

# Revised-Solicitation 36C25218B0017\_01122018

<b>SOLICITATION, OFFER, AND AWARD</b> (Construction, Alteration, or Repair)	1. SOLICITATION NUMBER	2. TYPE OF SOLICITATION	3. DATE ISSUED	PAGE OF PAGES
	36C25218B0017	<input checked="" type="checkbox"/> SEALED BID (IFB) <input type="checkbox"/> NEGOTIATED (RFP)	01-05-2018	1      203

**IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.**

4. CONTRACT NUMBER	5. REQUISITION/PURCHASE REQUEST NUMBER	6. PROJECT NUMBER
	550-18-2-6985-0001	550-18-101
7. ISSUED BY	CODE	8. ADDRESS OFFER TO
Department of Veterans Affairs Great Lakes Acquisition Center (GLAC) 3001 Green Bay Road Building 1, Room 329 North Chicago IL 60064-3048	36C252	Great Lakes Acquisition Center (GLAC) Department of Veteran Affairs 3001 Green Bay Road Building 1, Room 329 North Chicago IL 60064-3048
9. FOR INFORMATION CALL:	a. NAME	b. TELEPHONE NUMBER (Include area code) (NO COLLECT CALLS)
	Angella Sterling	224-610-3650

## SOLICITATION

**NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".**

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS (Title, identifying number, date)

#94 South Water Tower Repair at the VA Illiana Health Care System

General Description: Repair of the #94 South Water Tower to bring into compliance with current safety standards.

The Contractor shall provide all Management and Supervision, Labor, Materials, Equipment, Tools, and Transportation to execute work for Project 550-18-101, Repair North-South Water Towers located on the VA Illiana Health Care System campus located at 1900 East Main Street, Danville, IL 61832.

Project Magnitude: Between \$250,000 and \$500,000. NAICS: 236220 - Commercial and Institutional Building Construction) applies with a \$36.5 million size standard.

In accordance with Public Law 109-416 and pursuant to 38 USC 8127(d), this requirement is a 100% set-aside for Service Disabled Veteran Owned Small Business (SDVOSB). Bidders must be CVE-verified prior to submission of bid in accordance with VAAR 819.7003(b).

Davis Bacon Wage Requirements as outlined in IL70002 is incorporated into this solicitation.

A pre-bid site visit is tentatively scheduled for Wednesday, January 17, 2018 at 1:00 pm, CST., at 1900 East Main Street, Building 102, Room 102G, Danville, IL 61832. Requests for Information are due by 2:00 pm, CST on January 30, 2018. Responses to Requests for Information received after this date will be answered at the Contracting Officer's discretion.

**NOTICE TO BIDDERS:** Award will be made to the responsible bidder who submits the lowest responsive bid. A single award will be made on the BASE BID, subject to available funding.

11. The Contractor shall begin performance within <u>10</u> calendar days and complete it within <u>90</u> calendar days after receiving <input type="checkbox"/> award, <input checked="" type="checkbox"/> notice to proceed. This performance period is <input checked="" type="checkbox"/> mandatory <input type="checkbox"/> negotiable. (See <u>52.211-10</u> ).	
12a. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (If "YES," indicate within how many calendar days after award in Item 12B.)	12b. CALENDAR DAYS
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	10

**13. ADDITIONAL SOLICITATION REQUIREMENTS:**

- Sealed offers in original and 1 copies to perform the work required are due at the place specified in Item 8 by 3:00 p.m., CST (hour) local time 02-15-2018 (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, the date and time offers are due.
- An offer guarantee  is,  is not required.
- All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by reference.
- Offers providing less than 90 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

**OFFER (Must be fully completed by offeror)**

14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)		15. TELEPHONE NUMBER (Include area code)	
CODE		16. REMITTANCE ADDRESS (Include only if different than Item 14.)	
FACILITY CODE			

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of the solicitation, if this offer is accepted by the Government in writing within \_\_\_\_\_ calendar days after the date offers are due. (Insert any number equal to or greater than the minimum requirement stated in Item 13d. Failure to insert any number means the offeror accepts the minimum in Item 13d.)

