

ORDER FOR SUPPLIES OR SERVICES

1. CONTRACT/PURCH. ORDER/ AGREEMENT NO. W912JB-11-D-4013		2. DELIVERY ORDER/ CALL NO. BR01		3. DATE OF ORDER/ CALL (YYYYMMDD) 2014 Sep 26		4. REQ./ PURCH. REQUEST NO. 0010592608-0001		5. PRIORITY	
6. ISSUED BY INSTAL & VEHICLE SUP CONTRACTING DIV 6501 E. 11 MILE ROAD WARREN MI 48397-5000				CODE W56HZV		7. ADMINISTERED BY (if other than 6) INSTAL & VEHICLE SUP CONTRACTING DIV RACHEL SERRA CCTA-HDC-B/MS350 RACHEL.L.SERRA.CIV@MAIL.MIL WARREN MI 48397-5000			
9. CONTRACTOR ROCK INDUSTRIES, INC. ROBERT BRUZA 340 ROCKWELL AVE PONTIAC MI 48341-0000				CODE 3MPN1		FACILITY 3MPN1		10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE	
						12. DISCOUNT TERMS Net 30 Days		11. MARK IF BUSINESS IS <input type="checkbox"/> SMALL <input checked="" type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED	
						13. MAIL INVOICES TO THE ADDRESS IN BLOCK See Item 15			
14. SHIP TO IMCOM KAREN CARNAGO KAREN E. CARNAGO IMNI-PWF KAREN.E.CARNAGO.CIV@MAIL.MIL WARREN MI 48397-5000				CODE W56JK7		15. PAYMENT WILL BE MADE BY DFAS-INDY VP GFEB5 8899 E 56TH STREET INDIANAPOLIS IN 46249-3800			
						MARK ALL PACKAGES AND PAPERS WITH IDENTIFICATION NUMBERS IN BLOCKS 1 AND 2.			
16. TYPE OF ORDER	DELIVERY/ CALL	<input checked="" type="checkbox"/>	This delivery order/call is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.						
	PURCHASE	<input type="checkbox"/>	Reference your quote dated Furnish the following on terms specified herein. REF:						
ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.									
NAME OF CONTRACTOR			SIGNATURE			TYPED NAME AND TITLE			DATE SIGNED (YYYYMMDD)
<input type="checkbox"/> If this box is marked, supplier must sign Acceptance and return the following number of copies:									
17. ACCOUNTING AND APPROPRIATION DATA/ LOCAL USE									
See Schedule									
18. ITEM NO.		19. SCHEDULE OF SUPPLIES/ SERVICES				20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
		SEE SCHEDULE							
* If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.		24. UNITED STATES OF AMERICA TEL: 586-282-6524 EMAIL: john.m.sarti2.civ@mail.mil BY: JOHN SARTI				<i>John Sarti</i> CONTRACTING / ORDERING OFFICER		25. TOTAL	\$1,265,722.47
27a. QUANTITY IN COLUMN 20 HAS BEEN		<input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED							
b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE				c. DATE (YYYYMMDD)		d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE			
e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE						28. SHIP NO.	29. DO VOUCHER NO.	30. INITIALS	
f. TELEPHONE NUMBER		g. E-MAIL ADDRESS				<input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL	32. PAID BY		33. AMOUNT VERIFIED CORRECT FOR
36. I certify this account is correct and proper for payment.						31. PAYMENT		34. CHECK NUMBER	
a. DATE (YYYYMMDD)		b. SIGNATURE AND TITLE OF CERTIFYING OFFICER				<input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		35. BILL OF LADING NO.	
37. RECEIVED AT		38. RECEIVED BY		39. DATE RECEIVED (YYYYMMDD)		40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.	

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001		1	Job	\$433,572.06	\$433,572.06

Demolish Centerline Gardens

FFP

The contractor shall demolish Centerline Gardens to complete the project in accordance with task order requirements for "Demolish Buildings Centerline Gardens, Project Title: DTA001513". Reference Section C, Section H, Statement of Work dated 19 SEP 2014 and Drawings dated 23 SEP 2014.

The contractor shall demolish Buildings 1 through 8, Garage, and playgrounds.

This is a Firm Fixed Price CLIN with a downward adjustment in accordance with Special Contract Requirement Section, Section H.

Payment and Performance Bonds Required

Wage Determination (Macomb County) General Decision MI 140091 dated 08/29/2014 applies.

For Invoicing Instructions, see clause 52.232-4007, Wide Area Work Flow.

FOB: Destination

PURCHASE REQUEST NUMBER: 0010592608-0001

NET AMT \$433,572.06

ACRN AA \$433,572.06

CIN: GFEB001059260800001

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002		1	Job	\$302,394.55	\$302,394.55

Bid Option #1

FFP

The contractor shall demolish Centerline Gardens to complete the project in accordance with task order requirements for "Demolish Buildings Centerline Gardens, Project Title: DTA001513". Reference Section C, Section H, Statement of Work dated 19 SEP 2014 and Drawings dated 23 SEP 2014.

The contractor shall demolish Building 9 through 14. Demolish footings and foundations. Re-grade, scarify and hydro-seed all disturb areas.

This is a Firm Fixed Price CLIN with a downward adjustment in accordance with Special Contract Requirement Section, Section H. See Section H for Option language.

Payment and Performance Bonds Required

Wage Determination (Macomb County) General Decision MI 140091 dated 08/29/2014 applies.

For Invoicing Instructions, see clause 52.232-4007, Wide Area Work Flow.

FOB: Destination

PURCHASE REQUEST NUMBER: 0010592608-0001

NET AMT

\$302,394.55

ACRN AA

\$302,394.55

CIN: GFEB001059260800002

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003		1	Job	\$249,697.16	\$249,697.16

Bid Option #2

FFP

The contractor shall demolish Centerline Gardens to complete the project in accordance with task order requirements for "Demolish Buildings Centerline Gardens, Project Title: DTA001513". Reference Section C, Section H, Statement of Work dated 19 SEP 2014 and Drawings dated 23 SEP 2014.

The contractor shall demolish Building 15 through 20. Demolish footings and foundations. Re-grade, scarify and hydro-seed all disturb areas.

This is a Firm Fixed Price CLIN with a downward adjustment in accordance with Special Contract Requirement Section, Section H. See Section H for Option language.

Payment and Performance Bonds Required

Wage Determination (Macomb County) General Decision MI 140091 dated 08/29/2014 applies.

For Invoicing Instructions, see clause 52.232-4007, Wide Area Work Flow.

FOB: Destination

PURCHASE REQUEST NUMBER: 0010592608-0001

NET AMT

\$249,697.16

ACRN AA

\$249,697.16

CIN: GFEB001059260800003

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004		1	Job	\$161,679.16	\$161,679.16

Bid Option #3

FFP

The contractor shall demolish Centerline Gardens to complete the project in accordance with task order requirements for "Demolish Buildings Centerline Gardens, Project Title: DTA001513". Reference Section C, Section H, Statement of Work dated 19 SEP 2014 and Drawings dated 23 SEP 2014.

The contractor shall demolish Buildings 21 through 23. Demolish footings and foundations. Re-grade, scarify and hydro-seed all disturb areas.

This is a Firm Fixed Price CLIN with a downward adjustment in accordance with Special Contract Requirement Section, Section H. See Section H for Option language.

Payment and Performance Bonds Required

Wage Determination (Macomb County) General Decision MI 140091 dated 08/29/2014 applies.

For Invoicing Instructions, see clause 52.232-4007, Wide Area Work Flow.

FOB: Destination

PURCHASE REQUEST NUMBER: 0010592608-0001

NET AMT

\$161,679.16

ACRN AA

\$161,679.16

CIN: GFEB001059260800004

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005		1	Job	\$84,255.33	\$84,255.33

Bid Option #4

FFP

The contractor shall demolish Centerline Gardens to complete the project in accordance with task order requirements for "Demolish Buildings Centerline Gardens, Project Title: DTA001513". Reference Section C, Section H, Statement of Work dated 19 SEP 2014 and Drawings dated 23 SEP 2014.

The contractor shall demolish Building 24 through 27. Demolish footings and foundations. Re-grade, scarify and hydro-seed all disturb areas.

This is a Firm Fixed Price CLIN with a downward adjustment in accordance with Special Contract Requirement Section, Section H. See Section H for Option language.

Payment and Performance Bonds Required

Wage Determination (Macomb County) General Decision MI 140091 dated 08/29/2014 applies.

For Invoicing Instructions, see clause 52.232-4007, Wide Area Work Flow.

FOB: Destination

PURCHASE REQUEST NUMBER: 0010592608-0001

NET AMT

\$84,255.33

ACRN AA

\$84,255.33

CIN: GFEB001059260800005

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006		1	Job	\$34,124.21	\$34,124.21

Bid Option #5

FFP

The contractor shall demolish Centerline Gardens to complete the project in accordance with task order requirements for "Demolish Buildings Centerline Gardens, Project Title: DTA001513". Reference Section C, Section H, Statement of Work dated 19 SEP 2014 and Drawings dated 23 SEP 2014.

The contractor shall demolish parking lots and all sidewalks. Re-grade, scarify and hydro-seed all disturb areas. See Section H for Option language.

Payment and Performance Bonds Required

Wage Determination (Macomb County) General Decision MI 140091 dated 08/29/2014 applies.

For Invoicing Instructions, see clause 52.232-4007, Wide Area Work Flow.

FOB: Destination

PURCHASE REQUEST NUMBER: 0010592608-0001

NET AMT \$34,124.21

ACRN AA \$34,124.21

CIN: GFEB001059260800006

Section C - Descriptions and Specifications

PROJECT: DEMOLISH CENTERLINE



Directorate of Public Works
Detroit Arsenal

Design-Build Statement of Work

Project Title: DTA001513
Work Order Number Demolish Buildings
Centerline Gardens

U.S. Army Garrison - Detroit Arsenal
Directorate of Public Works
Warren, MI

19 September 2014
Final Document (Revised)

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SECTION 01 02 10.00 06

PROJECT DESCRIPTION AND DESIGN REQUIREMENTS
Revised 19 September 2014

PART 1 DESIGN OBJECTIVES

1.1 PROJECT DESCRIPTION

This project will require construction services to perform the work as described in this Statement of Work.

The Project "Demolish buildings at Centerline Gardens" encompasses vacant and boarded up housing complexes located in the northwest side of Detroit Arsenal. This project requires construction services to demolish and remove existing buildings 1 through 8, garage and playgrounds. All electric poles, overhead lines, transformers and street lights belong to DTE, these items shall be removed only in consultation with the DTE (Detroit Edison). All utilities to the buildings and garages have been disconnected, before they were boarded up. **Please see drawing sheet C-101,C-201.**

Refer to scope of work drawings for detail scope of work. Construction of minor elements such as full soil erosion control measures (silt fences, storm sewer inlet filters, etc.) are required as part of this contract in order to protect the environment.

The contractor shall acknowledge that the 100% Design Drawings, the 100% Technical Specifications and government answered Requests for Information (RFI) form the basis for this contract.

Electronic MicroStation V8 XM computer-aided design and drafting (CADD) files or Adobe Acrobat Portable Document Format (PDF) files, which may include the existing building floor plans and utility plans, may be provided by the Detroit Arsenal (DTA) Directorate of Public Works (DPW) on compact disc (CD) as part of this SOW for design development. Additional files for the Contractor's reference may also be provided on this CD. The Contractor shall field verify all files and drawings provided by the Detroit Arsenal DPW for accuracy prior to cost proposal submission.

Design and construction shall comply with the requirements contained in this SOW. The design and technical criteria contained and cited in this SOW, the Detroit Arsenal Installation Design Guide (IDG), the Department of Defense (DoD) Unified Facilities Criteria (UFC), and the Unified Facilities Guide Specifications (UFGS) establish minimum standards for design and construction quality. The Contractor shall adhere to the requirements included in the Detroit Arsenal (DTA) IDG. The Contractor shall adhere to the International Building Code (IBC), published by the International Code Council, as referenced by the UFC and UFGS. The Designers of Record shall use the Unified Facilities Guide Specifications and the requirements contained in this SOW to fully develop the technical specifications and construction drawings. The Contractor shall comply with the latest editions of all codes, standards, regulations, specifications, and requirements as of the date of issuance of this SOW. If there is a conflict between requirements in this SOW and the UFGS then the requirements of this SOW shall take precedence and shall be adhered to.

1.1.1 Bid Options

Option 01: Demolish Buildings 9 through 14. Demolish footing and foundations. Re-grade, scarify and hydro-seed all disturb areas.

Option 02: Demolish Buildings 15 through 20. Demolish footing and foundations. Re-grade, scarify and hydro-seed all disturb areas.

Option 03: Demolish Buildings 21 through 23. Demolish footing and foundations. Re-grade, scarify and hydro-seed all disturb areas.

Option 04: Demolish Buildings 24 through 27. Demolish footing and foundations. Re-grade, scarify and hydro-seed all disturb areas.

Option 05: Demolish parking lots and all sidewalks. Re-grade, scarify and hydro-seed all disturb areas

1.2 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK FOR THE BASE PERIOD:

The Contractor shall be required to:

a. commence work under this contract within the time allotted under the contract,

b. complete all preparatory work for demolition not later than 120 calendar days after date of receipt of notice to proceed.

c. complete the entire work not later than 240 calendar days after date of receipt of notice to proceed. The time stated for completion shall include final drawings and project closeout documents.

COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK FOR ALL BID OPTIONS, IF EXERCISED:

The Contractor shall be required to:

a. commence work under this contract within the time allotted under the contract,

b. complete all preparatory work for demolition not later than 120 calendar days after date of receipt of notice to proceed.

c. Each option shall be completed within 240 days of the exercise of an option. The time stated for completion shall include final drawings and project closeout documents.

1.3 APPLICABLE CRITERIA

Applicable design and construction criteria are specifically indicated in Department of Defense (DoD) Unified Facilities Criteria (UFC) and the Unified Facilities Guide Specifications (UFGS). Criteria shall be taken from the most current references as of the date of issue of the RFP, unless noted otherwise. Referenced codes and standards are minimum acceptable criteria. Administrative, contractual, and procedural features of the contract shall be as described in other sections of the SOW.

1.4 ENERGY STANDARD

COMPLIANCE Not applicable.

1.5 ACCESSIBILITY REQUIREMENTS

Not applicable.

1.6 FORCE PROTECTION & ANTI-TERRORISM

CONSIDERATIONS Not applicable.

1.7 HAZARDOUS MATERIALS ABATEMENT

Asbestos shall be handled in accordance

with Federal (EPA 40 CFR 61.145, EPA 40 CFR 61.145), Michigan Department of Environmental Quality (NESHAP), Department of Licensing and Regulatory Affairs (MIOSHA), Michigan State Police, and installation requirements.

All buildings are suspected of having ACM (asbestos containing materials). Based on historical drawings, the following building materials are asbestos containing materials (ACM) and presumed asbestos containing materials (PACM) and are to be handled in accordance with state and federal laws.

(ACM) Asbestos cement shingles (wall shingles on exterior building elevation and cinderblocks)

(ACM) Transite panels on doors and windows

(PACM) Pipe Insulation

(PACM) All Mastic

(PACM) All caulking

(PACM) All Vinyl and Asphalt Tiles

The ACM and PACM must be abated before demolition unless otherwise specified by the Michigan DEQ and terms of the contract.

The Contractor shall adhere to the third party neutral consultant final clearance requirements stated in the "ASBESTOS" paragraph of the contract.

Hazardous materials shall also be handled in accordance with Appendix A, Standard Environmental Protection Requirements and Appendix B, Other Standard Environmental Protection Requirements.

Lead-based paint is present in the building and shall be considered for workers protection during demolition.

1.7.1 Asbestos Survey

Contractor Submittal of Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) Survey conducted before demolition in accordance with the Michigan Department of Environmental Quality (DEQ) and the terms of the contract will be required 60 days after NTP.

1.8 PERMITS

The Contractor shall be responsible for preparing, filing, and paying for any fees required to obtain all necessary permits for the construction of this project.

Contractor shall also be responsible for permits required for utility companies to work within or adjacent to Mound Road right-of-way or Bear Creek easement.

Soil Erosion Control and Stormwater Management Permit (NPDES) are required for the project. The Contractor shall be responsible for preparing and paying for all fees required to obtain all necessary permits for any land disturbance permits required by Macomb County and the Michigan Department

of Natural Resources (MDNR-E).

- a. All permit application packages developed by the Contractor must contain the minimum information required by Macomb County and the MDNR-E.
- b. All permit packages must be reviewed and approved by the DPW - E&S Division prior to submittal to Macomb County and MDNR-E.
- c. Upon approval of the permit application packages by DPW - E&S Division, the contractor shall be responsible for filing each separate permit application package with Macomb County and MDNR-E, as appropriate.
- d. No work can occur until all requirements of the permits are in place.
- e. A copy of each required permit shall be kept on-site during the life of the project.
- f. Weekly compliance inspections shall be conducted by the Contractor according to the following schedule: Every Friday of each 7 day week (Sunday through Saturday) where work is occurring; every Friday for periods of suspended work; within 24 hours of each ½" or greater rain event or greater that occurs within a 24 hour period; multiple weekly inspections may be required in the event that rain events occur in excess of this standard (1/2" or greater rain within a 24 hour period) on consecutive days during the week (Sunday through Saturday) or multiple days during the same week; ½" or greater rain events that occur on Fridays shall require inspection on the first Saturday following the rain event; ½" or greater rain event on Saturdays shall require inspections on the first Sunday the rain event; copies of inspection reports shall be kept on-site during the life the project with weekly copies provided to DPW - E&S Division following each inspection event.
- g. Contact DPW - E&S for a standard inspection form.

Permits shall be prepared and filed in accordance with Appendix A, Standard Environmental Protection Requirements and Appendix B, Other Standard Environmental Protection Requirements.

1.9 FINAL CLEANING

The Contractor is required to clean the premises in accordance with FAR clause 52.236-12 and additional requirements stated here. Contractors operating equipment shall be cleaned regularly where practicable to minimize spread of errant debris throughout the site and onto the public right-of way. Remove waste, surplus materials, and rubbish from the site. Remove all Contractor installed temporary structures, barricades, project signs, fences, gates, and construction facilities.

As the demolition progresses, Contractor shall clear all debris from individual building sites by the end of each work day, or as directed by the Contracting Officer's Representative.

1.10 FURNITURE RECONFIGURATION, REMOVAL, AND COORDINATION

Not applicable.

1.11 COORDINATION

The Contractor shall coordinate with other contractors to prevent interference with their work and to allow them access to the work areas.

The Contractor shall coordinate work efforts with all affected utility companies. This includes initial contact to each utility company and coordination prior to and during construction.

Obtain DPW approval of interruption by submitting the Construction Impact Notification Form in accordance with the contract.

1.12 MAINTENANCE - ROADS AND GROUNDS

The Contractor shall provide the following maintenance for the duration of the project, from notice to proceed until final close-out of the project. The property shall be maintained to the extent necessary to protect against erosion & to prevent/eliminate safety, security and health hazards. Grass shall be mulched cut when dry conditions could make the area vulnerable to fires. Grass to be cut to 4 inches height and re-cut when growth reaches a maximum of 8 inches. Trees, shrubs and other vegetation shall be trimmed and/or removed that pose a safety hazard or security problem. Maintain the perimeter security fencing and gates, repair/replace as required to maintain the security integrity. Snow shall be removed on the roads to provide safe access for vehicles and authorized personnel such as for fire and police. As a minimum, maintain entrance and exit ways at Mound Road. Donner Roads. The Contractor shall not allow snow accumulations to become a vehicle access problem or safety hazard. Resolve drainage back-ups & other problem which may cause flooding, deterioration of property and erosion of grounds and pavements.

