



Statement of Work

Title: Survey and Scan Services
Revision Number: 0
Date: May 31, 2013

Statement of Work for *Survey and Scan Services*

Revision 1
6/17/2013

Prepared by: *D. Mahoney*

<i>APPROVALS</i>	<i>PRINT NAME</i>	<i>SIGNATURE</i>
<i>BTR*</i>	<i>Dewey Mahoney</i>	

* Approval for Technical Content

1.0 INTRODUCTION / BACKGROUND

The purpose of the Mission Support Contract (MSC) is to provide direct support to the U.S. Department of Energy (DOE), Richland Operations Office (RL); DOE Office of River Protection (ORP); and their Contractors with cost-effective Infrastructure and Site Services integral and necessary to accomplish the Hanford Site environmental cleanup mission.

The Contractor is required to provide Surveying, and Underground and Concrete/ Block Walls Scanning Services.

2.0 OBJECTIVE

The objective of this Statement of Work (SOW) is to provide for Surveying and Scanning within the Hanford Site in support of excavation permits, engineering studies, engineering designs, and construction activities including roadwork.

3.0 DESCRIPTION OF WORK – SPECIFIC



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The Subcontractor shall provide Surveying and Scanning Services as required. The specific Surveying and/or Scanning requirements will be established by the individual Survey / Scan Request Form (Attachment B).

(Note 1: Each request will be considered a separate action and accounted for independently).

(Note 2: When the BTR/Requestor deems an Emergency, Subcontractor is expected to complete field work and deliver final report as soon as reasonably achievable upon receipt of emergency request. The Not to Exceed (NTE) amount listed on the request is the Subcontractor's Notice to Proceed (NTP). If the NTE amount is not adequate, the Subcontractor shall contact the BTR/Requestor, prior to field work to establish an acceptable NTE).

The Subcontractor shall be capable of both GPS and conventional survey methods to provide:

- Horizontal Mapping
- Topographical Mapping
- Plan & Cross Section Survey
- Laser Scan

The Subcontractor shall be capable of performing the following types of scans:

- Ground Penetrating Radar
- Electromagnetic Induction
- Frequency Detection for energized lines
- Rebar Location in Concrete

The Subcontractor shall have a Washington State licensed surveyor in their office to review and certify surveys, if required by each release.

The Subcontractor shall provide all equipment required for the above Surveying and Scanning processes and have trained personnel on the equipment being used.

The Subcontractor shall be capable of providing topographic and geodetic survey maps.

The coordinate system shall be Washington State Plane South NAD 83 and NAVD 88 unless otherwise specified by the Buyer.



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The Subcontractor shall provide files for HGIS Mapping in the *.csv or *.shp file format.

The Subcontractor shall provide files for AutoCAD in the *.dxf or *.dwg file format.

Construction Site Attire and substantial footwear is required, and shall be coordinated with the Buyers Technical Representative (BTR) Field Representative.

4.0 REQUIREMENTS

The Subcontractor shall operate to MSA policies, procedures, and processes.

For any work performed on the Hanford Site or any MSA controlled facility, the provisions of the [On Site Services Special Provisions - SP-5](#), will apply to Subcontractor personnel.

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

The Subcontractor shall exercise a degree of care commensurate with the work and the associated hazards. The Subcontractor shall ensure that management of ES&H functions and activities is an integral and visible part of the Subcontractor's work planning and execution processes. The Subcontractor shall flow down ES&H requirements to the lowest tier Subcontractor performing work on the Hanford site commensurate with the risk and complexity of the work.

MSA Safety and Health Procedures are available on the internet at <http://www.hanford.gov/pmm/page.cfm/Construction>. The documents on this site are kept current and are readily available for Subcontractor and lower-tier Subcontractor use.

4.2 Government Property

The Subcontractor will be responsible for managing the Government-owned property as required in the Subcontract Provisions: None

5.0 PERSONNEL REQUIREMENTS



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5.1 Training and Qualifications

A. *Note 1: The Subcontractor shall ensure that its personnel meet and maintain the appropriate training, qualification, and certification requirements on the equipment being used. Hanford Site-specific general training requirements to safely perform this work will be designated by the Buyer's Technical Representative (BTR).*

B. *The following types of training qualifications are required:*

- *The Subcontractor shall participate in the required training designated by the facility.*
- *The Subcontractor shall contact the BTR/Requestor prior to start date for special instructions and additional training requirements.*
- *Initially, an estimated 8 hours of training will be required prior to the first on-site field work day for each employee..*

- *Hanford General Employee Training (HGET/MGET)*

- *Specific Safety and Health related training requirements are as follows:*

(Note: The Subcontractor may submit "equivalency" training, which must be submitted for review and approval by the Buyer.)