AMOUNTS	Base Bid \$ _____
	Deductive Alternate Bid #1 \$ _____
	Deductive Alternate Bid #2 \$ _____

18. The offeror agrees to furnish any required performance and payment bonds.

**19. ACKNOWLEDGMENT OF AMENDMENTS**

(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)

AMENDMENT NUMBER										
DATE.										

20a. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)	20b. SIGNATURE	20c. OFFER DATE
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**AWARD (To be completed by Government)**

21. ITEMS ACCEPTED:

22. AMOUNT	23. ACCOUNTING AND APPROPRIATION DATA 550-3680162-6985-854200-2580 23NRNR003
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24. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	ITEM	25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO <input type="checkbox"/> 10 U.S.C. 2304(c)( ) <input type="checkbox"/> 41 U.S.C. 3304(a) ( )
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26. ADMINISTERED BY 36C252 Department of Veterans Affairs Great Lakes Acquisition Center (GLAC) 3001 Green Bay Road Building 1, Room 329 North Chicago IL 60064-3048	27. PAYMENT WILL BE MADE BY Department of Veterans Affairs Financial Services Center PO Box 149971 Austin TX 78714-9971 PHONE: 877-353-9791    FAX: 512-460-5540
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**CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE**

<input type="checkbox"/> 28. NEGOTIATED AGREEMENT (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.	<input type="checkbox"/> 29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.
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30a. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or print)	31a. NAME OF CONTRACTING OFFICER (Type or print) Claude Humphrey PCOE16L2-3303		
30b. SIGNATURE	30c. DATE	31b. UNITED STATES OF AMERICA BY	31c. AWARD DATE

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## A.1 CONTRACT ADMINISTRATION DATA

**1. CONTRACT ADMINISTRATION:** All contract administration matters will be handled by the following individual(s):

a. **CONTRACTOR:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contact Person: \_\_\_\_\_  
Telephone #: \_\_\_\_\_  
Fax #: \_\_\_\_\_  
e-Mail Address: \_\_\_\_\_  
Tax Identification Number: \_\_\_\_\_  
DUNS Number: \_\_\_\_\_

b. **GOVERNMENT:** Contracting Officer (36C252/90C)  
Department of Veterans Affairs,  
Great Lakes Acquisition Center (NCO 12)  
Southern Tier Construction Team  
Capt. James A. Lovell Federal Health Care Center  
3001 Green Bay Rd., Bldg. 1, Rm 329  
North Chicago, IL 60064-3048

**2. CONTRACTOR REMITTANCE ADDRESS:** Effective January 1, 1999 all payments by the Government to the contractor will be made in accordance with Federal Acquisition Regulation (FAR) Clause 52.232-34, Payment by Electronic Funds Transfer. Contractor must be registered in the System for Award Management (SAM) database in accordance with FAR Clause 52.212-1(k).

**3. INVOICES:** Invoices shall be submitted within ten (10) calendar days after performance and acceptance of services and must include the VA Contract Number, Project Number, Purchase Obligation Number and Detailed description of the services provided. Payment for services provided under the terms of this contract will be made in arrears, within thirty (30) calendar days, upon receipt of properly executed invoice(s) in accordance with:

- 852.232-72 ELECTRONIC SUBMISSION OF PAYMENT REQUESTS (NOV 2012)
- UPON ACCEPTANCE OF SERVICES
- In order to comply with the Improper Payment Elimination and Recovery Act of 2010 (IPERA), the VA has mandated electronic invoice submission to the Veterans Affairs Financial Services Center (VAFSC). VAFSC has partnered with OB10 e-Invoicing network, for submissions of all electronic invoices to VA. OB10 electronic invoicing is free to all VA vendors. In order to submit electronic invoices, all VA vendors must register with OB10 by submitting an email to [VA.Registration@ob10.com](mailto:VA.Registration@ob10.com) or calling 1-877-752-0900 option 2 for Enrollment.
- Contractor shall submit an electronic invoice within ten (10) calendar days after performance and acceptance of services to the Veterans Affairs Financial Services Center

(VAFSC) e-Invoice through the website at <https://portal.tungsten-network.com/Login.aspx> For questions regarding the submission of VA electronic invoices, OB10 customer service may be contacted at 1-877-489-6135.