1.13 CONSTRUCTION SITE PLAN

Prior to the start of work, submit a site plan showing the locations and dimensions of temporary facilities (including layouts and details, equipment and material storage area (onsite and offsite), and access and haul routes, avenues of ingress/egress to the fenced area, and details of the fence installation). Identify any areas which may have to be graveled to prevent the tracking of mud. Indicate if the use of a supplemental or other staging area is desired. Show locations of safety and construction fences, site trailers, construction entrances, trash dumpsters, temporary sanitary facilities, and worker parking areas.

All Contractor staging areas and storage areas shall be limited to areas within five (5) feet of the project area boundaries.

The Contractor shall comply with UFGS Specification Section 01 50 00, TEMPORARY CONSTRUCTION FACILITIES AND CONTROLS.

1.14 TEMPORARY FACILITIES

Contractor shall provide temporary facilities for personnel per EM 385-1-1, such as Porta-Johns, drinking water, fire extinguishers, etc. Confirmation of these items will be required at Pre-Construction meeting.

PART 2 DESIGN AND CONSTRUCTION REQUIREMENTS

2.2 CIVIL AND SITE

2.2.1 Technical Requirements

2.2.1.1 Design and Installation Standards and Codes

The civil design and construction shall conform to the current versions of all applicable Unified Facilities Criteria (UFC). The project civil design and construction shall be in accordance with the latest edition of the Department of Defense (DoD) Unified Facilities Guide Specifications (UFGS) and the Michigan Department of Transportation (MDOT) specifications.

The design and construction shall conform to all standards and codes referenced in the UFGS specifications and MDOT specifications under the applicable civil specification sections.

Aggregate gradation shall be provided in conformance with MDOT specifications. All roadway design and construction shall conform to MDOT specifications. All concrete and gravel design and construction shall conform to MDOT specifications. The City Of Warren drawing details, available on the City of Warren website, shall be adhered to.

Asbestos shall be handled in accordance with Federal (EPA 40 CFR 61.145, EPA 40 CFR 61.145), Michigan Department of Environmental Quality (NESHAP), Department of Licensing and Regulatory Affairs (MIOSHA), Michigan State Police, and installation requirements.

2.2.1.2 Scope of Work

The work includes completion of civil and site work, construction and demolition as described herein and as detailed by the Civil Designer of Record. Refer to the Scope of Work Drawings for additional information pertaining to the scope of work.

2.2.1.3 Detroit Arsenal Specific Requirements

Phosphorus fertilizer shall not be applied on lawns unless exempted in Public Act 299 of 2010.

2.2.1.4 Grading and Drainage

The proposed site grading shall maintain existing topography while recognizing standard gradients. There shall be a balance of the quantity of cut and fill soils to create a smooth transition of graded areas into the existing natural site. The plan shall reflect selective site clearing that preserves as many trees as possible. Grading and site design shall manage site runoff to maintain rate of flow and quantity to pre-construction levels or reduce site runoff where possible. The principles of positive drainage shall be applied to control the conditions that remove rainfall away from facilities and functions. Site designs shall seek to minimize the disturbance of land and utilize natural drainage paths where possible.

Final site design and surface grading shall allow positive drainage at completion of the project and shall allow for changes to the surface due to subsequent years of maintenance.

All proposed earth material brought on to the site shall be free of any contaminants, a non-regulated soil, and shall not have any material such as rocks, sticks, dirt chunks, trees, root masses, concrete pieces, etc. larger than 12 inches in any dimension. Prior to hydroseeding, after the final grade has been back-bladed by the dozer, there shall be no objects on the prepared surface larger than 2" in any dimension. By the end of each day, all excavations shall be filled and compacted to within 24" of final grade, to avoid safety issues.

Federal, state and local regulations regarding the design of storm water management systems shall be considered the minimum design criteria.

2.2.1.5 Circulation and Parking

The vehicular and pedestrian circulation system shall promote safe and efficient movement of vehicles and pedestrians within the site area and maximize separation of vehicles and pedestrians. Safe circulation systems have a clear hierarchy of movement, lead to a clear destination, and do not interrupt other functions.

2.2.1.6 Vehicular

Circulation n/a

2.2.1.7 Vehicular

Parking n/a

2.2.1.8 Pedestrian

Circulation n/a

2.2.1.9 General Site

Engineering n/a

2.2.1.10 Materials

As minimum design criteria all materials shall conform to the applicable sections of the Michigan Department of Transportation specifications.

2.2.1.11 Standoff

Distances n/a

2.2.1.12 Site Survey

A site survey is not included in this RFP Package. The Contractor shall be responsible for conducting a complete site survey.

2.2.1.13 Notification Prior to Excavation

The Contractor shall notify the COR a minimum of 14 calendar days prior to the planned excavation to allow processing. The Contractor shall submit the excavation permit, and obtain approval prior to excavation. The Contractor shall follow the DTA excavation permit process. A copy of the

current excavation permit process can be obtained from the COR upon request. The Government will provide courtesy utility identification of known existing underground utilities in the work area. The marked location of the existing utilities is approximate and is a courtesy. Excavation by power driven equipment is not permitted within three (3) feet of either side of the marked utility. Hand excavate each side of the indicated obstruction and continue until uncovered or clearance for the new grade is assured.

The Contractor shall field verify the location of the existing installation utilities in the contract work areas. The Contractor shall hire a proficient subcontractor to locate utilities within excavation, boring, or tunneling area.

For locations of underground facilities, obtain digging permits prior to start of excavation by contacting the Contracting Officer's Representative 14 calendar days in advance. Follow the procedures specified in the contract to obtain excavation permits.

Report damage to underground utilities or subsurface construction immediately to the Contracting Officer's Representative, the DTA Base Operations Contractor, and the DTA Fire Department. Damage to marked or unmarked utilities shall be satisfactorily repaired or replaced by the Contractor at no additional cost to the Government. Repair is defined as permanent, code compliant measures as approved by the Contracting Officer's Representative.

Excavation that interrupts traffic, parking, or pedestrian circulation requires notification to the DPW by contacting the Contracting Officer at least fourteen (14) calendar days in advance. Obtain DPW approval of interruption by submitting the Construction Impact Notification Form. For procedures to obtain the Construction Impact Notification Form follow the procedures specified in the contract.

2.2.1.14 Demolition

Demolition shall comply with Federal (EPA 40 CFR 61.145, EPA 40 CFR 61.145), Michigan Department of Environmental Quality (NESHAP), Department of Licensing and Regulatory Affairs (MIOSHA), Michigan State Police, and installation requirements. The ACM and PACM must be abated before demolition unless otherwise specified by the Michigan DEQ and terms of the contract. All Demolished materials shall be removed from the site in accordance with applicable federal, state, and local regulations.

2.2.1.15 Abandoned Structures and Utilities

N/a

2.2.1.16 Entrances and Parking Lots

N/a

2.2.1.17 Sidewalks

N/a

2.2.1.18 Curbs and Gutters

n/a

2.2.1.19 Sanitary Sewer System

n/a

2.2.1.20 Storm Sewer System

N/a

2.2.1.21 Soils

n/a

2.2.1.22 Soil and Foundation Report (Geotechnical Report)

N/a

2.2.1.23 Certification

n/a

2.2.1.24 Soil Compaction

Soil compaction shall be achieved by equipment approved by a professional geotechnical engineer. Material shall be moistened or aerated as necessary to provide the moisture content that shall readily facilitate obtaining the compaction specified with the equipment used. Each layer of fill placement shall be no greater than 10 inches thick. Compact each layer to not less than the percentage of maximum density specified in Table 1, determined in accordance with ASTM D 1557.

TABLE 1 Soil Compaction

<u>Subgrade Preparation, Fills, Embankments, and Backfills</u>	<u>Compaction Requirements (Percentage of Maximum Density)</u>
--	--

Grassed Areas

80

The requirements shall be verified or modifications recommended by the consulting professional geotechnical engineer in the report wherever engineering, soils, or climatic factors indicate the necessity. Any modification to the stated compaction requirements shall require the approval of the Contracting Officer.

2.2.1.25 Capillary Water Barrier

n/a

2.2.2.26 Soil Treatment

n/a

2.2.2.27 Radon Mitigation

n/a

2.2.1.28 Sediment and Erosion Control

Sediment and erosion control plans shall be provided by the Contractor. Diversion dikes and silt fences shall be placed around drainage structures to prevent sediment from entering the existing storm sewer system. Perimeter silt fence shall be placed to prevent sediment from leaving the site via sheet flow.

2.2.1.29 Lawn Establishment

All disturbed areas of the site shall be hydro seeded with a blend of regionally appropriate grass seed, mulch and fertilizer. The hydro seeding mulch shall be spread by machine to cover the soil completely to establish a lawn and prevent erosion. No more than 5% weed growth allowed and water at least twice per week or as needed in hot weather during the growing season until 95% growth is established.

2.2.1.30 Security Access Gate

n/a

2.2.2 Drawings

Generally, the corrected and approved 65 Percent Design plans may be used as the basis for the final plans. However, all details necessary for complete construction must be included. The 100 Percent Final Design submittal shall include all the information presented in the 65 percent submittal, updated to final design status and corrected to reflect any changes made in response to review comments. Any concerns in developing the final design documents shall be resolved prior to starting the final design stage.

2.2.2.1 Location Plan and Vicinity Map

A vicinity map consists of a small scale drawing of the project location, similar to a road map. A location plan consists of a small scale drawing showing the Government property or reservation limit with the construction project site shown. The drawing shall show the facility approved Contractor Access and Haul Routes. A reproducible base sheet, if available, may be provided by the Detroit Arsenal DPW for the Contractor's use in preparing the Location Plan.

2.2.2.2 Survey Plan

The information depicting existing conditions used to generate site drawings shall be shown on this drawing.

2.2.2.3 Removal Plan

The removal plan shall show the existing physical features and condition of the site before construction. Each physical feature to be removed shall be as indicated on the standard legend sheet, a legend on the removal plan, and properly noted; to be removed, to remain, or to be relocated.

2.2.2.4 Site Plan

The site plan shall show all the site layout information necessary to field locate the building, walks, parking lots, and all other appurtenances to be constructed on the project. All site related work to be constructed will be located by dimensions. The site plan shall identify all site related items. Site plans shall be at a scale of 1:250 or 1:300 (1 Inch = 20 Feet or 1 Inch = 40 Feet). Other drawing scales must be approved by the Detroit Arsenal DPW. North arrows shall be oriented the same direction on all plan sheets and by all disciplines. No existing or proposed contours shall be shown on this plan. The site plan, prior to adding the dimensions, shall serve as the base sheet to the other plans; such as, the utilities plan, the grading and drainage Plans, and the landscape plan. The site plan shall show all existing physical features and utilities within and adjacent to the work site that will remain after the proposed construction has been completed.

Whenever the site plan occupies more than one sheet of drawings, a key plan shall be included. Additional plans, showing specific areas of the site in smaller scales can be included if more detail is necessary.

2.2.2.5 Grading and Drainage Plan

A final grading and drainage plan shall be provided at the same scale as the site plan; 1:250 or 1:300 (1 Inch = 20 Feet or 1 Inch = 30 Feet). Other drawing scales must be approved by the Detroit Arsenal DPW. In addition to the requirements for the preliminary plan, the final plan shall show the final location of all storm drains, culverts, and sub-drains. Storm drainage lines and structures shall be labeled. The rim elevation of all manholes, curb inlets, and area inlets shall be indicated.

2.2.2.6 Composite Utilities Plan

A composite utilities plan shall be provided at a scale of 1 Inch = 20 Feet or 1 Inch = 30 Feet. Use of other drawing scales must be approved by the Detroit Arsenal DPW. Existing utilities shall be indicated. Plans shall show layout of the existing storm drainage any other utilities which need to be provided.

2.2.2.7 Road Profile

N/a

2.2.2.8 Grading Sections

n/a

2.2.2.9 Storm Drain Profiles

n/a

2.2.2.10 Drainage Structure Details

n/a.

2.2.2.11 Pavement Details

n/a

2.2.2.12 Fence Details

n/a

2.2.2.13 Storm Water Pollution Prevention Plan (SWPPP) Site Map

Provide a site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, areas which will not be disturbed, locations of major structural and nonstructural erosion controls identified in the storm water pollution prevention plan, locations where stabilization practices are expected to occur, locations of off-site material, waste, borrow or equipment storage areas, surface waters

(including wetlands), and locations where storm water discharges to surface water.

2.2.2.14 Erosion Control Details

Provide details of best management practices used to control erosion.

2.2.2.15 Site Furnishing Details

The Contractor shall provide designs and details as necessary for site furnishings and accessories.

2.2.2.16 Landscape Plan

A landscape plan showing trees, shrubs, ground covers, seeded and sodded areas shall be prepared. The landscape plan shall be prepared by a fully qualified, experienced professional Landscape Architect. The Contractor's designer shall specify types of plant materials that are locally grown, commercially available, and acclimated to the project environment. The landscape plan shall include a plant materials schedule or listing. This schedule shall include botanical names, common names, size, the method of planting, and remarks. The Landscape Plan shall also show all un-surfaced ground areas disturbed by construction within the project limits with these areas shown to be seeded, sodded, or mulched as required.

2.2.2.17 Landscape Details

The Contractor shall verify the methods of planting to meet the project site/installation requirements and provide the necessary landscape details to perform the contract design work. Details shall reflect local practices and conditions for installation. The Contractor shall provide designs and details as necessary for other required site furnishings and accessories.

2.2.2.18 Planting Bed Grading and Drainage Plan

n/a

2.2.2.19 Sprinkler Irrigation System Plan

n/a

2.2.2.20 Water Distribution and Sewage Collection Systems Plans (Including Building Services)

n/a

2.2.2.21 Water Distribution and Sewage Collection Systems Profiles

n/a

2.2.2.22 Water Distribution and Sewage Collection Systems Details

n/a

2.2.3 Specifications

Provide complete edited UFGS specifications for all items. For all specific state requirements, provide completely edited MDOT specifications. Technical specifications shall be complete and fully coordinated with the drawings. All specification indexes shall be completely edited to reflect the paragraphs retained in the body of the specification. All references that have not been used in the body of the specification shall be edited from the technical specification.

2.2.4 Design Analysis Narrative

n/a

2.2.4.1 References

n/a

2.2.4.2 Basis for Design

n/a

2.2.4.3 Grading

n/a

2.2.4.4 Drainage

n/a

2.2.4.5 Water Supply and Distribution Systems

n/a

2.2.4.6 Wastewater and Sewers

n/a

2.2.5 Design Analysis Calculations

n/a

2.2.5.1 Storm Drainage System Calculations

n/a

2.2.5.2 Pavement Calculations

n/a

2.2.5.3 Sprinkler Irrigation System Design Parameters

n/a

2.3 GEOTECHNICAL

Not used.

2.4 ARCHITECTURAL

Not used.

2.5 STRUCTURAL

Not used.

2.6 PLUMBING

Not used.

2.7 HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

Not used.

2.8 ELECTRICAL

2.8.1 Technical Requirements

2.8.1.1 Design and Installation Standards and Codes

The electrical design and installation shall conform to the current versions of all applicable Unified Facilities Criteria (UFC), all applicable National Fire Protection Association (NFPA) standards, all applicable Institute of Electrical and Electronics Engineers (IEEE) standards, all applicable National Electrical Manufacturers Association (NEMA) standards, all applicable Illumination Engineering Society (IES) standards, all applicable Electronic Industries Alliance/Telecommunications Industry Association (EIA/TIA) standards, and all standards and codes referenced in the UFGS specifications. All distribution equipment/devised shall be UL listed and conform to NEC and the standards of IEEE, ANSI, and NEMA. Publications, codes, specifications, and standards shall be used as the basis for the project design. Publications and codes that imply recommendations shall be taken to be mandatory. Where there are conflicting criteria, the most stringent requirements take precedence.

2.8.1.2 Scope of Work

See scope of drawings.

2.8.1.3 Detroit Arsenal Specific Requirements

All abandoned electrical systems, equipment, lighting, conduit, equipment pads, and any other abandoned electrical system component within the project area boundaries shall be removed.

2.8.2 Drawings

Drawing scale shall match architectural drawing requirements. Drawings shall be complete and accurate.

All drawings provided to the Contractor shall be field verified for accuracy.

2.9 TELECOMMUNICATIONS

Not used.

2.10 FIRE PROTECTION

Not used.

2.11 ENVIRONMENTAL PROTECTION COMPLIANCE

Environmental protection shall be in accordance with Appendix A, Standard Environmental Protection Requirements and Appendix B, Other Standard Environmental Protection Requirements.

2.12 SAFETY

2.12.1 Technical Requirements

The Contractor shall adhere to the current installation safety requirements, MIOSHA safety requirements, OSHA safety requirements, the safety requirements included in UFGS Specification Section 01 35 26 GOVERNMENT SAFETY REQUIREMENTS, and the United States Army Corps of Engineer's codes and standards.

The Contractor shall provide accident prevention plan IAW with EM 385-1-1 Safety and health Requirements manual.

2.12.2 Drawings

The drawings shall clearly identify the amounts and locations of hazardous material.

2.12.3 Specifications

At a minimum, the pertinent UFGS specifications shall be completely edited and coordinated with the drawings.

01 35 26	GOVERNMENTAL SAFETY REQUIREMENTS
01 35 30	SAFETY, HEALTH, AND EMERGENCY RESPONSE (HTRW/UST)
01 35 29	SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS
02 82 14.00 10	ASBESTOS HAZARD CONTROL ACTIVITIES
02 82 33.13 20	REMOVAL/CONTROL AND DISPOSAL OF PAINT WITH LEAD
02 83 13.00 20	LEAD IN CONSTRUCTION
02 84 16	HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBS AND MERCURY
02 84 33	REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCBS)
31 21 13	RADON MITIGATION

Any interference with the civil, mechanical, electrical, geotechnical, and environmental specifications shall be addressed and reviewed to extract the list of sampling and analysis requirements.

2.12.4 Design Analysis Narrative

The Design Analysis Narrative shall list all conditions impacting safe work on the project for each of the sections listed above. Potentially hazardous conditions, such as, materials shall be identified. The basis and reasons for specific decisions, special features, and unusual requirements shall be explained or summarized. If it is necessary to deviate from criteria or standard practice, reasons shall be included. Design statements shall be provided in sufficient detail to enable the reviewer to get a clear picture and understanding of all included work. Narrative shall be complete relative to scope and design approaches. The design analysis shall carry a complete narrative for every item covered in the design.

2.12.5 Design Analysis Calculations

Amount and location of hazardous materials (asbestos, lead paint, PCBs, and other hazardous materials) shall be addressed.