- *044391 Portable Ladder Safety Training - Required for personnel who use portable ladders as part of their job responsibilities.*

- *044371 User's Scaffold Safety - Required for individuals that use scaffolds in order to perform work.*

- *170500 Basic Medic First Aid/CPR/AED Training*

Subcontractor shall ensure that its personnel meet and maintain the appropriate training, qualification and certification requirements.

The following types of training qualifications are required:

5.2 Security and Badging Requirements

For any on site work, see Special Provisions – On Site Services SP-5 for details.

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



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- A. For any on site work, see Special Provisions – On Site Services SP-5 for details.
- B. The Subcontractor shall wear a Buyer-issued security badge identifying him/her. A minimum of two working days advance notice is needed for Site badging.
- C. The Subcontractor employees will be required to submit to vehicle searches and shall not personally carry or transport certain prohibited articles.

5.3 Work Location / Potential Access Requirements

The Subcontractor shall be capable of performing ground and concrete scanning as well as land surveying in non-radiological areas over entire Hanford Site (Note: If any radiological contamination is suspected a Health Physicist Technician will accompany the field crew.

5.4 Site Access and Work Hours

The Hanford Site operates on the standard 8/9's schedule. The standard work day shall consist of nine (9) hours of work between 7:00 AM and 4:30 PM with one-half hour designated as an unpaid period for lunch. An eight (8) hour work day is substituted on alternate working Fridays, and no work occurs on the alternate non-working Friday

(Note: Daily work schedules and facility operations are **NOT** consistent on the Hanford Site. Many organizations and facilities **observe alternate Friday closures.**

Accordingly, BEFORE scheduling deliveries or site work, the Subcontractor shall make specific schedule arrangements with the Buyer, BTR, Facility Manager, Delivery Warehouse Manager, Building Manager, or other cognizant Mission Support Alliance organization.

The Buyer will not be liable for the cost of any delays, demurrage, layover, extra travel days, etc. which result from Subcontractor's failure to obtain a specific delivery or work schedule in advance.)

6.0 MEETINGS / SUBMITTAL

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

Standard deliverables for all Surveying and/or Scanning efforts (included in the applicable hourly crew rate) shall include a Data Report Field Markings, Field/Hand Sketches and/or Photos. Where specifically requested CAD drawings will be prepared and delivered (all preparation cost included in the CAD Drawing Prep/Update hourly crew rate).



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Once the Buyer issues a Survey / Scan Request, the Subcontractor has 48 hours to provide an Estimate/Schedule for each request. Upon receipt of the Subcontractor's Estimate/Schedule, the Requestor has 48 hours to respond to the Buyer as either approved or denied. Each individual Request will identify the specific deliverables.

(Note: Prior to mobilization, Subcontractor is required to communicate directly with the Point of Contact to coordinate jobsite access and any emerging relevant information.)

8.0 SPECIAL REQUIREMENTS

Submittals:

If the SOW requires the submittal of Subcontractor Information, insert the following:

- The following items shall be submitted to the Contract Specialist in accordance with the instructions contained in the Attachment A, Submittal Register.
- The Subcontractor submittals identified herein and summarized on the Submittal Register shall be submitted by the Subcontractor using the [Subcontractor Document Submittal Form \(CDSF\)](#)
- See <http://www.hanford.gov/pmm/page.cfm/SubcontractorForms>
- Subcontractor information shall be submitted in either hard copy or electronic format (If electronic, it must be viewable using either Microsoft® Windows®, Microsoft® Office, or Adobe® Acrobat® software).

Meetings

Subcontractor shall participate in all meetings as required by the Buyer's Technical Representative (BTR).



ATTACHMENT A SUBMITTAL REGISTER

Submittal Register Definitions

1. Numerical submittal sequence number: Example: 1, 2, 3, 4, ... (or organized by topics and project assigned coding structure).
2. Number of Copies and electronic and/or hard copy: Example: E (Electronic only), 6 (Six Hard Copies), or Hard, 1: E, 1 (One Hard Copy, and Electronic).
3. Format: Describes the type of submittal required:

DWG	An AutoCAD drawing using the Hanford standard formatting (See MSC-14660 , <i>Off-Site Vendor Directions of the Preparation and Control of Engineering Drawings</i>).
MFC	Microsoft Format Compatible application (Word, Excel, Access, PowerPoint)
P3	A Primavera Project Planner schedule
GEN	General or Open Format/Media
PDF	Adobe Acrobat (Portable Document Format)

4. Submittal Type:

APW =	Approval Required Prior to Work (Buyer must approve the Subcontractor's submittal prior to the Subcontractor being authorized to proceed with any activity/work associated with the submittal).
AP =	Approval Required (Buyer must approve the Subcontractor's submittal, however, work associated with the submittal may proceed prior to Buyer approval).
FIO =	For Information Only (the submittal is not subject to review and/or approval).