- All invoices shall reference the vendor name and address, customer name, contract number, appropriate obligation/funding order number, description of services provided, quantity provided, unit price, and total invoice amount (any additional info). Invoices shall also include any payment discount terms.
- For questions regarding invoice receipt or payment, please call VAFSC directly at 1-877-353-9791 or email [vafscshd@va.gov](mailto:vafscshd@va.gov)

**4. GOVERNMENT INVOICE ADDRESS:** All invoices from the Contractor shall be submitted electronically in accordance with VAAR Clause 852.232-72 “Electronic Submission of Payment Requests.” to the following web address: <http://www.ob10.com/us/en/#&panel1-1>.

**FACSIMILE, E-MAIL, AND SCANNED DOCUMENTS ARE NOT ACCEPTABLE FORMS OF SUBMISSION FOR PAYMENT REQUESTS.**

For assistance setting up e-Invoice, the below information is provided:

- \* Tungsten Network e-Invoice Setup Information: 1-877-489-6135
- \* Tungsten Network e-Invoice email: [VA.Registration@ob10.com](mailto:VA.Registration@ob10.com)  
<<http://VA.Registration@ob10.com/>>
- \* FSC e-Invoice Contact Information: 1-877-353-9791
- \* FSC e-invoice email: [vafscshd@va.gov](mailto:vafscshd@va.gov) <<http://va.gov/>>

**5. ACKNOWLEDGMENT OF AMENDMENTS:** The offeror acknowledges receipt of amendments to the Solicitation numbered and dated as follows:

AMENDMENT NO	DATE
_____	_____
_____	_____
_____	_____

**6. CONTRACT AUTHORITY:** The Contracting Officer is the only person authorized to approve changes or modify any of the requirements of this request. The Contractor shall communicate with the Contracting Officer on all matters pertaining to Contract Administration. Only the Contracting Officer is authorized to make commitments or issue changes that affect pricing, quantities or quality of performance of this contract.

**7. SUBMITTAL OF OFFERS:** All offers must be submitted to the attention of the Contracting Officer identified No Later Than the date/time specified. E-mail proposals will be acceptable at [angella.sterling@va.gov](mailto:angella.sterling@va.gov).

Offers for providing the services will be received at: (Contracting Officer – (36C252/90C), Department of Veterans Affairs, Great Lakes Acquisition Center (NCO 12), Southern Tier Construction Team, Capt. James A. Lovell Federal Health Care Center, 3001 Green Bay Rd., Bldg. 1, Rm 329, North Chicago, IL 60064-3048 until the date and time specified.

**NO FAX/ FACSIMILE SUBMITTED BIDS WILL BE ACCEPTED.**

All transmittal envelopes or other packaging shall be clearly marked with the solicitation number, offeror's company name and return address. All offers shall be subject to all terms and conditions of this solicitation.

**8. QUESTIONS:** All questions regarding this solicitation must be submitted to the Contracting Officer in writing (email is acceptable). Any prospective offeror/bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing. All questions must be submitted in writing to [angella.sterling@va.gov](mailto:angella.sterling@va.gov) **No Later Than, 3:00 p.m., local time (CST) on January 10, 2018.** No phone responses will be accepted. **NOTE:** All questions must reference the IFB# and Description of the project in the Header or Opening Statement.