2.12.6 Basis, Specific Goals, Objectives, and Priorities for Hazardous Material

The Design Analysis shall establish specific goals, objectives, and priorities for safety (including the removal, handling, and disposal of hazardous materials). Identify, explain, and document use of design criteria and state how the design meets goals, objectives, and priorities. Identify the preferred site development concept. Show how systematic planning has been used in the design and will meet the objectives. Systematic planning ensures high decision confidence and stakeholder satisfaction. It shall list various regulatory, scientific, and engineering decisions that must be made in order to achieve the desired outcome. List unknowns that stand in the way of making those decisions and strategies to eliminate or manage the unknowns.

2.13 SUSTAINABLE DESIGN

Not used.

2.14 DEMOLITION AND DECONSTRUCTION

Demolition and deconstruction shall be performed in accordance with UFGS Specification Section 02 41 00, DEMOLITION AND DECONSTRUCTION. Deconstructed materials shall become the property of the Contractor as indicated in UFGS Specification Section 02 41 00, DEMOLITION AND DECONSTRUCTION unless otherwise indicated or specified. Materials not owned by the Government and not used in construction shall be disposed of on Government property. **For example broken furniture, satellite dishes etc.** Any material to be disposed of in a landfill shall be no larger than 2 ft by 3 ft and no thicker than 18 in.

2.15 COST ENGINEERING INSTRUCTIONS

The Contractor shall submit a professional quality cost proposal in accordance with the policies and procedures stated in the "Cost Estimates" paragraph of the contract.

PART 3 NOT USED

-- End of Section --

SECTION 01 03 00.00 06

DESIGN AND CONSTRUCTION SUBMISSION REQUIREMENTS
04/13

PART 1 GENERAL

1.1 INTRODUCTION

a. Design

This section includes general requirements for developing and submitting a design including preparation of drawings, specifications, design analyses and other design deliverables conforming to the requirements contained in this section. Distribution requirements for design deliverables is also covered in this section.

b. Construction

This section includes distribution requirements for the construction set of design deliverables and distribution requirements for DD Form 1354 and as-built drawings. Included also are the construction submittal classifications for use in editing the technical guide specifications and instructions on revisions to accepted design during construction.

1.2 DESIGNER OF RECORD

The Design-Build (D-B) Contractor shall identify the Designer of Record for each area of work, also to be indicated in the Design Quality Control Plan. One Designer of Record may be responsible for not more than two design disciplines. All areas of design disciplines including **civil and electrical** shall be accounted for by a listed, Professional Registered, Designer of Record. The Designers of Record shall stamp, sign, and date each design drawing submitted under their responsible discipline for the 100 Percent Design; Corrected Final Design; and Released for Construction Design submittals.

Designers of Record shall be employees of, or contracted directly by, the Prime Contractor, or shall be an employee of an independent design firm that is contracted directly by the Prime Contractor. The Designer of Record shall not be an owner, employee, agent, or consultant of a construction subcontractor hired for this project.

1.3 REFERENCES

1.3.1 The Construction Specifications Institute (CSI)

CSI MasterFormat (latest edition) Master List of Section Titles and Numbers

1.3.2 U.S. National CAD Standard

(a) The A/E/C CAD Standard (compliant with the U.S. National CAD Standard) can be found at:

<https://cadbim.usace.army.mil/CAD>

1.3.3 Web Sites

In addition to the web sites listed in this section, other SOW Sections may list web sites where design criteria references used in this solicitation package may be found.

(a) UNIFIED FACILITIES CRITERIA (UFC), TECHNICAL MANUALS (TM), TECHNICAL INSTRUCTIONS (TI), AIR FORCE MANUALS (AFM), ENGINEERING TECHNICAL LETTERS (ETL), ARMY ARCHITECTURAL AND ENGINEERING DESIGN CRITERIA (AEI), SUSTAINABLE DESIGN DOCUMENTS, AND MILITARY HANDBOOKS (MIL HNDBK) can be obtained from the following internet addresses:

<http://www.hnd.usace.army.mil/techinfo/engpubs.htm>.

<http://www.wbdg.org/>

Additional web sites are as follows:

(1) TECHNICAL MANUALS, ETL's, ETC.:

www.usace.army.mil/inet/usace-docs

Click on "Information", then the desired publication.

(2) AIR FORCE DESIGN CRITERIA:

<http://afpubs.hq.af.mil>

(3) UNIFIED FACILITIES GUIDE SPECIFICATIONS (UFGS)

http://www.wbdg.org/ccb/browse_org.php?o=70

Guide specification numbers and titles referenced in the solicitation may vary from the actual specification numbers and titles available at the website listed above.

SpecsIntact software may be downloaded at the following Internet address:

<http://si.ksc.nasa.gov/SpecsIntact/software/software.htm>

SI Version 4.0 (Version SI4.2.0.785) or later shall be used. The new unified submittal format shall be selected for file format.

1.4 ENGLISH UNITS REQUIREMENTS

Drawings shall be stated in English units of measure. Specifications shall be stated in English units of measure, unless the UFGS specifications provide only a metric unit followed by the English equivalency in parentheses or where requirements for equipment are only available in metric units.

1.5 SUBMISSION OF DESIGN DRAWINGS, SPECIFICATIONS, AND DESIGN ANALYSES

1.5.1 Design Certification

Within each design submittal, the Contractor shall certify that all items submitted in the design documents (after construction award) comply with this SOW, the Division 1 specifications, the Detroit Arsenal Installation Design Guide (IDG), and mandatory requirements of the UFGS. The requirement specified in this SOW are binding contract requirement and in case of any conflict, after award, between the SOW and Contractor's submittals, the SOW will govern unless there is a written and signed agreement between the Contracting Officer and the Contractor waiving a specific requirement. The Contractor shall present with the letter of transmittal for each design submittal (including the Released for Construction Design submittal) a certification that the submittal (plans, specifications, design analysis, etc.) complies with the requirements stated above, similar to that shown at Attachment A of this section. The Contractor's Designers of Record shall confirm and be responsible for the technical accuracy and adequacy of all aspects of the project design.

1.5.2 Deviations

Deviations from the SOW technical requirements shall be identified in the letter of transmittal and design certification letter. Deviations from the SOW technical requirements will be considered and accepted by the Contracting Officer, if the changes result in a significant improvement to the project or if the changes exceed the minimum SOW technical requirements.

1.5.3 Field Inspection

The Contractor shall verify field conditions which are significant to design, by field inspection, researching and obtaining all necessary existing facility as-built drawings and reproducing them for his own use as necessary, and discussing status with knowledgeable personnel. The information shall be reflected in the design documents.

1.5.3.1 Photographs

The Contractor shall furnish digital photographs on CD-ROM depicting the progress of work during construction and after final inspection by the Contracting Officer's Representative (COR) of the conditions at the completion of the contract.

The monthly photography shall be performed between the first and fifth of each month and the CD's with digital photographs shall be submitted no later than the 10th of each month during the construction phase of the contract (from start of construction through completion of final inspection). The photograph CD shall be submitted in accordance with the submittal requirements of this SOW. A minimum of six views from different positions shall be taken as direction to show, as much as possible, work accomplished during the previous month, and a minimum of six views shall be taken of the completed work. Additional views and positions may be required by the COR to depict the work done.

Photographs shall be at least 4 megapixels and shall be in JPEG format. Each CD shall be identified with the date made, contract title and number, location of work, and a brief description of the work depicted.

No separate payment will be made for these services and all costs in connection thereto shall be considered a subsidiary obligation of the Contractor.

1.5.4 Drawings

1.5.4.1 Software Requirements

All design drawings shall be done by the Contractor using MicroStation V8 (.dgn) file format. The format shall conform to the U.S. National CAD Standard.

1.5.4.2 Geographic Information System (GIS) Software Requirements

All maps and other geospatial data must comply with the latest version of Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE) available from the CADD/GIS Technology Center at <https://cadbim.usace.army.mil/>. This data shall be organized using SDSFIE 2.60 specifications for file, class, and attribute nomenclature. Information must be collected at no less than 1:360 scale. This data shall meet or exceed National Map Accuracy Standards at those scales and metadata using Federal Geographic Data Committee (FGDC) Content Standards for Digital Geospatial Metadata (CSDGM) for organization. Content shall accompany all submissions. Geospatial data must be delivered in a georeferenced GIS (Geographic Information System) format based file structures including one-to-one cardinality between spatial records and attribute records including attribute data. All geospatial data must be delivered in the North American Datum 1983 (NAD83) projection, Michigan South State Plane Coordinate System, using U.S. Foot units.

Survey Grade Global Position Systems (GPS) or comparable traditional survey methods shall be used to collect geospatial data, for instance, northing, easting, and elevation above or below the Earth's surface for all contract activities where geospatial data is involved. This data shall be obtained at the time of construction and prior to burial in the case of underground utilities. This data must be delivered to the installation in an open Relational Database Management System (RDBMS) with the associated attribute data. Examples include obtaining precise GPS data for new waterline endpoints, connections, and connected valves prior to burial.]

1.5.4.3 RFP Drawings

The drawings furnished with this solicitation will be furnished to the Contractor in AutoCAD (.dwg) file format or MicroStation V8 (.dgn) file format.

1.5.5 Design Documents

Design documents, as required by the 65 Percent Design and 100 Percent Design submittals stated hereafter, shall include construction drawings, specifications, design analysis, and other design deliverables. Specifications shall be in sufficient detail to fully describe and demonstrate the quality of materials, the installation and performance of equipment, and the quality of workmanship. Detailing and installation of all equipment and materials shall comply with the manufacturer's recommendations. The design analysis shall be for each discipline of work and shall include all features with the necessary calculations, tables, methods and sources used in determining equipment and material sizes and capacities, and shall provide sufficient information to support the design.

1.5.6 Conferences

After contract award, the Prime Contractor and the Contractor Designer of Record representatives shall attend the Preconstruction Conference at the Detroit Arsenal (DTA) Directorate of Public Works (DPW).

In addition, a minimum of one design review conference during design will be held at the DTA DPW at the 65 percent completion stage of the design. The Prime Contractor and the Contractor Designer of Record representatives shall attend the design review conference, visit the site, meet with key using agency points of contact, address any appropriate discussion items, and make additional trips as necessary during the design to accomplish the work.

1.5.7 Document Packaging

The 65 Percent Design submittal includes the site and utility design and the building design complete to a 65 percent level. These documents shall be packaged and stamped "For Review Only - 65 Percent Design"; and each sheet of the drawings shall also be stamped. The 100 Percent Design submittal includes 100 percent complete site and utility design and building design and shall be stamped "For Review Only - 100 Percent Design", and each sheet of the drawings shall also be stamped. The design submittal(s) after the Government review of the 100 Percent Design shall be stamped "Released for Construction Design"; and each sheet of the drawings shall also be stamped. The Released for Construction Design submittal is for making corrections resulting from review comments and for preparing the final project documents. No additional time for completion of the contract will be granted to the Contractor due to insufficient design submittals.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 CONTRACTOR'S GENERAL DESIGN SUBMITTAL REQUIREMENTS

The design submittals for this project shall be submitted as indicated below. The design submittals shall be submitted to the Distribution Addresses listed below and shall include specifications, drawings, and design analysis in electronic format on CD as described below. Drawings shall be submitted in hardcopy and electronic format.

65 Percent Design for all disciplines.

100 Percent Design for all disciplines.

Released for Construction Design for all disciplines.

3.2 CONSTRUCTOR'S ROLE DURING DESIGN

The Contractor's construction management key personnel shall be actively involved during the design process to effectively integrate the design and construction requirements of this contract. In addition to the typical required construction activities, the constructor's involvement includes actions such as: integrating the design schedule into the master project schedule to maximize the effectiveness of fast-tracking design and construction (within the limits allowed in the contract), ensuring constructability and economy of the design, integrating the shop drawing and installation drawing process into the design, executing the material and

equipment acquisition programs to meet critical schedules, effectively interfacing the construction Quality Control (QC) program with the design QC program, and maintaining and providing the design team with accurate, up-to-date, redline and as-built documentation. The Contractor shall require and manage the active involvement of key trade subcontractors in the above activities. All work shall be performed in accordance with the Construction Quality Management (CQM) process in UFGS Specification Section 01 45 00.00 10 QUALITY CONTROL.

The project schedule shall be provided in accordance with UFGS Specification Section 01 32 01.00 10 PROJECT SCHEDULE. The Contractor shall, within five calendar days after contract notice to proceed, prepare and submit for approval the practicable project schedule. The project schedule shall show the order in which the Contractor proposes to perform the work and the dates on which the Contractor contemplates starting and completing the salient features of work. The work shall be scheduled so that, upon the start of design and the start of construction, work progresses in a continuous and diligent manner. A project schedule that does not reflect steady and reasonable progress throughout the design and construction periods will be rejected by the Government. Weekly progress reports and contractor progress reports are required covering the period from notice to proceed through final inspection and contract closeout. The project schedule shall be submitted to the COR in electronic Adobe Acrobat Portable Document Format (PDF) and electronic Microsoft Project format. The ENG Form 4025 shall be submitted in electronic Adobe Acrobat Portable Document Format (PDF) and shall be digitally signed by the Contractor.

3.3 DRAWINGS

Prepare, organize, and present drawings in the format specified herein. Provide drawings complete, accurate and explicit enough to show compliance with the SOW requirements and to permit construction. Drawings illustrating systems proposed to meet the requirements of the SOW shall reflect proper detailing for each system to assure appropriate use, proper fit, compatibility of components and coordination with the design analysis and specifications required by this section. Coordinate drawings to ensure there are no conflicts between design disciplines and between drawings and specifications.

The electronic drawings shall be in accordance with both the U.S. National CAD Standard and the Detroit Arsenal (DTA) Directorate of Public Works (DPW) CADD Standard which includes graphics (text fonts, text heights, and line weights), naming conventions (file names, sheet names, and level names), drawing assembly (referencing), sheet file composition, and all other specifications of the U.S. National CAD Standard and DTA DPW CADD Standard. A copy of the DTA DPW CADD Standard will be provided to the Contractor upon written request to the COR.

3.3.1 Drawings Format

Full size drawings are considered Arch D (24 inches x 36 inches). Half-size drawings are considered Arch C (18 inches x 24 inches). With written approval from the Contracting Officer's Representative, the Contractor may choose to consider the use of Arch 30 (30 inches x 42 inches), where size or scope of the project requires the use of larger drawing sheets. Title block shall be as indicated in the U.S. National CAD Standard and shall be based on the Detroit Arsenal title block. The Cover Sheet of the Contractor prepared drawings shall bear the stamp or seal and signature of the

registered architect or appropriate engineer responsible for the work. One full size and one half size hardcopy set of drawings shall be sent to the Activity Distribution Addresses listed below. Electronic copies of drawings, provided on CD, shall be sent to the Activity Distribution Addresses listed below, in MicroStation V8 format and Adobe Acrobat Portable Document Format (PDF). The drawings in Adobe Acrobat PDF format shall be provided in one single file containing all drawings in the design package. The drawings in Adobe Acrobat PDF format shall be directly converted from the source files and shall be searchable Adobe Acrobat PDF files (the drawing files shall not be scanned). The hardcopy and electronic drawings shall be provided for the 65 Percent Design submission, the 100 Percent Design submission, the Released for Construction Design submission, and the As-Built Drawing submission.

3.3.2 Drawings Sequence

Arrange drawings by design discipline in accordance with the U.S. National CAD Standard.

3.3.3 Drawings Required

As a minimum, the Contractor shall prepare and submit the following design drawings:

- a. Title Sheet, Index of Drawings, Legend and Abbreviations and Soil Borings
- b. Civil Drawings
- c. Utility Drawings
- d. Architectural Drawings
- e. Electrical Drawings

3.4 SPECIFICATIONS

3.4.1 Project Specifications

3.4.1.1 General Requirements

The Contractor shall develop project specifications utilizing unedited Unified Facilities Guide Specifications (UFGS), designated specification sections furnished with this SOW, and the development of additional project specifications not covered by UFGS. UFGS may be downloaded in SpecsIntact SGML (zipped) file format at the internet address listed above. Specifications shall be edited utilizing the latest edition of MasterFormat numbering system. The Contractor shall utilize SpecsIntact software.

3.4.1.2 Technical Specifications

The Contractor shall be required to use unedited UFGS sections for developing project specifications. Specification paragraphs and subparagraphs shall not be rewritten to lessen the quality of the original technical specification sections, unless directed otherwise. The technical guide specifications describe the type and quality of material and installation normally acceptable for United States Army Corps of Engineers

construction, and often represent specific agreement between the Government and the applicable industry. The provision of the technical guide specification shall not be changed without justification. Justifications and identification for additional materials shall be identified in the design analysis under the appropriate design discipline. Designer notes shall not appear in any design submittals. Only bracketed choices and inapplicable items shall be marked for deletion. These items shall be removed in the Released for Construction Design specifications submittal. The Contractor shall complete the editing of all options in these specifications. Where designer notes are provided, the Contractor shall edit the choice in accordance with the recommendations and guidance of the notes, except where specific guidance has been provided with this SOW (i.e. submittal paragraph).

3.4.1.3 Editing Technical Specifications

(1) Incorporating Established SOW Requirements into Guide Specifications

Where specific requirements in regards to materials, methods, and end function requirements are provided in the edited RFP Division 1 provided in this SOW, the unedited Unified Facilities Guide Specifications (UFGS) shall be edited to reflect these requirements. Variations to these requirements will not be permitted, unless authorized as a design deviation by the Contracting Officer.

(2) Requirements of Guide Specifications Not Established By SOW Requirements

Where specific direction has not been provided in regards to materials, methods, and end function requirements, the final requirements will be a result of the completed design by the Contractor.

The applicable unedited UFGS sections, Divisions 2 through 49, shall be edited to:

- (a). Provide the highest quality that can be provided within the cost and time authorized;
- (b). Meet or exceed the criteria requirements established by the solicitation;
- (c). Meet applicable Federal, state, and local codes; and
- (d). Do not sacrifice aesthetics, user requirements established by the solicitation, life-cycle economy, energy conservation, environmental protection or life safety.

Lessening the quality of the UFGS specifications shall not be made unless the Contractor provides the Contracting Officer documentation as to why the standards established by the UFGS sections cannot be made and the Contracting Officer approves. This documentation shall be included as a design deviation.

(3) ADDITIONS: If the specifications of the UFGS do not cover a feature that is in the project, new sentences and/or paragraphs shall be inserted in the proper locations to adequately cover the feature of work. Additions shall not lessen the quality of materials indicated by the specifications. If a new material is added, it shall be properly referenced in "Applicable Publications," "MATERIALS," "SUBMITTAL," "TESTS," and "INSTALLATION" paragraphs.

(4) DELETION OF INAPPLICABLE TEXT MATERIAL, AS NECESSARY, TO TAILOR THE SPECIFICATIONS TO FIT THE PROJECT: After deletion has been made to all inapplicable paragraphs, subparagraphs, choices, and schedules from the body of the specifications (including the correction of lists in "Submittals," "Tests," and "Installation" paragraphs), delete all non-applicable references listed in the preceding "APPLICABLE PUBLICATIONS" and "MATERIALS" paragraphs. Deletions shall not lessen the quality of materials indicated by the specifications.

(5) Do not remove any special code markings for submittals, references, tests or section references, unless the text is not required.

(6) REFERENCES TO SPECIFICATION SECTIONS: The Contractor shall be responsible for coordinating section references, along with the technical requirements, to specific specification sections (number and title) within the project specifications. Section references (title and number) shall be revised to reflect the titles and numbers of specification sections used.

