Statement of Work

For

Operation & Maintenance Support of the

Sentinel Software System

Title: FY20 Pro-Tem Inc. (PTI) Sentinel Annual Maintenance & Support

Date: 4/8/2020

Revision Number: 0

Requisition Number: 337248
1.0 INTRODUCTION / BACKGROUND

The Sentinel Access Control system, released by Pro-Tem, Inc. (PTI), was implemented by MSA as a site-wide system to provide software support for Radiation Protection worker management at the Hanford site. Sentinel is widely used throughout the Department of Energy (DOE) complex and commercial nuclear industry for managing work in radiologically controlled areas. The Sentinel implementation at Hanford also includes a set of custom interfaces, developed by PTI, that exchange data with other Hanford site systems.

MSA initially selected Sentinel in 2017 as the result of an initiative to 1) reduce radiological workers' processing-in times into radiologically controlled areas; and 2) replace a legacy custom developed application with a commercial off the shelf (COTS) solution. MSA first implemented Sentinel in May 2018. Washington River Protection Solutions (WRPS) and CH2M Hill Plateau Remediation Company (CHPRC) began using RAC for access control programs in January 2019.

2.0 OBJECTIVE

This Statement of Work (SOW) covers the annual system maintenance and support services for previously licensed Sentinel components in use at Hanford. The objective of the maintenance and support work is to ensure that the Sentinel system remains fully functional and performs optimally for approved uses at Hanford.

3.0 DESCRIPTION OF WORK – SPECIFIC

3.1 System Maintenance and Support Services

Sentinel is a modular based system. MSA has licensed the following Sentinel modules from PTI for use in Hanford production environment:

- System Configuration
- Code Table Management
- Rad Worker Management
- TLD Management
- Equipment Management
- RWP Management
- ALARA Management
- RCA Access
- Rad Access Management
- Multipack Management
- Dose Analyses
- Sample Management
- BioAssay Management
- Environmental Samples
- Reports
Sentinel system maintenance and support services shall cover all of the modules listed above. Specific services to be provided include:

1) Notification to MSA of any material defects or malfunctions in either the software or documentation
2) Delivery of revisions to software and documentation made by PTI during the support period
3) Correction of material defects or malfunctions in software that were not a result or errors caused by unauthorized modification to software
4) Telephone support on a reasonable and necessary basis
5) On-site support, if requested by MSA, within a mutually agreed time frame and not exceeding five days. For all on-site support, MSA will incur an additional charge at PTI’s standard consulting rates plus all travel and incidental expenses.

4.0 REQUIREMENTS

4.1 General

For any work performed on the Hanford Site or any MSA controlled facility, the provisions of the On Site Services Special Provisions, will apply to PTI personnel.

4.2 Engineering Requirements

None.

4.3 Environment, Safety, & Health (ES&H) Requirements

The Subcontractor shall comply with, and assist the Buyer in complying with Environmental, Safety, and Health (ES&H) requirements of all applicable laws, regulations and directives.

4.4 Quality Assurance (QA) Requirements

Are quality assurance requirement applicable to this scope of work: Yes

The work activities for this Statement of work has been designated as a Quality Level F - Q Level 3 - GS (Level D Software)

The Subcontractor shall have a Quality Assurance Program (QAP) and implementing procedures that utilizes a national or international voluntary consensus standard such as the International Standards Organization (ISO) 9000 Series of Standards or equivalent that include the following requirements, as a minimum:
• Organizational structure, including a description of roles and responsibilities
• QAP which describes the process to control items and activities
• Indoctrination, training, and qualification and/or certification of project personnel
• Design control, including design verification/validation, change control, and software quality requirements to ensure software produces correct results
• Implementing procedures and/or instructions that describe step by step activities
• Document control to ensure only correct documents are being used
• Corrective action management to identify and correct issues that lead to process improvements
• Quality records, which are protected from loss or deterioration and are submitted.

The Subcontractor shall submit sufficient evidence of a QAP with their proposal. Upon award of the subcontract, the QAP document and implementing procedures are required to be reviewed and approved by the MSA Quality Assurance Organization. If the Subcontractor’s QAP has been previously submitted and approved by MSA, and is current, the Subcontractor may submit a statement to this effect with the proposal and for the submittal requirement. If the Subcontractor’s QAP has been previously submitted and approved by MSA, but is not current, the QAP shall be updated and resubmitted to MSA for review and approval. The Subcontractor shall, during the performance of this Subcontract, submit proposed changes to the QAP and implementing procedures to the Buyer/QAE/CS for review and approval prior to implementation.