5. **Vendor Information: Mark Yes if document(s) are VI, otherwise leave blank.**

6. Description / Document Title: Title or general description of the document.

7. Submittal Date: Actual date or number of Calendar Days before or after a milestone that a submittal is due from the Subcontractor: Example: June 1, 2005 or CD + 60 [60 days after Conceptual Design Complete]

A Date of Award



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CD	Conceptual Design Complete
PD	Preliminary Design Complete
FD	Final Design Complete
M	Mobilization
SC	Start of Construction
EC	End of Construction

8. Buyer Review Time (Work Days): Example: 3 Days
9. Subcontract Reference: Cross reference to the Subcontract requirement that defines this submittal: Example: SOW 3.1.2.



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Submittal Register:

The Subcontractor shall meet the required schedule and provide the documents specified in accordance with the following submittals.

Subcontract Number and Name:						Revision:		
1. No.	2. No. of Copies* (See End Note)	3. Format	4. Type	5. Vendor Information – Mark Yes if VI, Otherwise Leave Blank	6. Description / Document Title	7. Submittal Date (Calendar Days)	8. Buyer Review Time (Work Days)	9. Subcontract Paragraph or Requirement Reference
1	1,E	GEN	APW		Unique Safety Practices	A + 5	5	SP-5
2	1,E	GEN	APW		Designated Safety Representative	A + 5	5	SP-5
3	1,E	GEN	APW		AJHA	A + 5	5	SP-5
4	1,E	GEN	APW		Safety Training Records	A + 5	5	SP-5
5	1,E	GEN	APW		Equipment Certification	A + 5	5	SP-5
6	1,E	MFC	APW		Chemical Inventory Worksheet and MSDS's	A + 5	5	SP-5
7	1,E	GEN	APW		Verification Letter of Current EJTA (Ready to Work)	A + 5	5	SP-5
8	1,E	GEN	AP		Completed Chemical Inventory Worksheet, As Required	A + 5	5	SP-5
9	1,E	PDF	APW		Hazard Communication Training Records	A+5	5	SP-5

*For electronic submittals, the number of hard copies can be negotiated with the Contract Specialist and approved by the Project Manager.



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ATTACHMENT A SURVEY / SCAN REQUEST FORM

Type of Service(s) Requested: <input type="checkbox"/> Survey <input type="checkbox"/> Scan		Request No.
Title:		NTE Amount (<i>Emergency requests only</i>):
CACN: COA:	Requestor/Phone:	
Requested Completion Date:	Point of Contact/Phone:	
Location of Work (<i>Attach map if expedient</i>):		
Description of Work (<i>Attach drawings, sketches or photos where practical</i>):		
Reference Documents:		
Survey Requirements <input type="checkbox"/> Horizontal (two dimensional layout of GPR anomalies, above ground features and coordinates) <input type="checkbox"/> Topographic (vertical and horizontal contour) <input type="checkbox"/> Plan & Cross-Section Survey (horizontal and vertical layout/plan and profile) <input type="checkbox"/> Laser Scan (three-dimensional scan of all physical features of an object/area)		
Scanning Requirements <input type="checkbox"/> Utility Locate (buried anomalies and utilities up to 8' deep) <input type="checkbox"/> Geophysical Ground Scan (sub-surface physical features of anomalies to depths in excess of 8' deep) <input type="checkbox"/> Concrete Scan (rebar and imbedded material in concrete)		
Field Markings: <input type="checkbox"/> Pin Flags <input type="checkbox"/> Chasers <input type="checkbox"/> Paint <input type="checkbox"/> 3' Lath <input type="checkbox"/> 18" Flats <input type="checkbox"/> Chalk		
Deliverables: <input checked="" type="checkbox"/> Data Report <input type="checkbox"/> Field/Hand Sketch <input type="checkbox"/> Photos <input type="checkbox"/> AutoCAD drawing		
Licensed Surveyor Stamp Required <input type="checkbox"/> Yes <input type="checkbox"/> No		
Additional Instructions/Comments:		