(7) REFERENCES: The Contractor shall be responsible for coordinating references or publications referenced in the text of each specification with those references listed at the beginning of each section. See paragraph: Reports below. The SpecsIntact software removes references or publications not referenced in the text from the Reference Article, when printing from the Jobs menu.

(8) SUBMITTALS: Each section of the specifications includes a submittal paragraph which lists all applicable Contractor submittals. Submittals shall be properly marked as outlined in the SpecsIntact documentation and in this section. These codings are used for automatic generation of the Submittal Register in the SpecsIntact Software. These codings must not be deleted from the text, unless the submittal is not required. The Submittal Item text between the coding shall be identical (word for word, including punctuation and spacing) to the paragraph text in the reference paragraph(s). Text may be either upper or lower case letters. An example of a submittal paragraph is provided in Attachment C, "Sample Submittal Paragraph".

During the design phase, the Contractor's designer(s) shall develop a complete list of required construction submittals in each technical specification. The list is to be used in preparing the Submittal Register for approval by the Contracting Officer's Representative (COR).

See UFGS Specification Section 01 33 00 SUBMITTAL PROCEDURES, for complete instructions related to submittal descriptions, classifications, numbers, and submittal process. Unless directed otherwise by the Contracting Officer, the words "Government Approval" associated with "G" designated submittals shall be interpreted as defined herein and in section 01 33 00 SUBMITTAL PROCEDURES.

Submittal Classifications defined in Section 01 33 00 are G-DO, G-AO, and FIO. One of these designations shall be used for all submittal requirements. For each submittal requirement in the guide specification, designers shall indicate a submittal type (G-DO, G-AO, or FIO) or shall delete the requirement for the submittal if it is not required. The references to "G-AE" and "G-PO" submittal types in the designer notes of the technical guide specifications shall be disregarded and submittals shall be

designated G-DO, G-AO, or FIO as determined by the Designer in accordance with the instructions in this section and Section 01 33 00 SUBMITTAL PROCEDURES. There shall be no "G-AE" or "G-PO" submittals in the submittal register.

To designate a submittal item as FIO, mark the semi-colon following the submittal item and also the submittal tags up to the Item tag for deletion (i.e. "; [] , []"). Designers shall identify submittal classifications for all required submittals.

(9) USE OF UFGS SECTIONS: Unless directed otherwise, use UFGS sections. UFGS sections are joint effort of the U.S. Army Corps of Engineers (USACE), the Naval Facilities Engineering Command (NAVFAC), National Aeronautics and Space Administration (NASA) and the Air Force Civil Engineer Support Agency (AFCESA). In instances where more than one UFGS section addresses the same material or system requirement, use the section developed by the USACE specification proponent (general rule of thumb). Available UFGS sections with the numbers ending ".00 10", ".00 20" or ".00 40" following the section number are sections that have not yet been unified by the different Government design agencies. The ending numbers designate the specification proponent (".00 10" is for USACE, ".00 40" for NASA and ".00 20" is for NAVFAC). Where UFGS sections include tailoring options for both the various proponents (Army, NASA, and Navy) use the Army tailoring option unless otherwise indicated in this SOW. Where conflicts exist that cannot be resolved, the Contracting Officer shall be contacted to resolve the issue.

3.4.1.4 Developing Additional Project Specifications

If the need should arise for developing project specifications on materials and items not covered by the UFGS, the Contractor shall develop specifications utilizing commercial Construction Specifications Institute (CSI), 49 Division, 3 Part Section Format. These specifications shall conform to the applicable criteria requirements indicated in the solicitation. For these specification sections, write at the Mediumscope level of detail as described in CSI MasterFormat. Use Mediumscope level section numbers and titles as identified in CSI MasterFormat. Adjust section numbers which conflict with the specifications used in the project specifications. Each of these developed specification sections shall be in the same format as the CSI format specifications included in the UFGS (including the submittal paragraph). Commercially available guide specifications such as "SpecText" published by The Construction Specifications Institute and "MasterSpec" published by The American Institute of Architects may be used, subject to the format, coding and submittal paragraph requirements if UFGS specification sections are not available. References to the "Architect/Engineer" and the "Owner" shall be changed to refer to the "Government" or "Contracting Officer," as appropriate. The specifications shall clearly identify, where appropriate, the specific products chosen to meet the requirements of the specifications (manufacturers' brand names and model numbers or similar product information). The Contractor shall be responsible for coordinating references, along with the technical requirements, to specific specification sections (number and title) within the project specifications. Section references (title and number) shall be revised to reflect the titles and numbers of specification sections used.

3.4.1.5 Division 0 and 1 Sections

Include Division 0 and 1 specification sections indicated below as part of the project specifications, unless directed otherwise:

01 32 01.00 10 PROJECT SCHEDULE,
01 33 00 SUBMITTAL PROCEDURES,
01 35 26 GOVERNMENT SAFETY REQUIREMENTS,
01 45 01 USACE QUALITY CONTROL,
01 57 20.00 10 ENVIRONMENTAL PROTECTION,
01 62 35 RECYCLED / RECOVERED MATERIALS,
01 74 19 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT,
01 78 00 CLOSEOUT SUBMITTALS,
01 78 23 OPERATION AND MAINTENANCE DATA,

All other Division 1 Specifications required by the Contract shall be the responsibility of the Contractor.

3.4.1.6 Format for Project Specifications

Submit the project specifications, including a cover page and table of contents, printed with a word processor (using SpecsIntact software) using good quality white paper. For the 65 percent and 100 Percent Design submittals, editing of the UFGS shall be shown as indicated in the SpecsIntact documentation for text deletions and for text insertions (i.e. 65 percent and 100 percent review specifications shall be printed to show all insertions and deletions). The Released for Construction Design specifications with review comments incorporated shall be cleaned up (markings for insertion and deletion removed) and shall be submitted in electronic format on electronic media (a Microsoft Windows compatible CD-ROM and compatible with the "SpecsIntact" micro computer software package). The cover page and attachments to specification sections shall be prepared in a Microsoft Word (compatible with Microsoft Word 2007) format. In addition to the electronic SpecsIntact formatted specifications, a single Adobe Acrobat PDF file, containing all specification sections for this project, shall be provided on CD with the 65 Percent Design, the 100 Percent Design, and the Released for Construction Design submittals.

Format shall be as outlined in the SpecsIntact documentation.

Each specification section shall include a Section Table of Contents which is combined with the page numbering of the specification section.

The Cover page shall be similar to the RFP Cover page and shall include:

- a. Project title, project number, activity and location
- b. Construction contract number
- c. Construction Contractor's name and address
- d. Design firm's name and address
- e. Names of design team members (Designers of Record) responsible for each Contractor prepared technical discipline of the project specification
- f. Name and signature of a Principal of the design firm

The Table of Contents shall list the specification section numbers and titles contained in the project specifications.

3.4.1.7 Reports

The Contractor shall submit the following SpecsIntact reports with the 100 Percent Design and the Released for Construction Design submittals: Address Verification, Reference Verification, Section Verification, Bracket Verification, Submittal Verification, and Submittal Register. References shall be reconciled when printing reports. The reports to be submitted for review shall be after the Contractor has corrected the errors generated by these reports. From the errors generated by the reference verification reports, fix only those errors where there is a discrepancy with the issue date of a publication (i.e., NFPA 70, revise to the latest code requirement). Address, Reference, and Submittal Reconciliation shall be completed prior to submittal of the 100 Percent Design.

3.4.2 Construction Submittals

All construction submittals shall be in accordance with Specification Section 01 33 00, "SUBMITTAL PROCEDURES".

Construction submittal types and products, including the submittal description numbers and data package numbers, shall be included in the specification sections, where required. When appropriate, use specific product terms instead of the generic product terms contained in the specifications sections (e.g., asphalt shingles, built-up roofing, EPDM single ply, etc. vs. roof covering; concrete masonry units, brick, metal siding, etc. vs. exterior skin; mineral fiber board, block, batt or blanket, polystyrene, polyurethane, polyisocyanurate board vs. insulation).

All submittals shall be provided in electronic Adobe Acrobat Portable Document Format (PDF). The ENG Form 4025 shall be provided in electronic Adobe Acrobat Portable Document Format (PDF) and shall be digitally signed by the Contractor. Submittals which require hardcopy submission; such as samples, shall be provided in hardcopy format (one hardcopy of the submittal) and shall be provided with an accompanying electronic digitally signed Adobe Acrobat PDF copy of the ENG Form 4025 and a hardcopy of the ENG Form 4025. One electronic copy and two hardcopies shall be provided for all drawing submittals. Electronic copies of design submittals shall be provided in the formats specified in this SOW.

Submittal review comments and submittal classification will be provided in hardcopy or electronic format by the Government.

The Government will have fourteen (14) calendar days to review and respond to construction submittals after date of receipt of the construction submittal.

3.4.2.1 Submittals Register (Form)

Prepare and maintain a Submittals Register. The Submittal Register (ENG Form 4288 "Submittal Register") shall be prepared using SpecsIntact Software. Additional instructions for completing the form are contained in Specification Section 01 33 00, "SUBMITTAL PROCEDURES."

Fill in columns "c" through "f" and submit with the 100 Percent Design submittal. The Submittal Register will be returned to the Contractor along with the reviewed and accepted design.

Resubmit the Submittal Register as a construction submittal as required in Specification Section 01 33 00, "SUBMITTAL PROCEDURES." The Contractor shall provide an electronic copy of the accepted submittal register (navy4288.txt file), generated by the SpecsIntact software, in both SpecsIntact file format and Adobe Acrobat Portable Document Format (PDF), seven (7) calendar days prior to the pre-construction conference. Remaining columns will be filled in at the appropriate time and by the appropriate authorities during construction.

3.5 DESIGN ANALYSES

Prepare design analyses (basis of design and calculations) for each design discipline. Specific requirements relative to the technical content to be provided are specified herein. The design analyses shall include a basis of design and calculations for each discipline. The design analyses shall be a presentation of facts to demonstrate that the concept of the project is fully understood and that the design is based on sound engineering. The design analysis for each discipline shall include:

- a. A basis of design consisting of:
 - (1) An introductory description of the project concept which addresses the salient points of the design;
 - (2) An orderly and comprehensive documentation of criteria, rationale, assumptions, and reasoning for system selection.
- b. Calculations required to support the design.

The Contractor shall not make reference to the SOW to avoid stating the requirements for the basis for design.

3.5.1 Format

The design analysis shall include: a cover page indicating the stage of design "PRELIMINARY DESIGN ANALYSIS" for 65 Percent Design submittal and "FINAL DESIGN ANALYSIS" for 100 Percent Design submittal, the project title, the fiscal year, the location, name of designer who prepared the design analysis ("Prepared By:") followed by the Name of Architect-Engineer (A-E) Contractor and Construction Contractor, location of A-E and Construction Contractor Office involved with the design, construction contract number, table of contents, and tabbed separations for each part of design analysis for quick reference. The cover sheet shall indicate the volume number and total number of volumes for the project. Provide a cover sheet for each volume. Submit design analyses prepared on 8 1/2 by 11 inch white paper. The design analysis for all disciplines shall be bound in one volume, excluding calculations. Multiple volumes for individual disciplines, appropriately numbered, may be provided, when required. An electronic copy of the design analysis submittal shall be submitted in Adobe Acrobat PDF format. Narratives shall be provided in decimal paragraph numbering system (i.e. 1, 1.1, 1.1.1, 1.1.1.1 etc.). Narratives shall be an original document that does not copy the text from the SOW document sections, and shall be written in the same tense (Past or Present)

for the entire design analysis. Each part of the design analysis shall include part numbering and page numbering (consecutive page numbering for each part). Organize design analysis narrative into the following parts, as follows:

3.5.1.1 Part 1 - General Description.

This part will provide statements of purpose, authority and applicable criteria. A description of the project and a summary of the economic factors influencing the choice of the **civil and electrical** systems used in the project shall be provided along with an indication of how initial costs and life cycle costs were considered.

a. Purpose. Include the following statement under the heading of "PURPOSE":

"Sample Statement: The purpose of this project is to provide a facility which allows for adequate comprehensive programs for both military personnel and their dependents. The anticipated average daily attendant for this facility will be 450 persons. The facility provides for adequate support for athletics, aerobic activities, auxiliary administrative support, parking and support area."

b. Authority. Provide the following authorization statement under the heading "AUTHORITY" for the project:

"Sample: The preparation of design documents was authorized by Design Directive dated (31 January 2009)."

c. Applicable Criteria. Provide a list of the general criteria that pertains to all disciplines used in the design. Specific criteria used in a particular engineering/architectural discipline shall be listed in the text of the appropriate discipline in Part 2 of the design analysis. Such criteria shall be referenced accordingly.

d. Project Description. Provide a description of the project and summary of economic factors influencing the choice of materials and systems used in the project.

3.5.1.2 Part 2 - Design Requirements and Provisions.

This part of the design analysis shall provide statements of factors considered and provided in the design along with supporting justification of design decisions and design calculations. Include narratives for each of the following areas or disciplines; **Civil, Electrical, Environmental Protection Compliance, Safety, and Sustainable Design.**

3.5.2 Calculations

All calculations shall be placed in separate appendix volume(s). Calculations shall include a cover page similar to the design analysis narrative cover page, a table of contents, index page, a summary of criteria for each appendix, the project title, and the location identified on every page of the calculations. All calculation pages shall be clearly legible. Each discipline which requires calculations shall be consecutively numbered (Example: A-1, A-2, A-3 etc. for Water Supply and Wastewater Calculations and B-1, B-2, B-3, etc. for Structural Calculations) and the date. Cite

criteria from which the calculations, rationale, and formulae are extracted by publication number, title, edition, and page number. The cover page and each page of calculations shall also include the names of the persons originating and checking the calculations. The person checking the calculations shall be a registered professional engineer other than the originator. In addition, the signature and seal of the appropriate registered professional engineer responsible for the work shall appear on the cover page of the calculations for each discipline. Each appendix index page shall list subtopics (e.g. for Structural - Loads, Materials, References, Wind Analysis, Footing Design, Wall Design, Column Design, etc.) with pages numbers where each of these subtopics can be found in the calculations.

Computer printouts shall be consecutively page numbered and identified similar to the calculations. Identify the computer program name, source, and version. All schematic models used for computer input shall be provided.

3.5.3 Design Review Meetings

Formal design review meetings shall be held at DTA DPW Building 205 Conference Room for the following milestone meetings **similar for each designed "part" proposed by the Contractor:**

65 Percent Design Submittal
100 Percent Design Submittal

The design review meetings shall be scheduled after all comments have been received and addressed by the Contractor. The Contractor shall provide all design review comment responses to the COR. The COR will schedule the design review meeting with the Contractor and appropriate Government personnel.

Design review meetings shall not be taken as an approval or acceptance and do not relieve the Contractor from responsibility for compliance with the contract, code regulations, or betterments, either listed with the Contractor's proposal or identified during the proposal evaluation.

For each design review meeting, the Contractor shall provide adequate copies of annotated comments to all conference participants. Unresolved comments and problems will be resolved by immediate follow-on action at the end of the meetings. Valid comments will be incorporated.

In addition, the Contractor shall request a design progress meeting to the COR after 35 percent design is complete. The COR may schedule the design progress meeting with the Contractor and appropriate Government personnel. The Contractor shall bring 35 percent design drawings and specifications to the meeting. The Contractor shall brief the Government personnel on all aspects of the 35 percent design package. The intent of the 35 percent design progress meeting is to address all design issues, conflicts, concerns, and questions. Additional design progress meetings may be requested by the Contractor or the COR and may be scheduled by the COR to address issues, conflicts, concerns, and questions.

3.5.4 Requests for Information, Meeting Minutes, and Comments

Copies of Requests for Information (RFIs) made by the Contractor to the Government shall be included as an appendix to the design analysis. An index of each RFI, which documents the RFI number, the date the RFI was given to the Government, the date the RFI was answered by the Government, and the response provided by the Government shall be provided. The Government will have fourteen (14) calendar days to respond to RFIs after date of receipt of the RFI.

The Contractor shall record meeting minutes at each meeting attended. The Contractor shall submit the meeting minutes to each person that attended the meeting via e-mail message no later than three (3) calendar days after the meeting occurs. Any RFI, from any meetings, shall be formally submitted separately by the Contractor. A copy of all meeting minutes and design review comments (if any) with responses shall be included as an appendix to the design analysis.

Appendices for RFIs, meeting minutes, and design review comments shall have page numbering that follows the same format as for Calculations listed above.

3.6 DESIGN CERTIFICATION

The Contractor shall provide certification signed by an officer of the Contractor's company attesting that the drawings, specifications, and design analyses prepared for construction meet the requirements of the RFP. The certification shall accompany the submission of the design documents along with names and disciplines for the Designers of Record. This design certification shall include a list of deviations (variations) from the solicitation or accepted final design. Prepare the design certification and transmittal letter in the format shown on Attachment A or Attachment B included at the end of this section.

3.7 65 PERCENT DESIGN SUBMITTALS

The 65 Percent Design submittal shall consist of 65 percent complete drawings and specifications for all areas of design disciplines including [**civil and electrical**]. All design calculations for all disciplines shall be provided with the 65 Percent Design submittal. The design calculations provided with the 65 Percent Design submittal shall be 100 percent complete. The design analysis shall be 100 percent complete and shall be provided with the 65 Percent Design submittal.

3.8 100 PERCENT DESIGN SUBMITTALS

The 100 Percent Design submittal shall consist of 100 percent complete drawings, specifications, and design analysis for all areas of design disciplines including **civil and electrical**.

3.9 REVIEW BY GOVERNMENT

3.9.1 Distribution of Design Documents for Conformance Review

(a) The Government shall receive design submittal review responses from the Contractor prior to design review conferences as specified in the paragraph below. All submittals shall be transmitted by express mail. Originals of transmittal letters shall be sent to the Detroit Arsenal Directorate of Public Works and copies shall accompany each mail package. Transmittal

letters shall indicate distribution by use of the "ATTN" code shown in the address. Design document sets shall include the items listed below. Some of the construction submittals are also listed. Design submittals shall be submitted as a complete package (i.e. drawings, specifications, design analysis,...). The distribution listed below also applies to all design reviews and design packages accepted for construction.

(b) For the 65 Percent Design, the 100 Percent Design, and the Released for Construction Design submittals, if the Government requires more time than the number of days specified, the Contractor will be granted an extension of time equal to the number of calendar days of delay.

3.9.1.1 Design Submittal Items

Electronic copies of each required submittal (unless specified otherwise in this SOW); Design Analysis, Specifications, Drawings (half size hardcopy set, full size hardcopy set, and electronic copy), Submittal Register, Review Comments, Requests For Information, Meeting Minutes, Design Certification Letter, Operation and Maintenance Manuals, As-Built Drawings (half size hardcopy set, full size hardcopy set, and electronic copy), and DD Form 1354 - Transfer and Acceptance of Military Real Property, shall be sent to the Activity Distribution Addresses listed in the paragraph below as required for the 65 Percent Design submittal, the 100 Percent Design submittal, the Released for Construction Design submittal, and for the project completion submittals.