The work activities for this statement of work shall be performed in accordance with the Pro-Tem, Inc., DBA PTI Systems NQA-1-2008 w/2009 Addenda QA Program and Implementing procedures. Problem reporting and specific corrective action shall be reported to MSA along with type of error, evaluation of error and resolution of error in accordance with the Pro-Tem QA Program.

The Subcontractor shall be responsible for performing quality workmanship and shall conduct the quality control measures necessary to ensure that all work confirms to referenced codes, standards, and other requirements as defined by this SOW.

Procurement of Potentially Suspect or Counterfeit Items: The Subcontractor shall warrant that all items furnished under this Subcontract are genuine (i.e. not counterfeit) and match the quality, test reports, markings, and/or fitness for use required by the Subcontract. See Subcontract General Provisions, Suspect or Counterfeit Items.

For any Software revisions the Subcontractor shall provide a legible/reproducible Certificate of Conformance which shall include the following information, as a minimum"
1. Identify the appropriate Purchase Order or Contract number under which the item or service is being supplied.

2. Identify the specific procurement requirements that were met by the purchased item or service and/or any approved changes, waivers, or deviations applicable to the item or service.

3. The Certificate of Conformance shall also identify any procurement requirements that have not been met along with an explanation and the means for resolving the nonconformance.

4. The Certificate of Conformance shall be signed (or otherwise authenticated) by the Subcontractor’s representative responsible for quality.

Subcontractor shall also maintain a Software Quality program that includes but is not limited to:

- Software Management Planning
- Software Design Description
- Requirements Traceability Matrix
- Code Reviews
- Software Test Plan(s)
- Test Cases
- Unit Testing
- Acceptance Testing and results
- Operational Testing and results
- Configuration management process that includes, but not limited to component naming, baseline numbering, V&V, and a problem reporting process.
- Lifecycle documentation management
- Risk Management
- Software Installation Plan (if necessary)

In addition the requirements above, the subcontractor shall comply with DOE O 415.1 Chg 2-Attachment 1.

If the Subcontractor subcontracts any portion of this work scope to lower tier subcontractors, the Subcontractor shall be responsible for the flow down of applicable portions of this SOW to their lower tier subcontractors, including engineering and quality assurance requirements, pertaining to services and activities for which they are responsible.
All Subcontractor activities are subject to oversight by MSA’s QAE and/or Engineering representative(s) at the Subcontractor’s facilities, including lower-tier facilities if applicable. Access to the Subcontractor’s or lower tier’s facilities shall be requested through the Subcontractor’s contract representative and MSA’s CS. The visit may be performed jointly with the Subcontractor.

4.5 Government Property

The Subcontractor will not use any government property during performance of the services specified in this SOW.

5.0 PERSONNEL REQUIREMENTS

5.1 Training and Qualifications

Subcontractor shall ensure that its personnel meet and maintain the appropriate training, qualification, and certification required for the support provided.

5.2 Security and Badging Requirements

For any on site work, see Special Provisions – On Site Services for details.

Subcontractor employees will be required to submit to vehicle searches and not personally carry or transport certain prohibited articles.

All subcontractor employees must be US Citizens.

5.3 Work Location / Potential Access Requirements

On-site work will be located at 2261 Stevens Drive, Richland, WA 99354.

5.4 Site Access and Work Hours

Hanford personnel at the Hanford Site work a standard 4/10 schedule. The standard work week consist of ten (10) hours of work between 6:00 am and 4:30 pm, with one-half hour designated as an unpaid period for lunch, Monday through Thursday.

Work performed outside normal operating hours shall be coordinated and/or approved through the BTR and/or the Contract Specialist prior to performing the work.

6.0 MEETINGS

Subcontractor shall participate in all meetings as required by the Buyer’s Technical Representative (BTR).
7.0 DELIVERABLES AND PERFORMANCE SCHEDULE REQUIREMENTS

7.1 Deliverables

Subcontractor shall provide the software services identified in Section 3.0.
Certificate of Conformance
QAP

7.2 Schedule

Start Date: April 11, 2020  Completion Date: April 10, 2021