## **A.2 STATEMENT OF WORK**

The Contractor shall provide all Management and Supervision, Labor, Material, Supplies, and Equipment, to Upgrade and Repair a 200,000-gallon multi-column Elevated Water Storage Tank at the Department of Veterans Affairs, Illiana Health Care System, 1900 East Main St., Danville, IL in accordance with plans and specifications. Work shall include cleaning and debris removal; installation of lightning protection and grounding systems, flapper valves, manways, riser piping, ladders, railing, safety grating, drain valves, signage, liquid level indicators, and cathodic protection; anchor bolt adjustment; repair of interior welded seams, lead-based paint removal and disposal, and application of interior and exterior coating systems.

Prior to work commencing, direct coordination with Veterans Affairs Illiana Health Care System (VAIHCS) Facility Management Service is required. Primary point of contact is Mark Shoviak at (217) 554-4160 and alternate is Patrick Sherrill at (217) 554-5982.

**NOTE:** The Certification and Accreditation requirements do not apply, and a Security Accreditation Package is not required.

### **SCOPE OF WORK TASKS**

**A. BASE BID** - The Contractor shall provide all Management and Supervision, Labor, Material, Supplies, and Equipment, to perform the following tasks in accordance with the accompanying plans and specifications.

**Task #1: *Lightning Protection System and Grounding:*** Install Lightning Protection and Grounding System, per OSHA 29 CFR 1926 (K), NFPA 780-2014, 5.4 Metal Towers and Tanks, and NFPA 70-2017.

**TASK #2: *Anchor Bolts:*** Clean area around anchor bolts, tighten anchor bolts to specifications, then weld around circumference of the nut-to-base plate connections and anchor plate-to-leg connection then tack weld the bolt-to-nut connections for preventive maintenance.

**TASK#3: *Riser Drain Valve:*** Install frost-proof drain valve, complete with locking device and splash pad to direct water away from the tank foundation, per NFPA 22-2013; 14.7.4.1. A drain pipe of at least 2" that is fitted with a controlling valve and 1/2" drip valve shall be connected into the tank discharge pipe near its base, where possible on the tank side of all valves.

**TASK#4: *Name Plate:*** Remove name plate, clean the face, clean and repaint area behind the plate and remount it.

**TASK#5: *Stub Overflow Pipe:*** Extend 4" stub overflow pipe down the exterior to grade, complete with standoffs every 10' on center and an elbow fitted with a flapper valve and screen and a splash pad to direct the water away from the tank foundation, per NFPA 22-2013; 14.6.3.2.



**TASK#6:** *Tower Access Ladder:* Install a compliant tower access ladder, complete with standoffs every 10' on center, a cable type ladder safety climb, a lockable ladder guard and post a Fall Protection sign, per OSHA 1910.27 Fixed Ladder.

**TASK#7:** *Tower Access Ladder Standoff Platform:* Raise height of rigid railing system around outside of balcony from 33" to 42". Install anti-skid floors and swing gates.

**TASK#8:** *Balcony Hand Rail System:* Raise height of rigid railing system around outside of balcony from 36" to 42". Install intermediate rail complete with swing gate at the opening of the handrail at the junction of the tower access ladder and structural girder. Install necessary bracing to maintain design strength. Install anti-skid floors and swing gates.

**TASK#9:** *Strut End Connections:* Reinforce strut end connections by welding.

**TASK#10:** *Balcony Floor Weep Holes:* Drill additional weep holes in the balcony floor to prevent ponding of water.

**TASK#11:** *Shell Manways:* Install two (2) 30" shell manways 180 degrees apart. Install davit slides on both shell manways. Install "Confined Space Entry" signs, per NFPA 22-2013; 14.7.2 Shell Manholes, OSHA 1910.146 (c)(2) Confined Spaces.

**TASK#12:** *Liquid Level Indicator:* Repair the existing liquid level indicator, replace damaged parts as needed and calibrate the unit, per NFPA 22-2013; 14.1.8 Water-Level Gauge.