3.9.1.2 Activity Distribution Addresses

Department of the Army
US Army Garrison - Detroit Arsenal
6501 East Eleven Mile Road
Mail Stop 117 (Attn: Karen Carnago)
Warren, Michigan 48397-5000

Army Contracting Command - Warren (ACC-WRN)
6501 East Eleven Mile Road
Mail Stop 350 (Attn: John Sarti)
Warren, Michigan 48397-5000

3.9.2 Review Comments

For each design submittal, the Contractor will be furnished comments from the Detroit Arsenal Directorate of Public Works, and other agencies involved in the review process, approximately fourteen (14) calendar days after receipt, unless indicated otherwise. Annotated comments and responses to all design review comments, including the disposition of all comments, shall be furnished in writing by the Contractor within seven (7) calendar days of the review comments receipt. The Government will schedule the design review conference within seven (7) calendar days from receipt of the design review responses from the Contractor.

In responding to review comments presented by the Government, the Contractor's designer shall state how and where comments were addressed or will be addressed with the next design submittal.

All Government review comments on the 65 Percent Design shall be resolved prior to distribution of the 100 Percent Design documents. The Contractor

shall furnish copies of annotated review comments indicating disposition of all comments with the 100 Percent Design document set.

All Government review comments on the 100 Percent Design shall be resolved prior to distribution of the Released for Construction Design documents. The Contractor shall furnish copies of annotated review comments indicating disposition of all comments with the Construction document set.

For each design review meeting, the Contractor shall provide adequate copies of annotated comments to all conference participants. Unresolved comments and problems will be resolved by immediate follow-on action at the end of the conferences. Valid comments shall be incorporated.

After receipt of final corrected Released for Construction Design documents, the Detroit Arsenal Directorate of Public Works will recommend acceptance to proceed with construction as stated in this SOW.

3.9.3 Delays

Delays caused by the Contractor in completion of the 65 Percent Design, the 100 Percent Design, or the Released for Construction Design will not be considered as valid reasons to delay completion of the entire design. The Government may not be held liable for delays caused by re-submittal efforts caused by designs submitted which are rejected by the reviewers.

3.10 RELEASED FOR CONSTRUCTION DESIGN

Upon the Contractor's completion of the Released for Construction Design submittal, the Contractor shall reproduce copies of the design documents (accepted for the purposes of beginning construction) subject to the incorporation of the 100 Percent Design review comments. The Cover Sheet of the Contractor prepared drawings shall bear the stamp or seal and signature of the registered architect or appropriate engineer responsible for the work. The date on each drawing shall reflect the month and year that the drawings were cleared for the purposes of beginning construction. The cover sheet of the drawings, the cover sheet of the specifications, and the cover sheet of the design analysis shall include the date that the design documents were cleared for the purposes of beginning construction. The Contractor shall provide the design analysis, the design drawings, and the specifications in electronic formats as specified above. Drawings shall be provided in electronic and hardcopy format as specified above. Distribution shall be as indicated above. The originals will be retained by the Contractor for recording of as-built conditions. Upon completion of the project, the accepted design documents corrected to reflect as-built conditions shall be supplied to the Government.

The Contractor will be notified in writing by the Contracting Officer's Representative (COR) of Construction Notice to Proceed (NTP) when the design has been cleared for construction, accepted by the Government, and therefore considered Released for Construction Design documents.

3.10.1 Accuracy and Completeness of Design

Reviews by the Government of the design documents shall not be construed to be an endorsement of the accuracy or completeness of the design. Design deficiencies or omissions in the accepted design shall be the responsibility of the Contractor.

3.11 REVISIONS TO THE ACCEPTED DESIGN

3.11.1 Minimization of Design Revisions

The accepted design will be used by all parties involved in construction and in administration of the contract. Therefore, it is imperative that the design documents be kept up to date and an effective system of making and distributing changes be implemented. Since changes to the design increase risk of construction errors and deplete available administrative resources, every effort shall be made to minimize revisions to the accepted design. One of the measures of the Contractor's effectiveness of management will be how well the goal of minimizing changes to the accepted design is met. The use of effective quality control during design and the utilization of experienced and capable designers are some of the means that are expected to be used to accomplish this goal.

3.11.2 Supplemental Design Package and Certification

If revisions to the accepted design (Released for Construction Design) become necessary, the Contractor shall submit a Supplemental Design Package using Attachment B "Supplemental Design Certification and Transmittal Form" attached at the end of this specification section. This Supplemental Design Package shall be submitted as a "G-DO" construction submittal in accordance with Section 01 33 00 SUBMITTAL PROCEDURES. The revisions will be considered a "Variation" and the list of deviations from the accepted design shall be identified on the Supplemental Design Certification and Transmittal Form and on the construction submittal form ENG Form 4025. Variations from the Released for Construction Design set must be approved by the Contractor's Designer and the Contractor's Quality Control Representative and shall be accepted by the Contracting Officer as conforming with the SOW before construction of items affected by these revisions may commence. The Contractor shall comply with all the requirements of paragraph "VARIATIONS" of Section 01 33 00 SUBMITTAL PROCEDURES in preparation of the Supplemental Design Package.

3.12 AS-BUILT DRAWING SUBMITTALS

An as-built drawing is a construction drawing revised to reflect the final as-built conditions of the project as a result of modifications and corrections to the project design required during construction. The final as-built drawings shall not have the appearance of marked up drawings. The final as-built drawings shall appear as professionally prepared drawings as if they were the "as-designed" drawings.

As-Built Drawings shall be provided in accordance with UFGS Specification Section 01 78 00 CLOSEOUT SUBMITTALS. Redline as-built drawings shall be provided to the Contracting Officer's Representative (COR) prior to the pre-final and final inspections.

3.12.1 Maintenance of As-Built Drawings

The Contractor shall keep a record set of working as-built drawings at the job site, marked in red, of all changes and corrections from the contract drawings. The Contractor shall enter changes and corrections on drawings promptly to reflect "Current Construction". The CADD files shall be updated at least on a monthly basis. The marked-up set of drawings shall reflect

any changes, alterations, adjustments, or modifications. Changes must be reflected on all sheets affected by the change. Changes shall include marking the drawings to reflect structural details, foundation layouts, equipment sizes, and other extensions of design. Both paper and electronic documents shall be available at all times and shall be provided promptly to the Contracting Officer when requested.

Final as-built drawings shall reflect actual room numbers adopted by the end user.

3.12.2 Computer-Aided Design and Drafting (CADD) As-Built Drawings

Only personnel proficient in the preparation of CADD drawings shall be employed to prepare and modify the construction drawings or prepare additional new drawings. As-Built drawings shall be provided in MicroStation format. As-Built drawings shall be provided in conformance with the U.S. National CAD Standard. Additions and corrections to the construction drawings shall be in conformance with the Nation CADD Standard. The Contractor shall provide as-built drawings in MicroStation format in conformance with the U.S. National CAD Standard regardless of the software and standard in which the CADD drawings are provided to the Contractor by the Government. Conversions and corrections to the drawings provided by the Government to the Contractor shall be made by the Contractor. Line work, line weights, lettering, layering conventions, and symbols shall be in conformance with the U.S. National CAD Standard. If additional drawings are required, they shall be prepared in MicroStation format and shall be in conformance with the U.S. National CAD Standard. The title block and drawing border to be used for any new final as-built drawings shall be identical to that used on the contract drawings.

All work by the Contractor shall be done on files in MicroStation format. Translation of files to a different format, for the purpose of as-built production, and then retranslating back to the format originally provided, will not be acceptable unless the Government provided the files in AutoCAD format. If the Government provided drawings are in AutoCAD format then the Contractor shall convert the files to MicroStation format and provide the drawings in MicroStation format. The Government will review final as-built drawings for accuracy and the Contractor shall make all required corrections, changes, additions, and deletions.

When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor. All other contract drawings shall be marked in the bottom right-hand corner of each drawing either "AS-BUILT" drawing denoting no revisions on the sheet, or "REVISED AS-BUILT" denoting one or more revisions. Original contract drawings shall be dated in the revision block.

3.12.3 As-Built Conditions that are Different from Contract Drawings

All as-built conditions that are different, such as dimensions, road alignments and grades, and drainage and elevations, from the contract drawings shall be accurately reflected on each drawing. Any options shown on drawings and not selected shall be deleted and options selected shall be clearly reflected on final as-built drawings.

In addition, as-built information that exceeds the detail shown on the contract drawings include those that reflect structural details, foundation

layouts, equipment, sizes, mechanical and electrical room layouts, and other extensions of design, that were not shown in the project design documents because the exact details were not known until after the time of approved shop drawings. It is recognized that these shop drawing submittals (revised showing as-built conditions) will serve as the as-built record without actual incorporation into the contract drawings. Furnish all such shop drawings in CADD format. Fire protection details shall be included such as wiring, piping, and equipment drawings.

3.12.4 Final As-Built Drawings

At the time of Beneficial Occupancy of the project or at a designated phase of the project, final as-built CADD files shall be provided to the Contracting Officer to include the following:

- (1) On CD in MicroStation V8 format
- (2) On CD in Adobe Acrobat PDF format (one file of all drawings)
- (3) The record set of approved working as-built drawings (one full size hardcopy set and one half size hardcopy set)

In the event the Contractor accomplishes additional work after this submittal, which changes the as-built conditions, the Contractor shall furnish a new CD with all drawing sheets (MicroStation V8 and Adobe Acrobat PDF files) and a new full size set of affected sheets.

Title Blocks shall be clearly marked to indicate final as-built drawings.

All other documents such as; design analysis, catalog cuts, and certification documents, which are not available in native electronic format, shall be scanned and provided in an organized manner in Adobe Acrobat PDF format.

3.13 OPERATION AND MAINTENANCE DATA

Submit Operation and Maintenance (O&M) Data specifically applicable to this contract and a complete and concise depiction of the provided equipment, product, or system, stressing and enhancing the importance of system interactions, troubleshooting, and long-term preventative maintenance and operation. The subcontractors shall compile and prepare data and deliver to the Contractor prior to the training of Government personnel. The Contractor shall compile and prepare aggregate O&M data including clarifying and updating the original sequences of operation to as-built conditions. Organize and present information in sufficient detail to clearly explain O&M requirements at the system, equipment, component, and subassembly level. Include an index preceding each submittal. The O&M Data shall be provided in accordance with the requirements of UFGS Specification Section 01 78 23 OPERATION AND MAINTENANCE DATA.

The Contractor shall provide one complete electronic copy of the final O&M data in Adobe Acrobat PDF format on CD to the COR. The ENG Form 4025 shall be provided in Adobe Acrobat PDF format and shall be digitally signed by the Contractor.

3.14 DD FORM 1354, TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY

The Contractor shall prepare and provide, for acceptance, completed DD Form 1354 "Transfer and Acceptance of Military Real Property." The DD Form 1354

shall be filled out in accordance with the latest edition of UFC 1-300-08, Criteria for Transfer and Acceptance of Military Real Property. The Contractor shall provide all three types of DD Form 1354; including, Draft, Interim, and Final, as described in UFC 1-300-08. Each submittal of the DD Form 1354 shall be provided electronically in Adobe Acrobat PDF format.

Attachment A - DESIGN CERTIFICATION AND TRANSMITTAL LETTER

[Contractor's Letterhead]

[Date: _____]
[Contract No. _____]

[Reviewing Component Address]

Subj: DESIGN CERTIFICATION AND TRANSMITTAL LETTER
[Project Title _____]
[Project Location _____]
[Contract No. _____]

Gentlemen

Enclosed are the following documents, which I hereby certify are in compliance with the contract requirements and can be used to commence construction subject to Government Conformance Review:

1. Design Drawings
2. Project Specification
3. Design Analysis
 - a. Civil
 - b. Water Supply and Wastewater Collection
 - c. Architectural
 - d. Interior Design
 - e. Structural
 - f. Mechanical
 - g. Fire Protection
 - h. Electrical
 - i. Communications
 - j. Environmental Protection, Compliance and Permits
 - k. Health and Safety
 - l. Sustainable Design
4. Submittals Register
5. All other Design Deliverables
6. Deviations (List of Deviations with Justification Attached)

[Typed Name and Signature of an
Officer of the Contractor's Company]

Copy to:
[As standard with the Contractor]

Attachment B - SUPPLEMENTAL DESIGN CERTIFICATION AND TRANSMITTAL FORM

[Contractor's Letterhead]

[Date: _____]
[Contract No. _____]

[Reviewing Component Address]

Subj: SUPPLEMENTAL DESIGN CERTIFICATION AND TRANSMITTAL FORM
[Project Title _____]
[Project Location _____]
[Contract No. _____]

Gentlemen:

The supplemental design items listed below and the attached documents, unless identified otherwise, I hereby certify are in compliance with the contract requirements and are compatible with other elements of work, subject to Government conformance review:

1. Nature and Features of the Design Variation(s):
2. Why each Design Variation is desirable and Beneficial to the Government:
3. List of any additional Deviations from the SOW:
4. List of Specific Documents Supporting Design Variation(s):
 - a. Design Drawings
 - (1) Sketches:
 - (2) Reissued Drawings:
 - (3) Descriptive Changes:
 - b. Project Specifications
 - (1) Reissued or New Sections:
 - (2) Descriptive Changes:
 - c. Design Analysis
 - (1) Reissued Pages:
 - (2) Reissued or New Calculations:
 - d. Any other Design Deliverable:

[Typed Name and Signature of an
Officer of the Contractor's Company]

Copy to:
[As standard with the Contractor]

ATTACHMENT C SAMPLE SUBMITTAL PARAGRAPH

The below listing is an example of a typical submittal paragraph as it may appear within the technical guide specifications and with the appropriate text for the submittal review designations, G-DO, G-AO, or FIO (blank).

1.4_ SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-02 Shop Drawings

Fire Sprinkler Design Drawings; G-DO

SD-03 Product Data

Meters

Regulators

SD-08 Manufacturer's Instructions

Dielectric Unions

Pressure Reducing Valves

SD-10 Operation and Maintenance Data

Wet Pipe Sprinkler System; G-AO

-- End of Section --

Section E - Inspection and Acceptance

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	Destination	Government	Destination	Government
0002	Destination	Government	Destination	Government
0003	Destination	Government	Destination	Government
0004	Destination	Government	Destination	Government
0005	Destination	Government	Destination	Government
0006	Destination	Government	Destination	Government

Section F - Deliveries or Performance

DELIVERY INFORMATION

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	UIC
0001	08-JUN-2015	1	IMCOM KAREN CARNAGO KAREN E. CARNAGO IMNI-PWF KAREN.E.CARNAGO.CIV@MAIL.MIL WARREN MI 48397-5000 586-282-9369 FOB: Destination	W56JK7
0002	08-JUN-2015	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56JK7
0003	08-JUN-2015	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56JK7
0004	08-JUN-2015	1	(SAME AS PREVIOUS LOCATION) FOB: Destination	W56JK7

0005	08-JUN-2015	1	(SAME AS PREVIOUS LOCATION)	W56JK7
			FOB: Destination	

0006	08-JUN-2015	1	(SAME AS PREVIOUS LOCATION)	W56JK7
			FOB: Destination	

Section G - Contract Administration Data

ACCOUNTING AND APPROPRIATION DATA

AA: 0212014201407250000119192254 S.0009979.58 6100.9000021001

COST CODE: A2ACT

AMOUNT: \$1,265,722.47

CIN GFEBS001059260800001: \$433,572.06

CIN GFEBS001059260800002: \$302,394.55

CIN GFEBS001059260800003: \$249,697.16

CIN GFEBS001059260800004: \$161,679.16

CIN GFEBS001059260800005: \$84,255.33

CIN GFEBS001059260800006: \$34,124.21

SPECIAL CONTRACT REQUIREMENTS

SPECIAL CONTRACT REQUIREMENTS:

The amount of costs for demolition work could not be established with any reasonable certainty since there was insufficient time for the Government to conduct an Asbestos NESHAP Survey before awarding this contract. The asbestos NESHAP survey has to be conducted before any demolition work can be conducted to determine the levels of Regulated Asbestos-Containing Material present in each building and whether they meet or exceed the federal and state threshold levels for removal prior to demolition work. This survey will also determine what type of demolition method will be required in accordance with federal and state laws, as well as, the disposal requirements for demolished materials. Therefore, to achieve an award in the face of this uncertainty, it was agreed that: 1) the contract price for the demolition effort would be based in part on submitted price proposals based on proposed asbestos abatement based on historical drawings for the following building materials that are asbestos containing materials (ACM) and presumed asbestos containing materials (PACM):

- (ACM) Asbestos cement shingles (wall shingles on exterior building elevation and cinderblocks)
- (ACM) Transite panels on doors and windows
- (PACM) Pipe Insulation
- (PACM) All Mastic
- (PACM) All caulking
- (PACM) All Vinyl and Asphalt Tiles

In addition a site visit was provided to offerors to assist in preparing price proposals.

2) The parties agree that the stated contract price shall be subject to a downward adjustment if as result of the asbestos NESHAP survey, it is determined that any of the 27 units (including the garage) do not require asbestos abatement for the ACM and PACM items identified above. If the asbestos NESHAP survey identifies areas beyond the ACM and PACM that require asbestos abatement, they will be considered "unforeseen site conditions," to which contractors will be entitled to an equitable adjustment in accordance with clause 52.236-2, Differing Site Conditions, of the contract. No equitable adjustment will be made for asbestos abatement for the ACM and PACM items.

Option to Extend the Term of the Contract: (a) The bid options 1 through 4 may be exercised unilaterally and incrementally from time of award until all 19 units are exercised, but no later than 240 days after time of award. Bid option 5 may be exercised unilaterally, but no later than 240 days after time of award. (b) If the Government exercises the options, the extended contract shall be considered to include this option clause. The units within options 1-4 may be incrementally exercised. If the Government exercises the bid options 1 through 4 in an amount less than the full option of units (increment), the dollar value of the option exercised will be the total option price divided by the number of units to be demolished IAW the Statement of Work.

SPECIAL CONTRACT REQUIREMENTS

Section H - Special Contract Requirements

SPECIAL CONTRACT REQUIREMENTS INDEX

1. SECURITY REQUIREMENTS
2. IDENTIFICATION OF VEHICLES AND PERSONNEL
3. UNAUTHORIZED PERSONNEL
4. INSTALLATION REGULATIONS
5. WORK SCHEDULING
6. SAFETY/ACCIDENT REPORTING
7. MAINTENANCE OF TRAFFIC AND SAFETY
8. SMOKING POLICY
9. SPECIAL CONDITIONS
10. EXCAVATING PERMIT
11. COMMERCIALLY OWNED/OPERATED RADIATION EMITTING SOURCES/EQUIPMENT/DEVICES
USED ON GOVERNMENT PROPERTY
12. AFFIRMATIVE PROCUREMENT
13. SOLID WASTE MANAGEMENT

1. SECURITY REQUIREMENTS

1.1. BUILDING SECURITY

1.1.1. The contractor shall be provided with access to all areas when required to perform the work. The contractor shall be responsible for any Government-owned keys, proxy cards, remote clickers, or any other access device that have been issued to him for access to facilities or areas pertinent to this contract. Keys, proxy cards, remote clickers, or any other access device provided to the contractor shall not be removed from the premises of the facilities and buildings. Keys, proxy cards, remote clickers, or any other access device provided to the contractor shall not be duplicated or issued to any individual to be retained in his possession while not physically performing duties included in the task order. Should the contractor lose a key, proxy card, remote clicker, or any other access device, the Contractor shall notify the Contracting Officer, immediately and in writing, but not later than one business day after they are aware of the loss. All lost keys, proxy cards, remote clickers, or any other access device shall be replaced at the contractor's expense. In the event that a key is lost by contractor personnel, the contractor shall replace all keys and locks in that system. A keying scheme compatible with the remaining building lock system and an equal number of keys existing in the old system shall be provided at no additional cost to the Government. This must be coordinated with the Building Key Control Officer and Base Ops Key Shop Personnel through the COR. Upon completion of the work in an area, the key(s), proxy cards, remote clickers, or any other access device to the area shall be returned immediately. Keys, proxy cards, remote clickers, or any other access device shall be returned prior to final task order payments.

