will perform as required.

3.2.4 Phase IV - Packaging, Handling, Storage, and Transportation (PHS&T)

a. The Contractor shall be responsible for preservation and packaging of item(s) being rebuilt under the terms of this SOW. Items scheduled for long-term storage or shipment to overseas destinations shall be in accordance with Level "A" requirements of MIL-STD 2073-1D(1), METHOD 10. Items scheduled for domestic shipment for immediate use or short-term storage shall be to Level "B" requirements.

b. Marking for shipment and storage shall be in accordance with MIL-STD-129.

c. The Marine Corps will provide the contractor with the shipping addresses for delivery of the repaired equipment. The Contractor shall be responsible for arranging for shipment to the pre-designated site(s). The Marine Corps will be responsible for transportation costs associated with shipping the subject equipment to and from the Contractor.

3.3 Configuration Management

3.3.1 Configuration Status Accounting (CSA)

a. The Contractor shall record and submit data on retrofit accomplished during Phase II. Any approved Modifications Instructions (MIs) or Engineering Change Proposals (ECPs) not previously applied shall be incorporated during Phase II of the Rebuild process.

b. The Contractor shall determine the application status of approved configuration changes by visual inspections to the extent possible. The government will identify the configuration changes to be inspected by furnishing a Configuration Inspection Checklist to the Contractor. The Contractor shall use one checklist per MGB to record the inspection findings along with other required data.

c. The Contractor shall record serial numbers of the assemblies listed on the Configuration Inspection Checklist. The Contractor shall also record the information on the Equipment Record Jacket in accordance with TM 4700-15/1H.

3.3.2 Configuration Control. The MGB is configuration controlled and tolerances are controlled during the manufacturing process. No departure from the present configuration is allowed. Request for cosmetic changes will be on a case-by-case basis and in that instance the Contractor shall submit a Request for Deviation. MIL-HDBK-61 and ANSI/EIA-649 provide guidance for preparing this configuration control document.

3.4 Quality Assurance Provisions. The Contractor shall provide and maintain a Quality System that, at a minimum, adheres to the requirements of ANSI/ISO/ASQC Q9001-2000, Quality Management Systems - Requirements.

3.5 Acceptance. The performance of the Contractor and the quality of work delivered, including all equipment furnished and documentation written or compiled, shall be subject to in-process review and inspection during performance. Inspection may be accomplished in-plant or at any work site or location and MCSC, Code GTES, Albany, Georgia representatives shall be permitted to observe the work or to conduct inspection at all reasonable hours. Final Inspection and Acceptance Testing shall be conducted at the Contractor Facility. Final acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements.

3.6 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by MCSC, Code GTES, Albany, Georgia. The Contractor shall, at no additional cost to MCSC, Code GTES, Albany, Georgia provide the following:

a. Develop an approach for modification or correction of all deficiencies.

b. Upon approval of a documented approach, the Contractor shall correct the deficiencies and repeat the verification until an acceptable compliance with acceptance test procedures is demonstrated.

3.7 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM). The Management Control Activity (MCA/Code 581-1B) will coordinate GFE/GFM requests and maintain a central control system on all government owned assets in the Contractor's possession. The MCA will forward a GFE Accountability Agreement to the Contractor for signature on an annual basis to establish a chain of custody and identify property responsibilities for Marine Corps assets. The Contractor is to acknowledge receipt of GFM to the MCA within 15 days of receipt. This can be done by mailing a copy of the DD1348 to Materiel and Distribution Management Department, Distribution Management Branch, Management Control Activity (Code 581-1B), 814 Radford Blvd., STE 20320, Albany, Georgia 31704-0320, or faxing a copy to commercial telephone number (229) 639-5498 or DSN 567-5498.

3.8 Contractor Furnished Materiel (CFM). The Contractor may requisition materiel as required in the performance of the SOW through the DoD Supply System. DoD 4000.25-1-M

(MILSTRIP) Chapter 11 provides guidance to contractors on the requisitioning process. The contractor's decision to utilize CFM procured from the DoD Supply System shall be based upon cost effectiveness, availability of materiel and the required completion/delivery date.

3.9 Pre-Shop Analysis Check List. The Contractor shall complete the Pre-Induction Inspection utilizing the Pre-Shop Analysis Check List in Appendix E of RS 08676A-50 for each MGB repaired. This document along with the Contractor's produced list of defective parts and assemblies repaired shall be available during final acceptance testing. One copy of each document shall be provided to Marine Corps Systems Command, Code GTES, 814 Radford Blvd., STE 20343, Albany, Georgia 31704-0343, 30 days after final acceptance of each MGB in PDF Format Media.