**TASK#13:** *Shell/Roof Access Ladder:* Install a compliant shell/roof ladder complete with standoffs every 10' on center and a cable type ladder safety device, per OSHA 1910.27 Ladders. Minimum clear distance between the sides of individual rung/step ladders and between the side rails of other fixed ladders must be 16".

**TASK#14:** *Primary Roof Manway:* Post Confined Space Entry Sign and install new lock on existing manway and post Confined Space Entry sign.

**TASK#15:** *Secondary Roof Manway:* Replace existing 24" secondary roof manway with 30" manway, per OSHA 1910.146 (c)(2), AWWA D100-11; 5.4.3, and NFPA 22-2013; 5.7.3 Roof Hatch. Post Confined Space Entry Sign.

**TASK#16:** *Cathodic Protection System:* Remove cathodic protection system and weld steel plates over holes. Install passive cathodic protection system.

**TASK#17:** *Interior Access Ladder:* Install compliant interior access ladders complete with standoffs every 10' on center and cable type ladder safety devices at the primary and secondary shell manways, per NFPA 22-2013; 5.7.4.1.

**TASK#18:** *Interior Bowl Ladders:* Install compliant interior bowl ladders complete with standoffs every 10' on center and cable type ladder safety devices at the primary and secondary shell manways, per NFPA 22-2013; 5.7.4.1.

**TASK#19:** *Interior Cleanout:* Perform dry interior cleanout, up to 3" of sediment and debris. Tank to be drained by VAIHCS.

**TASK#20:** *Safety Grating:* Install compliant safety grating over riser pipe opening, per AWWA D100-11; 5.1.1 Safety Grill and OSHA 29 CFR 1910.23 (a)(1).

**TASK#21:** *Riser Ladder:* Install compliant riser ladder complete with standoffs every 10' on center and cable type ladder safety device.

**TASK#22:** *Tank Roof Railing:* Install 42" high handrail system around the circumference of the tank roof, complete with toe board, intermediate rail and a swing gate at the junction of the shell-to roof access ladder and tank roof.

**TASK#23:** *Interior Wet Coating System:* Section 09 91 01, ELEVATED WATER STORAGE TANK REPAINTING, Paragraph 3.8. The entire surface shall be abrasive blast cleaned to a Near White Finish, removing all existing paint, dirt, mill scale, foreign matter by the methods outlined in the SSPC Society of Protective Coating's Specification SP-10. Minimum angular anchor profile of 2.0 mils is required. Apply a Prime Coat, Stripe Coat, Intermediate Coat, and Finish Coat.

**TASK#24:** *Interior Dry Area Coating System:* Section 09 91 01, ELEVATED WATER STORAGE TANK REPAINTING, Paragraph 3.9. The top side of the upper platform and 1' up the riser wall, the top side of the lower condensate plate and 1' up the riser wall and access tube and the belly of the tank shall be abrasive blast cleaned a Commercial Blast Finish removing all existing paint, rust, dirt, mill scale, and foreign matter the methods outlined in the SSPC Society of Protective Coating's Specification SP-6 A blast profile of 1.5 mils is required. All other rusted and failed surfaces on the interior dry shall be spot abrasive blast cleaned to a Commercial Finish, SSPC SP-6. Feather edges to for a smooth transition to a tight existing paint. Apply a Prime and Finish coat.

**TASK#25:** *Exterior Coating System:* Section 09 91 01, ELEVATED WATER STORAGE TANK REPAINTING, Paragraph 3.7. Remove all oil and grease from the surface prior to blast cleaning. All exterior surfaces shall be abrasive blast cleaned to a Commercial Finish, removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating's Specification SP-6. A minimum angular blast profile of 2.0 mils is required. Apply Prime, Additional Prime, Intermediate, First Finish, and Second Finish Coats. Apply VA Logo. Note: Tank exterior is known to contain lead-based paint, for lead-based paint removal, see Section 02 83 33.13 LEAD-BASED PAINT REMOVAL AND DISPOSAL.