1.1.2. Whenever areas are locked, contractor employees shall not permit the use of keys, in their possession, by other persons for the purpose of gaining access to such locked rooms or areas; and, likewise, contractor employees shall not open locked rooms or areas to permit entrance by persons other than the contractor's employees in the fulfillment of their duties.

1.1.3. Upon the completion of their duties, contractor personnel shall secure all utilities in unoccupied area, unless otherwise coordinated with the COR. It shall be the responsibility of contractor personnel observing open and/or unlocked windows in their respective work areas to close and secure such windows. Where difficulty is encountered in keeping areas locked or windows closed and locked, the COR shall be notified.

1.1.4. There may be areas that require all personnel entering that area to sign a sign-in/sign-out sheet. The contractor shall comply with installation policies in these areas.

1.1.5. The contractor shall provide site security (fencing, lighting, or guard service) as required by each task order. However, at a minimum, the contractor shall maintain the site and all other contractor controlled areas in such a manner as to minimize the risk of theft, vandalism, injury, or accident. The contractor shall comply with site security regulations.

1.1.6. The contractor shall comply with all security regulations imposed by the installation occupying the space where work is to be performed.

Any necessary security clearances shall be obtained prior to commencement of work.

1.1.7. The contractor shall ensure that all parts of the facility where work is being performed are adequately protected against vandalism and theft.

1.2. INSTALLATION AND BASE SECURITY CLEARANCE

1.2.1. Locations to be serviced by the resulting contracts include areas that are "closed" to the public, pursuant to Sec 21, Internal Security Act of 1950, 50 U.S.C. 797 and, as such, only those persons granted permission may enter. It is, therefore, required that control be exercised over contractor personnel while working on the Base. To maintain this control, a listing of all contractor personnel who will be working under the contract, must be submitted to the Contracting Officer and COR prior to the start of work under the Task Order. The preferred method of providing this list is via e-mail, to the contract administrator, unless notified otherwise. The listing shall include, but not limited to: contract number, project number, employee name, and the estimated starting and ending date of each employee. Subsequent listings of all additions or deletions will be submitted as employees hired or released.

1.2.2. During construction, the contractor shall permit base personnel access to the facilities within the work area. The contractor shall provide protection to persons and property throughout the progress of the work.

D-1.2.3. In the event of a declared National Emergency the Contracting Officer may be required to stop work on this contract for security reasons. The contractor shall ensure the Contracting Officer has a current "Off Duty" contact name and telephone number at all times to facilitate notification.

D-1.2.4. The contractor shall be responsible for compliance with all regulations and orders of the Commanding Officer of the Military Installation, respecting identification of employees, movements on installation, parking, truck entry, and all other military regulations, which may affect the work. Special requirements will be identified in the statement of work for an individual Task Order.

D-1.2.5. The work under this contract shall be performed at an operating military installation with consequent restrictions on entry and movement of nonmilitary personnel and equipment.

D-1.2.6. The military installations, Detroit Arsenal and U.S. Army Garrison - Michigan at Selfridge ANG Base, have installation specific requirements, which will be identified by the individual Task Order.

1.2.7. The Contractor shall coordinate with the installation's Visitor Control Center (VCC) to obtain an identification badge for each employee and vehicle permits. All contractor employees must wear the badge in a visible location near their chest at all times while working at the facility.

1.2.7.1. Detroit Arsenal VCC. The VCC can be contacted at 586.282.5757. The VCC is located between Van Dyke and Mound Roads, on the North side of

Eleven Mile Road in City of Warren, Macomb County, Michigan. Turn into the Main Gate of the Detroit Arsenal and the VCC is immediately to the right in Building 232. The VCC is open Monday through Friday, 7:00 A.M. - 2:00 P.M Eastern Standard Time (EST), except Holidays. If a contractor requires entry before 7:00 A.M. or after 2:00 P.M, EST a temporary badge can be obtained at the Main Guard house, located to the north of Building 232. A contractor can gain access to the Main Guard house by staying in the far right lane when entering the Main Gate on Eleven Mile Road.

1.3. Security conditions for release of plans and drawings:

1.3.1. Released U.S. Government (USG) information is to be used for the purpose of this contract only and will not be released to third parties without approval from US Army Garrison - Detroit Arsenal. Upon project completion, this information is to be destroyed.

1.3.2. No reproduction of released USG information is authorized for other than the contract's legitimate purpose.

1.3.3. Access to this information is to be controlled as UNCLASSIFIED/FOR OFFICIAL USE ONLY and shall not be available for distribution under the Freedom of Information Act (FOIA).

1.3.4. Information that is provided to the contractors & A/E's from the USG will be returned to the USG when no longer needed, or at the end of the contract. Under special provisions the USG may authorize the contractor to destroy the information by shredding (paper) or degaussing (magnetic media) to make unreadable and unrecoverable. Confirmation of destruction will be provided to the USG.

1.3.5. All information and drawings provided shall not be posted on any internet web site.

1.3.6. The responsible USG POC for coordination of release and return of USG engineering drawings and information at the Detroit Arsenal is the DPW Engineering Services Division CAD Technician. Coordination of release and return of USG engineering drawings shall be through the COR.

1.4. Required Security Training. AT Level I Training. This provision/contract text is for contractor employees with an area of performance within an Army controlled installation, facility or area. All contractor employees, to include subcontractor employees, requiring access Army installations, facilities and controlled access areas shall complete AT Level I awareness training within 30 calendar days after contract start date or effective date of incorporation of this requirement into the contract, whichever is applicable. The contractor shall submit certificates of completion for each affected contractor employee and subcontractor employee, to the COR or to the contracting officer, if a COR is not assigned, within seven calendar days after completion of training by all employees and subcontractor personnel. AT level I awareness training is available at the following website: <https://atlevel1.dtic.mil/at>.

1.4.1. AT Awareness Training for Contractor Personnel Traveling Overseas. This standard language text required US based contractor employees and associated sub-contractor employees to make available and to receive government provided area of responsibility (AOR) specific AT awareness

training as directed by AR 525-13. Specific AOR training content is directed by the combatant commander with the unit ATO being the local point of contact.

1.4.2. iWATCH Training. This standard language is for contractor employees with an area of performance within an Army controlled installation, facility or area. The contractor and all associated sub-contractors shall brief all employees on the local iWATCH program (training standards provided by the requiring activity ATO). This local developed training will be used to inform employees of the types of behavior to watch for and instruct employees to report suspicious activity to the COR. This training shall be completed within 30 calendar days of contract award and within YY calendar days of new employees commencing performance with the results reported to the COR NLT 30 calendar days after contract award.

1.4.3. For Contracts that Require OPSEC Training. Per AR 530-1, Operations Security, new contractor employees must complete Level I OPSEC training within 30 calendar days of their reporting for duty. All contractor employees must complete annual OPSEC awareness training.

1.4.4. For Contracts That Require Handling or Access to Classified Information. Contractor shall comply with FAR 52.204-2, Security Requirements. This clause involves access to information classified "Confidential," "Secret," or "Top Secret" and requires contractors to comply with- (1) The Security Agreement (DD Form 441), including the National Industrial Security Program Operating Manual (DoD 5220.22-M); any revisions to DOD 5220.22-M, notice of which has been furnished to the contractor.

2.0 IDENTIFICATION OF VEHICLES AND PERSONNEL

2.1. Vehicles: Highway vehicles owned or leased by contractors shall be furnished with identifying markings reflecting minimally, the contractor's name, home city, and local phone number. Personal vehicles must be registered with the installation (if applicable).

2.2. Personnel: The contractor's workmen shall have legal identification (picture ID) on them at all times while working on Government projects.

2.3. The contractor shall be responsible for furnishing an identification badge to each employee prior to the employees work on-site and for requiring each employee engaged on the work to display the badge in a visible location near their chest at all times while working at the facility.

2.4. All prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of the employee.

2.5. When required by the Contracting Officer, the contractor shall obtain and submit fingerprints of all persons employed or to be employed on the project.

3. UNAUTHORIZED PERSONNEL

3.1. The contractor shall inform all personnel working under his jurisdiction

(including subcontractor and visiting supplier personnel) that access to areas outside of the immediate work area excluding, direct haul and access routes, contracting and engineering offices and point of supply and storage is prohibited. Circulation of said personnel will be limited to official business only. Persons in violation of the above may be apprehended and turned over to the appropriate authorities

4. INSTALLATION REGULATIONS:

4.1. The contractor, his employees, and subcontractors shall become familiar with and obey the regulations of the installation including fire, traffic, safety and security regulations while on the military installation. Those driving motor vehicles shall observe and obey all speed limits posted throughout the installation. Personnel should not enter restricted areas unless required to do so and only upon prior approval. All contractor employees and subcontractors shall carry proper personal identification with them at all times.

4.2. Contractor's equipment shall be conspicuously marked for identification and parked or placed within approved areas only, out of the way of driveways, emergency access roads, and traffic.

5. WORK SCHEDULING

5.1. Unless otherwise indicated by special project phasing instructions, the contractor shall be prepared to pursue the contracted work during the Contract Normal Working period of 7:30 a.m. to 4:00 p.m., Monday through Friday, exclusive of recognized Federal Holidays outlined hereunder, and the Friday after Thanksgiving. Also, If a Federal Holiday falls on a Saturday, the DTA Base will be closed on the Friday before, and if a Federal Holiday falls on a Sunday, the DTA Base will be closed on the following Monday. If the 4th of July Holiday falls on a Thursday, the Detroit Arsenal Base will be closed on the Friday after. The contract employees will not be allowed to work during Federal holidays, which are:

New Year's Day - 1 January
Martin Luther King JR's Birthday - 3rd Monday in January
President's Day - 3rd
Monday in February Memorial
Day - Last Monday in May
Independence Day - 4 July
Labor Day - 1st Monday in
September Columbus Day -
2nd Monday in October
Veteran's Day - 11
November
Thanksgiving Day - 4th Thursday in November
Christmas Day - 25 December

5.2. If the contractor determines that work is required prior to or after normal working hours, then the contractor shall submit a written request to the Contracting Officer or their designee for approval, no later than 72 hours prior to the work to be performed. For any request submitted late, approval will be at the discretion of the Contracting Officer or their designee. All weekend requests shall be submitted to the Contracting Officer or their designee for approval no later than 72 hours prior to the

weekend work that is to be performed. Should the contractor be required to perform work during other than normal hours, including Saturday, Sundays and Government Legal Holidays, due to contractor and subcontractor delay, in order to maintain contract completion dates, the Government shall not be held liable for additional costs.

5.3. The installation buildings are places of employment for the Government employees and are occupied by the Government employees during the Government employees' working hours. All machines, equipment and activities that emit toxic, hazardous and offensive fumes, odors, vapors, chemicals, smells, that are offensive and impact the Government employees and that generate noise that also adversely impacts the Government employees, shall not be allowed during those Government employee's working hours and shall be carried out at the Government non-work hours.

5.4. All toxic, hazardous and offensive fumes, odors, vapors, chemicals, smells, that are offensive and impact the Government employees MUST be removed and dissipated from the buildings prior to daily occupancy of the buildings at 6:00 A.M. Eastern Standard Time (EST) and the buildings shall be free and fully be meeting safety & health provisions and provide a functional place of employment. The Government employees working hours are

6:00 AM to 6:00 PM EST, Monday through Friday, (all other working week day hours are considered Government non-work hours). Offensive painting operations and other contractual tasks that emit fumes, odors, chemicals that are offensive and impact the Government employees shall be carried out at Government non-work hours.

5.5. If there are fumes, odors, vapors, chemicals still being emitted during the Government employees working hours, then the contractor shall provide means and methods to ventilate the areas and assure a safe working environment for the Government employees.

5.6. Prior to commencing work on the job initially, resumption of work after prolonged interruption (seven calendar days or more), commencement of any warranty work, and upon completion of warranty work the contractor must notify the Contracting Officer and COR. When relocating to new sites, returning to sites for follow-up work on a phased work plan, notification to the COR is sufficient. Notification should be accomplished sufficiently in advance to allow scheduling of inspection forces. The above precautions are to ensure construction inspection and recording of work proceedings.

6. SAFETY/ACCIDENT REPORTING:

6.1. Accident prevention and safety practices on contractual work under the jurisdiction of the Contracting Officer are the responsibilities of the contractor concerned.

6.2. Safety Plan. Within 30 calendar days of award of the MA IDIQ contract, the contractor shall furnish to the Contracting Officer a Company/Corporate Safety Plan. Prior to mobilization of a Task Order, the contractor shall furnish, as a submittal, their site-specific safety plan. Furthermore, the contractor shall brief all employees on proper safety procedures and accident reporting. The contractor shall provide all occupational health services to his employees. Contractor employees shall be instructed to notify the contractor's project manager of potential or existing occupational health hazards that require attention. The contractor shall designate a person on his staff to manage the contractor's safety and accident prevention program. This person will provide a point of contact for the Contracting Officer and COR on matters of job safety, and shall be responsible for ensuring the health and safety of onsite personnel.

6.3. Compliance with Regulations. All work shall comply with applicable Army, state, and Federal safety and health requirements. The contractor shall comply with the requirements of OSHA (Occupational Safety and Health Association), MIOSHA (Michigan Occupational Safety and Health Association), U.S. Army Safety Program (AR 385-10), the Installation Safety Program (TACOM Supplement 385-10), and the U.S. Army Corps of Engineers Safety Manual EM-385-1. Where there is a conflict between applicable regulations, the most stringent shall apply.

6.4. All work including the handling of hazardous materials or the disturbance or dismantling of structures containing hazardous materials shall comply with the applicable requirements of 29 CFR 1910/1926. Work involving the disturbance or dismantling of asbestos or asbestos-containing materials; the demolition of structures containing asbestos;

and/or disposal and removal of asbestos, shall also comply with the requirement of 40 CFR, Part 61 Subpart (The National Emission Standard for Asbestos) (ETL 1110-1-118 and DA Circular 40-83-4).

6.5. Contractor Responsibility. The contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work. The Government will not be held liable for any action on the part of the contractor, his employees or subcontractors, which result in illness, injury or death.

6.6. Inspections, Tests, and Reports. The required inspections, tests and reports made by the contractor, subcontractors, specially trained technicians, equipment manufacturers, and others as required, shall be at the contractor's expense. Testing shall be performed by qualified personnel whose qualifications are provided and approved prior to the performance of the test. Testing shall be performed in the presence of the COR.

6.6.1. Equipment shall be commissioned and tested by the manufacturer's qualified representative following their specifications.

6.6.2. Testing reports shall be on prescribed forms specifically for the particular test that is being performed. All information shall be legible. The form shall be signed and dated by the tester and the performing company identified. Test results shall be clearly identified and compared to required results.

6.7. Materials and Equipment. Special facilities, devices, equipment, clothing and similar items used by the contractor in the execution of work shall comply with applicable regulations.

6.8. Traffic Control Devices. The contractor shall comply with the recommendations contained in Part 6 of the U. S. Department of Transportation, Federal Highway Administrations "Manual on Uniform Traffic Control Devices (D6. -1978) to ensure proper warnings to motorists and adequate traffic control. The contractor shall provide all warning lights, barricades, flagmen and other traffic control devices and signs.

6.9. Accident Notification/Report. In the event of a work-related OSHA recordable accident, the contractor shall immediately notify the Contracting Officer and shall prepare a Report of Accident (DA Form 285 or equivalent) in quadruplicate and forward the original hard copy and one electronic copy to the Contracting Officer for forwarding to the TACOM Safety Office. The contractor shall maintain an accident file for the life of the contract to include all accident reports. In the event of a work-related incident resulting in death or the in-patient hospitalization of three or more employees the contractor shall immediately notify the Contracting Officer who will notify the TACOM Safety Office. Any technical advice and assistance necessary in accident investigation and reporting may be requested from the respective Safety Office.

6.10. Confined Spaces. All confined spaces located on the installation shall be considered permit-required confined spaces. Before any work commences in a confined space the contractor shall provide a copy of their written Confined Space Program and training certificates/documentation for

all employees working in the confined space to the TACOM Safety Office. The contractor shall notify both the TACOM Safety Office and the Detroit Arsenal Fire Department prior to entering the confined space each day. Once work commences for the day the contractor shall notify the Detroit Arsenal Fire Department and submit a copy of the closed out Confined Space Permit to the TACOM Safety Office.

6.11. Excavation and Trenching. The contractor shall follow 29 CFR 1926 Subpart P or the MIOSHA equivalent and the U.S. Army Corps of Engineers Safety Manual EM-385-1 Section 25 when performing an excavation or trenching operation. Excavations five feet or more in depth shall have a protective system (i.e., sloping, benching, support system, shield system, etc.) to protect employees from cave-in. Excavated materials shall be kept at least two feet from the edge of excavations. A stairway, ladder, ramp or other safe means of egress shall be located in trench excavations that are four feet or more in depth as to require no more than 25 feet of lateral travel for employees. The contractor shall not allow employees to work in excavations in which there is accumulated water, or in excavations in which water is accumulating, unless adequate precautions have been taken to protect employees against the hazard. If the stability of adjacent structures is endangered by excavation operations then the contractor shall use a support system for the protection of employees. See Section D.10 for further information regarding excavation and permits.

6.12. Scaffolds. The contractor shall follow 29 CFR 1926 Subpart L or the MIOSHA equivalent and the U.S. Army Corps of Engineers Safety Manual EM-385-1 Section 22 while using scaffolds. Scaffolds shall be designed by a qualified person and shall be constructed and loaded in accordance with that design.

6.13. Material Safety Data Sheet. The contractor shall submit a Material Safety Data Sheet (MSDS) for all hazardous materials to the COR and have a MSDS for all hazardous materials readily available for the entire duration of the project. When the contractor is working in buildings that are occupied by Government personnel, the contractor must provide a MSDS for all hazardous materials to the COR before they begin the work. See Section 17 for further information regarding MSDS and related hazardous material usage.

6.14. Site Visits. The TACOM Safety Office may conduct site visits announced or unannounced. If the contractor is found to be performing activities that are immediately dangerous to life or health of government or contract employees the TACOM Safety Office will immediately suspend the contractor's operations until the situation is corrected. This type of situation is most likely to arise during excavation or confined space operations.

6.15. Personal Protective Equipment. The contractor shall follow EM 385-1-1. The contractor (and all sub- contractors) shall wear proper personal protective equipment at all times while working in construction areas, to include eye, ear, foot, and head protection and high visible vest while working near or around traffic.

7. MAINTENANCE OF TRAFFIC AND SAFETY

7.1. Where possible, the contractor and his work shall not interfere

with the normal operations of traffic, particularly emergency vehicles and equipment. The contractor is responsible for safety on the project site.

7.2. The contractor shall use only established haul routes. When materials are transported in prosecution of the work, vehicles shall not be loaded beyond the loading limit established by Federal, state or local law or regulation. When it is necessary to cross curbing or sidewalks, protection against damage shall be provided by the contractor.