Period of Performance shall be ninety (90) Calendar Days after issuance of Notice to Proceed.

**B. DEDUCTIVE ALTERNATE BID #1:** Includes all work in the BASE BID minus the Exterior Coating System (Task #25).

Period of Performance shall be seventy-five (75) calendar days after issuance of Notice to Proceed.

**C. DEDUCTIVE ALTERNATE BID #2:** Includes all work in the DEDUCTIVE ALTERNATE BID #1: minus the Interior Wet Coating System (Task #23), and Interior Dry Area Coating System (Task #24).

Period of Performance shall be sixty (60) calendar days after issuance of Notice to Proceed.

### A.3 PRICE/COST SCHEDULE

ITEM NUMBER	DESCRIPTION OF SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	<p>The Contractor shall furnish all labor, material, equipment, and supervision needed to repair the #94 South Water Tower located on the VA Illiana Healthcare System campus at 1900 East Main Street, Danville, IL 61832, as per the Statement of Work (SOW).</p> <p><b>A. BASE BID:</b> The project includes the upgrade and repair of Elevated Water Storage Tank #94 (South). Work includes cleaning and debris removal, foundation repair, installation of lightning protection and grounding systems, anchor bolt adjustment, installation of flapper valves, manways, riser piping, ladders, railing, safety grating, drain valves, signage, liquid level indicators, and cathodic protection, repair of interior welded seams, interior coating system (wet and dry), and exterior coating systems. See Scope of Work: Drawings Sheet G-003.</p>	1.00	JB	\$ _____	\$ _____
<b>BASE BID TOTAL</b>				\$ _____	

**DEDUCTIVE ALTERNATE BID #1**

ITEM NUMBER	DESCRIPTION OF SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
<b>0002</b>	<p>The Contractor shall furnish all labor, material, equipment, and supervision needed to repair the #94 South Water Tower located on the VA Illiana Healthcare System campus at 1900 East Main Street, Danville, IL 61832, as per the Statement of Work (SOW).</p> <p><b>B. DEDUCTIVE ALTERNATE BID #1:</b>                      All work in the Base Bid minus the Exterior Coating System (Task #25). See Scope of Work: Drawings Sheet G-003.</p>	1.00	JB	\$ _____	\$ _____
<b>DEDUCTIVE ALTERNATE BID # 1 TOTAL</b>				\$ _____	

**DEDUCTIVE ALTERNATE BID #2**

ITEM NUMBER	DESCRIPTION OF SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	The Contractor shall furnish all labor, material, equipment, and supervision needed to repair the #94 South Water Tower located on the VA Illiana Healthcare System campus at 1900 East Main Street, Danville, IL 61832, as per the Statement of Work (SOW). <b>C. DEDUCTIVE ALTERNATE BID #2:</b> All work in the Base Bid minus the Exterior Coating System (Task #25), the Interior Wet Coating System (Task #23), and the Interior Dry Area Coating System (Task #24). See Scope of Work: Drawings Sheet G-003.	1.00	JB	\$ _____	\$ _____
<b>DEDUCTIVE ALTERNATE BID # 2 TOTAL</b>					\$ _____

**NOTICE TO BIDDERS:** Award will be made to the responsible bidder who submitted the lowest responsive bid.

A single award will be made on Base Bid, but in the event the offer exceeds the funds available, a single award will be made on Alternate Bid Item 1 or Alternate Bid Item 4, in that order, based on available funding. Offerors should quote a price on each item listed.

For Alternate Bid Items, bidders should ensure that the all-inclusive price after the deductions are subtracted has been entered. Do not enter the amount of the deduction.