7.3. With respect to his own operations, and those of all his subcontractors, the contractor shall provide marking, lighting, and other acceptable means of identifying personnel, equipment, vehicles, storage areas, and any work or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the base.

7.4. The contractor shall furnish, erect, and maintain weighted barricades, warning signs, and other traffic control devices as required maintaining traffic flow and insuring safety and the contractor's equipment. The contractor shall make his own estimate of all labor, materials, equipment, and coincidental necessary for providing the maintenance of vehicular traffic.

7.5. Steam Tunnel Concrete Covers. The contractor shall not walk, drive, or store equipment on steam tunnel concrete covers. Contractor shall be responsible for damages caused from neglecting this requirement.

8. SMOKING POLICY

8.1. Contractors shall follow the smoking policy as set forth with DoD and DTA regulatory guidance. Contractors shall follow the following guidance:

- a. Smoking is prohibited in all workplaces and all community facilities to include offices, any work areas, recreation facilities, retail stores, common areas, military vehicles, aircraft and in all government owned or leased buildings, vehicles, vans and buses.
- b. This policy applies to all tobacco products to include, cigarettes, pipes, electronic cigarettes, cigars and chewing tobacco.
- c. Smoking is only authorized within 10 feet of designated smoking areas or inside of personally owned vehicles. Smoking areas will be identified by a shelter or cigarette butt receptacle. Smoking is not allowed in any common areas such as walkways or parking lots.
- d. Disposal of cigarette butts, matches, and any other smoking-related debris on the grass, sidewalks, parking lots, or in unauthorized containers is prohibited.

9. SPECIAL CONDITIONS

9.1. Any contractor equipment that causes or generates electro-magnetic disturbances or interference shall be removed from service until properly repaired. The Contracting Officer may also require repositioning or removal

of the equipment from the base.

9.2. The contractor shall be responsible for the coordination of his work with base communications personnel, who may be working in the area and making them aware of proposed work that may affect the work of their particular trade in process of performance.

10. EXCAVATING PERMIT

10.1. The contractor is required to secure an excavating permit before proceeding with any exterior on-site excavating or digging. The U.S. Army Garrison - Detroit Arsenal and Selfridge permit must be signed and a site inspection will be conducted (pre-dig meeting) prior to approval. A copy of the current excavation permit and excavation permit process can be obtained from the COR upon request. The DTA permit must be signed by the DPW, Chief of Engineering Services Division. The contractor must make provisions to accommodate delays that may arise due to the permit acquisition process. The USAG-DTA DPW, Chief of Engineering Services Division must have 14 calendar days notice from the contractor prior to permit being approved.

10.2. The contractor shall comply with Public Act 53 effective April 1 1975 as amended on December 21, 1989 by House Bill No. 5085. The contractor shall notify MISS DIG and the utility owners three full working days (excluding Saturdays, Sundays, and holidays) before any excavation, tunneling, drilling, boring, or demolition work begins. The contractor shall notify and call MISS DIG at 1-800- 482-7171, and coordinate his work accordingly. .

10.3. The contractor shall comply with all requirements and conditions of the USAG-DTA excavation permit. The contractor is responsible for locating all utilities. The contractor shall field verify the location of the existing installation utilities in the contract work areas. The contractor shall hire a proficient subcontractor to locate the above utilities within excavation, boring, tunneling area. Suggested methods include the "Underground Radar Penetration" and exploratory trenches and pits to determine underground utility locations.

10.4. Facility Base Operations personnel may field locate utilities for the contractor, but this is done only as a courtesy utility identification. The contractor shall be responsible for protecting utility identification.

11. COMMERCIALY OWNED/OPERATED RADIATION EMITTING SOURCES/EQUIPMENT/DEVICES USED ON GOVERNMENT PROPERTY

11.1. When using radiation sources/equipment/devices for soil compaction tests or stress/support studies for detection of structural/weld defects in structural framing, pressurized pipe, vessels, etc., the operator shall comply with the following requirements:

- a. Prior to bringing the radiation generator on to the U.S. Army Garrison locations, the contractor shall provide the Contracting Officer with the following information/documentation, as a submittal at least 30 calendar days before the starting date of the permit, for review and approval, and issuance of an Army Radiation Permit by

the TACOM LCMC Safety Office:

1. A letter applying for an Army Radiation Permit with Supporting Documentation.
 2. A copy of the Nuclear Regulatory Commission (NRC) License, that permits use or storage of radioactive sources/equipment/devices at Army Installations. If an Agreement State License is provided, then documentation must be provided to show the license is valid on Federal Property. This includes NRC Form 241, Report of Proposed Activities in Non-Agreement States, with the NRC in accordance with 10 CFR 150. If exempt from NRC licensing or under general licensing, proof of exemption or general licensing must be provided. For NARM and machine produced radiation, the contractor must provide appropriate state authorization that allows the contractor to use the radiation emitting sources/equipment/devices. The licensing must show operational use conditions/restrictions with expiration date.
 3. The documentation must specify the start and stop dates for the Army Radiation Permit and describe what purposes the applicant needs the Army Radiation Permit (Proposed Work Statement).
 4. A current list of trained and qualified employees that will be using the radiation emitting sources/equipment/devices and their training.
 5. The name of the contractor Radiation Safety Officer (RSO) and emergency contact telephone number.
 6. Operating instruction(s)/technical order(s) for the equipment that contains the radioactive source. Indication of whether the sources/equipment/devices are to be stored on-site overnight and how it is to be stored. How the sources/equipment/devices will be stored during lunch hour and breaks.
 7. Designated storage location of the radioactive source if it remains overnight.
 8. Proposed marking of the storage location if it exceeds 2mR/hr as measured at the surface of the storage container.
 9. A copy of the company Radiation Safety Program.
 10. Emergency Response Plan in case of an emergency for a lost or damaged source/equipment/device and/or over exposure incident/injury.
 11. Provide the portion of their contract that identifies the location(s) of where the source will be used, for how long, and for what type use.
 12. Current leak tests on radiation sources/equipment/devices.
- b. The COR will obtain approval from the proper office having jurisdiction (TACOM Safety Office).

After approval is received for use of the specific radiation generator, the contractor shall:

1. Meet proper Department of Transportation (DOT) and NRC shipping criteria to include properly filled out shipping manifest(s), container marking/labels, and placards on the vehicle as needed when transporting the source/equipment/device onto and around base/installation. The documents shall also allow the removal of the source/equipment/device from the base/installation. The source and the activity shall dictate which DOT and NRC regulations and CFR's are applicable. These include, 10 CFR for the permit and operation; 29 CFR for occupational safety and health activities when using the instrument/equipment/device, 40 CFR for environmental protection activities, 49 CFR for transporting the instrument, and 10 CFR if the source is lost or stolen.

2. Limit authorized use of radioluminescent signs and markers to areas with low occupancy and where electrical power is not available except at prohibitive cost.

c. The contractor shall not:

1. Buy radioactive materials or accept radioactive materials into the Army inventory without approval from the TACOM LCMC Safety Office.
2. Buy or use radium without TACOM LCMC Safety Office approval.
3. Buy radioluminescent signs and markers only upon approval of the TACOM LCMC Safety Office.

d. Non-ionizing radiation (laser equipment). The contractor shall provide documentation committing to and supporting the below:

1. Only qualified and trained employees shall be assigned to install, adjust, and operate laser equipment.
2. Proof of qualification of the laser equipment operator shall be available and shall be in possession of the operator at all times.
3. Employees, when working in areas in which a potential exposure to direct or reflected laser light greater than 0.005 watts (5 milliwatts) exists, shall be provided with the following anti-laser eye protection devices:

(A). Employees whose occupation or assignment requires exposure to laser beams shall be furnished suitable laser safety goggles which will protect for the specific wavelength of the laser and be of optical density (O.D.) adequate for the energy involved. Table E-3 lists the maximum power or energy density for which adequate protection is afforded by glasses of optical densities from five to eight.

TABLE E-3
 SELECTING LASER SAFETY GLASS

Intensity, Attenuation CW Maximum Power Density	Attenuat	
	Optical Density	Attenuation
10^{-7}	5	10^5
10^{-6}	6	10^6
1.	7	10^7
10.	8	10^8

Output levels falling between lines in this table shall require the higher optical density.

(B) All protective goggles shall bear a label

identifying the following data:

(i) Laser wavelengths for which use is intended.

(ii) Optical density of those wavelengths.

(iii) Visible light transmission.

4. Areas in which lasers are used shall be posted with standard laser warning placards.
5. Beam shutters or caps shall be utilized, or the laser shall be turned off, when laser transmission is not actually required. When the laser is left unattended for a substantial period of time, such as during lunch hour, overnight, or at change of shifts, the laser shall be turned off.
6. Only mechanical or electronic means shall be used as a detector for guiding the internal alignment of the laser.
7. The laser beam shall not be directed at employees.
8. When it is raining or snowing, or when there is dust or fog in the air, the operation of laser systems shall be prohibited where practicable. In any event, employees shall be kept out of range of the area of source and target during such weather conditions.
9. Laser equipment shall bear a label to indicate maximum output.
10. Employees shall not be exposed to light intensities above any of the following: (A). Direct staring: 1 micro-watt per square centimeter. (B). Incidental observing: 1 milliwatt per square centimeter. (C). Diffused reflected light: 2 1/2 watts per square centimeter.

11. Laser unit in operation shall be set up above the heads of the employees, when possible.

12. Employees shall not be exposed to microwave power densities in excess of ten milliwatts per square centimeter.

e. The Installation/Base RSO or his representative reserves the right to inspect work sites and terminate/suspend any operation involving a radiation emitting source deemed to be unsafe IAW applicable laws, rules, and Federal regulations.

f. Disposal of radiation emitting sources/equipment/devices by contractors on Army property is prohibited.

12. AFFIRMATIVE PROCUREMENT

WHERE THE FOLLOWING REQUIREMENTS DIFFER FROM REQUIREMENTS ESTABLISHED BY A SPECIFIC TASK ORDER, THE TASK ORDER REQUIREMENTS SHALL GOVERN.

12.1. GENERAL

12.1.1. GREEN PROCUREMENT & POLLUTION PREVENTION

Green Procurement is a mandatory component of the Army pollution prevention program. The goal of the U. S. Army Garrison Detroit Arsenal for Green Procurement: "100% of all products purchased each year in each of U.S. EPA's 'Guideline Item' categories shall contain recovered materials meeting U.S. EPA's Guideline Criteria." This document contains guidelines for implementing the RCRA, EO, DoD, and Army requirements.

12.1.2. Green Procurement is part of the Federal Government's program to promote recycling and the use of recycled material. The requirements are defined in Executive Order 13423.

Applicability:

1. Applies to Federal agencies including USAG - DTATA and to persons/companies contracting with Federal agencies with respect to work performed as part of these contracts.
2. Applies to all procurement or purchasing actions using Federal funds; such actions include:
 - a. Purchases made directly by USAG - DTA.
 - b. Purchases made directly by the Contractor in support of work being performed for
USAG - DTA.

12.1.2. The use of EPA designated items is required during performance of this contract. The EPA issued the Comprehensive Procurement Guidelines (CPGs) that have established the mandatory procurement by federal agencies of 58 items produced with recovered materials. The EPA has also issued Recovered Material Advisor Notices (RMANS) to accompany the CPGs and provide detailed information on the designated items. The number of items designated by the EPA may change during the contract period. The contractor must use all newly designated items. The use of these items is mandatory for all actions on the USAG - DTA unless one of the following exemptions applies.

12.1.3. The contractor must follow the USAG - DTA Green Procurement Plan in order to obtain a waiver to not use one of the EPA designated items. The Resource Recovery and Conservation Act (RCRA) provides the following exemptions from the requirement to purchase EPA-designated items:

1. The product is not available within a reasonable period of time.
2. The product does not meet the performance standards in applicable specifications or fails to meet reasonable performance standards of the procuring agency.
3. The product is not available at a reasonable price. For USAG - DTA purposes, "unreasonable price" is defined as follows: If the price of the recycled-content product exceeds the cost of a non-recycled item, then the price is considered unreasonable.

12.1.4. The EPA "List of Available Construction Products Composed of Recovered Materials" and their suppliers can be obtained at:

<http://www.epa.gov/cpg/products.htm>. A list of recycled content requirements can be found at

https://usagmi.army.mil/sites/directorates/green_procurement_chart.doc

12.1.5. The Contractor will evaluate the reasonable availability, reasonable performance standards, and price of EPA "Available Construction Products Composed of Recovered Materials" as compared to virgin materials that will be used on the construction project. The Contractor will consult with and report to the COR on the choice of materials selected.

12.1.6. A "Green" waiver from the requirement to use recovered materials will be determined by the Contracting Officer in consultation with the USAG - DTA Environmental Management Division. As new items are added to the CPG list, the Contractor must use these new items or obtain a "Green" waiver. The Contractor must provide to the COR a list of all recovered materials used in conjunction with the project at the end of the contract period.

12.2. AUTHORITY AND REFERENCES

A. The Resource Conservation and Recovery Act (RCRA), Section 6002 (42 U.S.C. 6962)

B. Executive Order (EO) 13101, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition

C. Title 40, Code of Federal Regulations (CFR), Part 247, Comprehensive Procurement Guideline for Products containing Recovered Material

D. Federal Acquisition Regulations (FAR)

E. Section 9002 of the Farm Security and Rural Investment Act of 2002

12.3. SUBMITTALS

12.3.1. The contractor shall provide all submittals in accordance with UFGS Specification Section 01 33 00, *SUBMITTAL PROCEDURES*. The contractor shall follow all procedures specified in UFGS Specification Section

01 33 00, *SUBMITTAL PROCEDURES*.

12.4. DEFINITIONS 3 GREEN PROCUREMENT TERMINOLOGY

12.4.1. Affirmative Procurement Program (APP) - a program assuring guideline items composed of recovered materials will be purchased to the maximum extent practicable, consistent with Federal law and procurement regulations.

12.4.2. Bio-based Product - A commercial or industrial product (other than food or feed) that utilizes biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials. The USDA maintains the official bio-based products list
<http://www.dm.usda.gov/procurement/programs/biopreferred.htm>.

12.4.3. Certification - provided by offerors/bidders/vendors, is written documentation certifying the percentage of recovered materials contained in products or to be used in the performance of the contract is at least the amount required by applicable specifications or other contractual requirements. Certification on multi-component or multi-material products should verify the percentage of post-consumer waste and recycled material contained in the major constituents of the product.

12.4.4. Comprehensive Procurement Guideline (CPG), EPA designated items that must contain recycled content when purchased by Federal, state, and local agencies, or by Government contractors using appropriated Federal funds. Under EO 13101, EPA is required to update the CPG every 2 years with new recovered content products. Visit
<http://www.epa.gov/cpg/index.htm>.

12.4.5. Designated Products are products that are or can be made from recovered materials that have been designated in the CPG through EPA's formal rule making process (also referred to as "designated items).\" EPA maintains the designated products list at
<http://www.epa.gov/cpg/products.htm>.

12.4.6. Environmentally Preferable - products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

12.4.7. Executive Order 13101 entitled "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition". EO 13101 was signed on September 14, 1998. This Order replaces EO 12873 and reinforces the Federal Government's buy-recycled efforts.

12.4.8. Executive Order 13148 entitled "Greening the Government Through Leadership In Environmental Management". EO 13148 was signed on 22 April 2000. This Executive Order integrates environmental accountability into policy, mission, operations, and management to include long-term planning and day-to-day decision making and replaces EO 12856.

12.4.9. Federal Agency means any department, agency, or other

instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including a government corporation, and the Government Printing Office. Military departments, as defined in 5 U.S.C. 102, are covered under the auspices of the Department of Defense. Green Procurement is the purchasing of environmental preferable products and services in accordance with one or more of the established Federal "green" procurement preference programs.

12.4.10. Material Specification means a specification that stipulates the use of certain materials to meet the necessary performance requirements.

12.4.11. Minimum Content Standard - the minimum recovered material content specifications set to assure the recovered material content required is the maximum available without jeopardizing the intended item use or violating the limitations of the minimum content standards set forth by EPA's guidelines.

12.4.12. Performance Specification - a specification stating the desired product operation or function but not specifying its construction materials.

12.4.13. Pre-consumer Materials are generated in manufacturing and converting processes, such as manufacturing scrap and trimmings/cuttings. Preconsumer materials are also known as post-manufactured materials. EPA does not consider preconsumer materials as recovered materials.

12.4.14. Post-consumer Material or Waste - a material, finished product, or waste that has served its intended end use and has been diverted or recovered from waste destined for disposal. "Post-consumer material" is a part of the broader category of "recovered materials".

12.4.15. Post-manufactured means waste material and byproducts which have been recovered or diverted from solid waste but are byproducts which are commonly reused within an original manufacturing process, such as scrap and trimmings/cuttings. Post-manufactured materials are also known as pre-consumer materials. EPA does not consider post-manufactured materials as recovered materials.

12.4.16. Recovered Material - waste materials and by-products recovered or diverted from solid waste, excluding those materials and by-products generated from, and commonly reused within, an original manufacturing process. "Post-manufactured" materials are not recovered materials.

12.4.17. Recovered Materials Advisory Notices (RMANS) provide purchasing guidance and recovered and post consumer material content levels for designated items. RMAN recommendations are guidance and therefore are not codified in the Code of Federal Regulations. Department of Defense policy requires meeting or exceeding the RMANS.

12.4.18. Solid Waste - garbage, refuse, sludge, and other discarded non-hazardous solid materials, including those from industrial, commercial, and agricultural operations, and from community activities. The general components of solid wastes are: municipal solid waste (MSW), construction and demolition debris (C&D), and non-hazardous industrial waste.

12.4.19. Unreasonable Price - is the cost of a recycled item exceeding the cost of a non-recycled item. 12.5. REGULATORY

BACKGROUND

12.5. 1 Section 6002 of RCRA requires federal agencies to give preference in the acquisition process to products and practices that conserve and protect natural resources and the environment. EO 12873 requires Federal agencies to expand waste prevention and recycling programs, implement affirmative procurement programs for the United States Environmental Protection Agency (EPA), designated items, and procure other environmentally preferable products and services. The stated purpose of the Affirmative Procurement Program is to stimulate the market for recovered materials. As a result of EO 12873, the EPA issued the Comprehensive Procurement Guidelines (CPG's) that have established the mandatory procurement by Federal agencies of 36 items produced with recovered materials. The EPA has also issued Recovered Material Advisor Notices (RMANS) to accompany the CPGs and provide detailed information on the designated items. Please direct all questions regarding the plan to the Contracting Officer for forwarding to the DPW Environmental Division.

12.6. EXEMPTIONS

12.6.1. EPA Recommendations. The U.S. EPA recommends minimum recycled content levels are mandatory for procurements of those items listed in the AFFIRMATIVE PROCUREMENT REPORTING FORM, unless one of the following exemptions applies. RCRA provides the following exemptions from the requirement to purchase EPA-designated items:

1. The product is not available from a sufficient number of sources to maintain a satisfactory level of competition (i.e., available from two or more sources).
2. The product is not available within a reasonable period of time.
3. The product does not meet the performance standards in applicable specifications or fails to meet reasonable performance standards of the procuring agency.
4. The product is not available at a reasonable price. For Army purposes, "unreasonable price" is defined as follows: If the price of the recycled-content product exceeds the cost of a non-recycled item, then the price is considered unreasonable.

12.7. CONTRACTOR RESPONSIBILITY. The contractor is responsible for completion of the form with respect to the work and products being provided. The Prime contractor is responsible for insuring that all subcontractors comply with this order. Each contractor shall provide written documentation to support his/her decision not to acquire items meeting the minimum content levels. This documentation shall be forwarded to the Contracting Officer for review and approval. In the event the documentation fails to support the contractor's findings, the Contracting Officer shall return the documentation to the contractor citing the reason(s) for disapproval. The contractor shall resubmit and address the deficiencies. The contractor is cautioned not to proceed with acquiring non-compliant materials until the Contracting Officer's approval is received.

12.8. U.S. EPA DESIGNATED ITEMS. The 54 U.S. EPA-designated items are listed below. Not all of these materials may be required in the construction of this project. Please refer to the drawings and specifications. The attached AFFIRMATIVE PROCUREMENT REPORTING FORM shall be used to demonstrate compliance with the stated procurement requirements. The contractor is required to refer to the most recent list of EPA-designated items.

a. PAPER PRODUCTS

1. All paper and paper products, excluding building

and construction paper grades. b. VEHICULAR PRODUCTS

2. Lubricating oils containing re-refined oil, including engine lubricating oils, hydraulic fluids, and gear oils but excluding marine and aviation oils.
3. Tires, excluding airplane tires.
4. Reclaimed engine coolants, excluding coolants used

in non-vehicular applications c. CONSTRUCTION PRODUCTS

5. Building insulation products.
6. Structural fiberboard products for applications other than building insulation.
7. Laminated paperboard products for applications other than building insulation.
8. Cement and concrete, including products such as pipe and block, containing fly ash.
9. Cement and concrete, including concrete products such as pipe and block, containing ground- granulated blast furnace (GGBF) slag.
10. Carpet made of polyester fiber for use in low- and medium-wear applications.
11. Floor tiles containing recovered rubber or plastic.
12. Patio blocks containing recovered rubber or plastic.
13. Shower and restroom dividers/partitions containing recovered steel or plastic.
14. Reprocessed and consolidated latex paint for specific uses.
15. Carpet cushion.
16. Flowable fill.
17. Railroad grade crossing surfaces.

d. TRANSPORTATION PRODUCTS

18. Traffic barricades used in controlling or restricting vehicular traffic.
19. Traffic cones used in controlling or restricting vehicular traffic.
20. Parking stops.
21. Channelizers used as temporary traffic control devices.
22. Delineators used as temporary traffic control devices.
23. Flexible delineators used as temporary

traffic control devices. e. PARK AND

RECREATION PRODUCTS

24. Playground surfaces containing recovered rubber or plastic.
25. Running tracks containing recovered rubber or plastic.
26. Plastic fencing.
27. Park benches and picnic tables.
28. Playground equipment.

f. LANDSCAPING PRODUCTS

29. Hydraulic mulch products containing recovered paper or recovered wood.
30. Compost made from yard trimmings, leaves, and/or grass clippings.
31. Garden and soaker hoses containing recovered rubber or plastic.
32. Lawn and garden edging containing recovered rubber or plastic.
33. Food waste compost.
34. Plastic lumber landscaping timbers and posts.

g. NON-PAPER OFFICE PRODUCTS

35. Office recycling containers.
36. Office waste receptacles.
37. Plastic desktop accessories.
38. Toner cartridges.
39. Binders.
40. Plastic trash bags.
41. Printer ribbons (re-inked ribbons or re-inking equipment/service for ribbons).
42. Plastic envelopes.
43. Solid plastic binders.
44. Plastic clipboards.
45. Plastic file folders.
46. Plastic clip portfolios.
47. Plastic presentation folders.

h. MISCELLANEOUS PRODUCTS

48. Pallets
49. Sorbents.
50. Industrial drums.
51. Awards and plaques.
52. Mats.
53. Signage, including sign supports and posts.
54. Manual-grade strapping.

12.9. The intent of this section is to increase the awareness of all contractors as to the availability of products manufactured from, or that contain recycled materials, thereby increasing the use of these products in the construction of this project. The various sections of the specifications contain references to products to be used in the construction of this project. The listed product may or may not be manufactured from or contain recycled materials. Therefore, all

contractors, subcontractors, equipment suppliers, and material suppliers are responsible for compliance with this specification. Recycled products shall be used wherever possible subject to the exemptions as per the paragraph entitled EXEMPTIONS. Substitution of recycled materials or recycled products for specified products are subject to the provisions of the paragraph entitled 1.8 Exemptions.

12.10. RECYCLED OR RECOVERED PRODUCTS. All construction materials to be used in this project, unless on existing exemption list, are to be identified on the form at the end of this section.

12.11. GREEN PROCUREMENT PROGRAM WEBSITES:

Select Sources of Supply for Environmentally Preferable Products and Services

GSA: <http://www.gsa.gov/environ>

DLA: <http://www.dscr.dla.mil/catalogs/catalog.htm>

Energy Star[®]: <http://www.energystar.gov/> (note: Energy Star[®] does not sell products, but provides a list of manufacturers and their certified products)

JWOD: <http://www.nib.org/JWOD%20Catalog/index.html>

UNICOR: www.unicor.gov/about/erecycle.htm

FEMP: http://oahu.lbl.gov/cgi-bin/search_data.pl

Determining EPP Attributes for Specific Purchase Types

For paints, carpet, office supplies, cleaners and particle board purchases:

<http://www.greenseal.org/recommendations.htm>

For cleaners: <http://www.epa.gov/opptintr/epp/cleaners/select/>

For construction projects:

<http://www.epa.gov/opptintr/epp/tools/bees.htm>

GPP Compliant Product Listings

CPG: <http://www.epa.gov/cpg/products.htm> and Comprehensive Procurement Guidelines Chart

Biobased: <http://www.biobased.oce.usda.gov/public/index.cfm>

FEMP: <http://oahu.lbl.gov> Energy Star:

http://www.energystar.gov/index.cfm?fuseaction=find_a_product.

Alternatives to Ozone-Depleting Substances:

<http://www.epa.gov/ozone/snap/lists/index.html>

Resources for EPP Product Selection

EPA Database of Environmentally Preferable Products and Services:

<http://yosemitel.epa.gov/oppt/eppstand2.nsf>

13 SOLID WASTE MANAGEMENT

As required by the individual task order, a waste management plan shall be submitted within 15 days after award of a delivery order and prior to initiating any site preparation work.

The plan shall include the following:

a. Name of individuals on the Contractor's staff responsible for waste prevention and management.

- b. Actions that will be taken to reduce solid waste generation.
- c. Description of the specific approaches to be used in recycling/reuse of the various materials generated, including the areas and equipment to be used for processing, sorting, and temporary storage of wastes.
- d. Characterization, including estimated types and quantities, of the waste to be generated.
- e. Name of landfill and/or incinerator to be used and the estimated costs for use, assuming that there would be no salvage or recycling on the project.
- f. Identification of local and regional reuse programs, including non-profit organizations such as schools, local housing agencies, and organizations that accept used materials such as materials exchange networks and Habitat for Humanity.
- g. List of specific waste materials that will be salvaged for resale, salvaged and reused, or recycled. Recycling facilities that will be used shall be identified. Include expenses for the removal and disposal of building materials through demolition, recovery, reuse and recycling techniques that will not otherwise be offset by revenue, savings, or cost avoidance within the contract.
- h. Identification of materials that cannot be recycled/reused with an explanation or justification.

By the 15th of each month the contractor shall provide the following information to Contracting Officers Representative:

- a. Quantity of waste generated in cubic yards or tons;
- b. Quantity of waste diverted through sale, reuse, or recycling in cubic yards or tons;
- c. Quantity of waste disposed by landfill or incineration in cubic yards or tons.

Types of C&D Waste

Project Phase	C&D Debris
Construction	Mixed rubble, wood, roofing, wall board, insulation, carpet, pipe, plastic, paper, bricks, lumber, concrete block, metals
Demolition	Mixed rubble, concrete, steel beams, bricks, wood, lumber, wallboard, insulation, carpet, pipes, wire, equipment, fixtures
Excavation	Earth, sand, stones, wood
Roadwork	Asphalt, concrete, earth
Site Clearance	Trees, brush, earth, top soil, concrete, mixed rubble, sand, steel, paper, plastic, garbage, rubbish

The records shall be made available to the Contracting Officer during construction, and a copy of the records shall be delivered to the Contracting Officer upon completion of the construction.

13.1. Disposal of solid waste, including construction and demolition(C&D) debris is the responsibility of the contractor.

13.2 The contractor shall divert 50% of C&D waste by weight from landfill disposal.

(1) The contractor shall make an effort to deliver non-hazardous materials to a commercial recycler and provide US Army Garrison with a summary of weights of materials recycled.

13.3 The Contractor shall not use the installations dumpsters and custodial services. The necessary containers, bins and storage areas to facilitate effective waste management shall be provided and shall be clearly and

appropriately identified. Recyclable materials shall be handled to prevent contamination of materials from incompatible products/materials and separated by one of the following methods:

a. Reuse

First consideration shall be given to salvage for reuse since little or no re-processing is necessary for this method, and less pollution is created when items are reused in their original form. Sale or donation of waste suitable for reuse shall be considered. Salvaged materials, other than those specified in other sections to be salvaged and reinstalled, shall not be used in this project.

b. Recycle

Waste materials that are not suitable for reuse, but do have value as a recyclable, shall be recycled whenever economically feasible.

Non-hazardous waste

Materials with no practical use or economic benefit shall be disposed at a landfill or incinerator.

Section I - Contract Clauses

CLAUSES INCORPORATED BY REFERENCE

52.247-34	F.O.B. Destination	NOV 1991
252.204-7000	Disclosure Of Information	AUG 2013
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	JUN 2012

CLAUSES INCORPORATED BY FULL TEXT

52.201-4000	TACOM-WARREN OMBUDSPERSON	Jan 06
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Information regarding the TACOM-Warren Ombudsperson is located at the website <http://contracting.tacom.army.mil/acqinfo/ombudsperson.htm>.

52.204-4005 (TACOM)	REQUIRED USE OF ELECTRONIC COMMERCE	(AUG 2012)
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(a) All contract awards, modifications and delivery orders issued by TACOM will be issued electronically. The contractor has the option to receive these actions either via the Worldwide Web (WWW) or Electronic Data Interchange (EDI). Many provisions/clauses that appear "by reference", meaning only clause titles and regulation site are listed; their full texts can be found at the website: <http://farsite.hill.af.mil/>

(b) In order to be eligible to receive an award under this solicitation, the successful offeror must be registered with the Department of Defense (DOD) System for Award Management (SAM). The SAM registration process may be done electronically at the World Wide Web (WWW) site: <https://www.sam.gov/portal/public/SAM>. (In order to be registered to use EDI, you must use the long form for registration. Certification information, including information on the EDI 838 TPP, must be furnished to the Contracting Officer within 60 calendar days after contract award to complete networking requirements within the Government.)

(c) Worldwide Web Distribution. The contractor will receive an electronic Notice of the Award, Modification, or Delivery Order via e-mail. If you choose the WWW option, you must download the file from the appropriate TACOM webpage:

Warren: http://contracting.tacom.army.mil/CFDATA/AWARDS/AWARD_RPT01.cfm

Rock Island - JMTC: <https://acquisition.army.mil/asfi/>

Red River Army Depot: <https://www.redriver.army.mil/>

Anniston Army Depot: <https://acquisition.army.mil/asfi/>

(d) Electronic Data Interchange. If you choose to receive contract awards, modifications and delivery orders through EDI, they will be delivered electronically via the Federal Acquisition Network (FACNET). Federal Standard Version 3050 of Standard X12 from the American National Standards Institute (ANSI) will be used as the format for these electronic transactions.

(1) You must complete the EDI 838 Trading Partner Profile, and must agree (i) to subcontract with a DoD certified VAN or Value Added Service (VAS) provider, or (ii) to become DoD certified as a Value Added Network (VAN). The EDI 838 Trading Partner Profile is contained in the basic SAM registration form and includes portions of the registration form which are titled "Optional".

(2) You must select a VAN from the official DoD approved list. DoD Certified VANs are listed at <http://www.acq.osd.mil/dpap/ebiz/VANs.htm>. If your VAN is later removed from the official list, or if you voluntarily drop your initially selected VAN, then you must switch to a VAN that remains on the official DoD approved list. You must maintain an active account on a DoD approved VAN for the entire duration of the contract, beginning no later than the 60th day after award.

(e) Unless otherwise specified elsewhere in the contract, all data items you are required to provide under this contract must be submitted electronically. Please go to the following webpage for <http://contracting.tacom.army.mil/acqinfo/ebidnotice.htm>

(f) Additional information can be obtained by sending a message to: usarmy.detroit.acc.mbx.wrn-web-page@mail.mil or by calling (586) 282-7059.

[End of Clause]

52.204-4009 (TACOM) MANDATORY USE OF CONTRACTOR TO GOVERNMENT ELECTRONIC
COMMUNICATION (AUG 2008)

- (a) All references in the contract to the submission of written documentation shall mean electronic submission. All electronic submissions shall be in the formats and media described in the website: <http://contracting.tacom.army.mil/acqinfo/ebidnotice.htm>.
- (b) This shall include all written unclassified communications between the Government and the Contractor except contract awards and contract modifications which shall be posted on the internet. Return receipt shall be used if a commercial application is available. Classified information shall be handled in full accordance with the appropriate security requirements.
- (c) In order to be contractually binding, all Government communications requiring a Contracting Officer signature must include an affirmative response from the Contracting Officer's e-mail address. The Contractor shall designate the personnel with signature authority who can contractually bind the contractor. All binding contractor communication shall be sent from this contractor e-mail address(es).
- (d) Upon award, the Contractor shall provide the Contracting Officer with a list of e-mail addresses for all administrative and technical personnel assigned to this contract.

- (e) Unless exempted by the Procuring Contracting Officer in writing, all unclassified written communication after contract award shall be transmitted electronically.

(End of Clause)

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within **Section C, Statement of Work** after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than **See Section C, Statement of Work**. The time stated for completion shall include final cleanup of the premises.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the entire work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$330.05 for each calendar day of delay until the work is accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.211-4000 (TACOM) MARKING OF SHIPMENT

(JUL 2008)

All packages must be marked with the contents and TACOM Contract/Order Number.

Failure to properly mark all shipments may result in delayed payment and possible rejection of invoices and/or shipments.

[End of Clause]

52.232-4000(TACOM) CONTRACTING OFFICER'S AUTHORITY

(APR 2006)

The Contracting Officer is the only person authorized to approve additions or changes in any of the requirements under any contract, resulting from this solicitation, notwithstanding any provisions contained elsewhere in this contract, the said authority remains solely in the Contracting Officer. In the event that the contractor effects any change at the direction of any person other than the Contracting Officer, such change shall be solely at the risk of the contractor. (See General Provision, entitled: "Notification of Changes," FAR 52.243-7 or paragraph (c) of FAR 52.212-4).

[End of Clause]

52.232-4007

WIDE AREA WORK FLOW (WAWF), CODES, AND DESIGNATED ACCEPTORS (AUG 2012)

The contractor shall use WAWF to electronically process invoices for payment and receiving reports. The contractor shall register to use WAWF and take the Web-based training at <https://wawf.eb.mil>. Direct any questions relating to the system and vendor training to the Ogden Help Desk at 866-618-5988.

To properly route an invoice and receiving report through WAWF, the contractor shall indicate the following when prompted:

1. Select the appropriate type of invoice as indicated below. **It is imperative that contractors select the proper type of invoice.** Improper selection of an invoice type will result in the delay of a payment or the rejection of an invoice submittal.

 Invoice and Receiving Report Combo (Supplies)

Use for contracts that are entirely for supply requirements or for contracts that are predominantly for supply requirements but also includes minimal service line items.

 X **Invoice 2-in-1 (Services)**

Use for contracts that are entirely for service requirements.

2. Use the following DoDAAC (Department of Defense Activity Address Code) codes when prompted:

- Your firm's CAGE Code: 3MPN1
- Issue and Admin DoDAAC Code: W56HZV
- Ship-To DoDAAC Code: W56JK7
- Accept-By DoDAAC Code: W56JK7
- Payment DoDAAC Code: HQ0490

3. Include the **Purchase Request Number** as specified in each Contract Line Item Number (CLIN). This number can be found at the bottom of the extended description of each CLIN. **NOTE:** The purchase request number may be different for each CLIN.
4. Indicate the proper **Unit of Measure** as specified in each CLIN. Failure to indicate the proper Unit of Measure will lead to vendor pay issues.
5. Indicate the following **Acceptor, Alternate Acceptor, and Contract Specialist** when the WAWF system prompts for “additional e-mail submission” after clicking “Signature”.
 - Primary Acceptor Name: Karen Carnago
 - Primary Acceptor e-mail: karen.e.carnago.civ@mail.mil

 - Alternate Acceptor Name: Moiz Uddin
 - Alternate Acceptor e-mail: moiz.uddin.civ@mail.mil

 - Contract Specialist Name: Rachel Serra
 - Contract Specialist e-mail: rachel.l.serra.civ@mail.mil

To track the status of an invoice, in WAWF click on the link, “Pay Status” (myInvoice-External link) found under the tab named “Lookup” or by going to <https://myinvoice.csd.disa.mil/index.html>. If the payment office indicated in the contract is Columbus, direct any payment related questions to the Defense Finance Accounting Services (DFAS) Columbus at 800-756-4571. If the payment office is other than Columbus, contact the contract administrator for the customer service phone/fax numbers.

[End of clause]

The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the contractor will report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract via secure data collection site. The contractor is required to completely fill in all required data fields in the format using the following web address: <https://cmra.army.mil> . The required information includes the following:

- (1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative;
- (2) Contract number, including task and delivery order number;
- (3) Beginning and ending dates covered by reporting period;
- (4) Contractor name, address, phone number, e-mail address, identity of contractor employee entering data;
- (5) Direct labor hours (including sub-contractors);
- (6) Direct labor dollars paid this reporting period (including sub-contractors);
- (7) Total payments (including sub-contractors);
- (8) Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each sub-contractor if different);
- (9) Data collection cost;
- (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the contractor with its UIC for the purposes of reporting this information);

(11) Locations where contractor and sub-contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on website);

(12) Presence of deployment or contingency contract language; and

(13) Number of contractor and sub-contractor employees deployed in theater this reporting period (by country).

Reporting inputs will be for the labor executed during the period of performance during each Government fiscal year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year, beginning with 2013. Contractors may direct questions to the help desk at : <https://cmra.army.mil>.

[End of Clause]

52.246-4009 (TACOM) INSPECTION AND ACCEPTANCE POINTS: DESTINATION (FEB 1995)

Inspection and acceptance of supplies offered under this purchase order shall take place as specified here.

Inspection: DESTINATION

Acceptance: DESTINATION.

[End of Clause]

Section J - List of Documents, Exhibits and Other Attachments

LIST OF APPENDIX

List of Appendix

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Appendix K - Detroit Edison Map

Statement of Work Drawings DTA 001513 9-23-14

Davis-Bacon Wage Determination MI140091

Presolicitation RFIs with Government Responses