# PROJECT SPECIFICATIONS

Project 550-18-101



**Repairs to Water Tower #94 (South)  
Department of Veterans Affairs  
VA Illiana Health Care System  
1900 East Main Street Danville, IL**

**Prepared by:  
Facility Management Service (FMS)**

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**SECTION 01 00 00  
GENERAL REQUIREMENTS**

**PART 1 - GENERAL**

**1.1 GENERAL INTENTION**

- A. Contractor shall completely prepare site for building operations, including demolition and removal of existing structures, and furnish labor and materials and perform work for 550-18-101 Emergency Repairs to Water Tower #94 (South) as required by drawings and specifications.
- B. The time and date for the site visit for this project will be announced in the solicitation.
- C. Other Visits to the site by Bidders may be made only by appointment with the Medical Center Engineering Officer.
- D. Offices of VA Iliana Health Care System – Facility Management Service (138), Danville, IL 61832, will render certain technical services during construction.
- E. Before placement and installation of work subject to tests by testing laboratory retained by the Contractor, the Contractor shall notify the Contracting Officers Representative (COR) the site in time to observe testing laboratory personnel in the taking and testing of specimens and field inspection. Such prior notice shall be not less than three business days unless otherwise designated by the COR.
- F. All employees and subcontractors of Contractor shall comply with VA security management program and obtain permission of the VA police, be identified by project and employer, and restricted from unauthorized access.
- G. Prior to commencing work, Contractor shall provide proof that a OSHA certified “competent person” (CP) (29 CFR 1926.20(b)(2)) will maintain a presence at the work site whenever the Contractor or subcontractors are present.
- H. Training:
  - 1. All employees and subcontractors of Contractor shall have the ten (10)-hour OSHA certified Construction Safety course and /or other relevant competency training, as determined by VA CP with input from the ICRA team.
  - 2. Contractor’s superintendent(s)/Project Manager shall have completed the thirty (30)-hour construction training OSHA certification. The Contractor shall submit an appointment letter on the Contractor’s company letter head containing, the name of the designated OSHA certified superintendent(s), state the name of the Competent Person (if different than the superintendent), as well as credentials for both. The letter shall be accompanied by a copy of the individual(s) safety training records.
  - 3. Submit training records of all such employees for approval before the start of work.
- I. VHA Directive 2011-36, Safety and Health during Construction, dated 9/22/2011 in its entirety is made a part of this section.

## 1.2 STATEMENT OF BID ITEM(S)

- A. **BASE BID:** The project includes the upgrade and repair of Elevated Water Storage Tank #94 (South). Work includes Cleaning and Debris Removal, Foundation Repair, Installation of Lightning Protection and Grounding Systems, Anchor Bolt Adjustment, Installation of Flapper Valves, Manways, Riser Piping, Ladders, Railing, Safety Grating, Drain Valves, Signage, Liquid Level Indicators, and Cathodic Protection, Repair of Interior Welded Seams, Interior Coating System (wet and dry), and Exterior Coating Systems. See Scope of Work: Drawings Sheet G-003.
- B. **DEDUCTIVE ALTERNATE BID #1:** All work in the Base Bid minus the Exterior Coating System (Task #25). See Scope of Work: Drawings Sheet G-003.
- C. **DEDUCTIVE ALTERNATE BID #2:** All work in the DEDUCTIVE ALTERNATE BID #1 minus the Interior Wet Coating System (Task #23), and the Interior Dry Area Coating System (Task #24).

## 1.3 SPECIFICATIONS AND DRAWINGS FOR CONTRACTOR

Available electronically as posted on Fed Biz Ops.

## 1.4 CONSTRUCTION SECURITY, SAFETY AND HEALTH REQUIREMENTS

- A. The Security and Safety Requirements pertains to station policy for construction projects performed at the Central Iowa Health Care Center. Safety and Health concerns are taken seriously at this facility. All employees of the Contractor are expected to strictly adhere to these regulations and requirements. This is exceedingly important, since we must be primarily concerned for the safety and health of our patients. In this regard, OSHA Standards may protect worker safety and health, but they have minimal benefit for protecting the safety and health of our patients, due primarily to their differing medical conditions. Review this information as orientation with your personnel performing work on site. Where the requirements as outlined in this or other regulations are differing, the more stringent shall apply.
- B. **Security Plan:**
  - 1. The security plan defines both physical and administrative security procedures that will remain effective for the entire duration of the project.
  - 2. The Contractor is responsible for assuring that all sub-contractors working on the project and their employees also comply with these regulations.
- C. **Security Procedures:**
  - 1. Secure all construction areas, especially mechanical and electrical rooms against entry of unauthorized individuals including patients.
  - 2. Unless specified, working hours other than regular working hours will require authorization by the contracting officer. Regular work hours for the Medical Center is Monday–Friday, 8:00 a.m. to 4:30 p.m.
  - 3. Contractor’s employees shall not enter the project site without appropriate badge. They may also be subject to inspection of their personal effects when entering or leaving the project site.

4. For working outside the “regular hours” as defined in the contract, The Contractor shall give three (3) working days’ notice to the Contracting Officer so that arrangements can be provided for the employees. This notice is separate from any notices required for utility shutdown described later in this section.
5. No photography of VA premises is allowed without written permission of the Contracting Officer.
6. VA reserves the right to close down or shut down the project site and order Contractor’s employees off the premises in the event of a national emergency. The Contractor may return to the site only with the written approval of the Contracting Officer.

**D. Key Control:**

1. The Contractor's superintendent will be issued necessary keys daily for those areas outside the construction barriers that require their access (i.e. utility closets, electrical closets, mechanical spaces, etc.) and return these keys at the end of each business day. No more than two (2) keys/day will be issued. The Engineering Office will maintain a logbook to account for these keys. Contractors that fail to return these keys will be assessed a \$25.00 charge.
2. The Contractor and Contractor’s sub-contractor shall ensure all doors leading to and from construction site/area are either monitored or locked to prevent access to the area from unauthorized persons (i.e. patients, staff).
3. The Contractor shall provide security locks for the construction area. Duplicate keys or lock combinations are to be provided to the COR for the purpose of security inspections of every area of the project including tool boxes, powered equipment, and parked machines and take any emergency action.

**E. Motor Vehicle Restrictions:**

Contractor and Contractor’s sub-contractor vehicles shall be parked within the staging area of the project. The staging area shall be determined at the time of the pre-bid meeting. Parking in patient/visitor/staff will require a request and approval for such parking through the COR.

**F. General Safety:**

1. Follow all federal, state and local safety and health regulations.
2. Maintain safety in the construction site/area in accordance with the provisions of the contract that includes the Occupational Safety and Health Administration (OSHA) Regulations; National Electrical Codes; National Fire Protection Association, etc . Work in a safe manner and take all proper precautions while performing your work. Extra precautions shall be taken when working around persons occupying the building during construction.
3. Provide Personal Protective Equipment (PPE) for your employees.
4. Post appropriate signs in specific hazardous areas.
5. Tools, ladders, etc. are to be secured when not in use.
6. Weekly Safety Inspections: The Construction Safety Committee at the facility will perform safety inspections of all contract operations periodically throughout the month. Written reports of unsafe practices or conditions will be reported to the COR and Contracting Officer for immediate attention and resolution.

**G. Environmental Protection:**

1. No hazardous materials will be disposed of on Government property. All waste will be hauled off-site or disposed in contractor owned and operated waste removal containers.
2. A copy of all waste manifests for special or hazardous wastes will be forwarded to the COR. Environmental requirements will be strictly enforced.

**H. Fire Alarms:**

1. The Contractor is responsible for reviewing locations of fire alarm systems within their construction area.
2. In the event of a fire alarm sounding, individuals are to remain in their respective area, unless Medical Center personnel (Safety, Nursing or Engineering) instruct otherwise, or unless a fire situation is in the area, in which case individual(s) should immediately evacuate.
3. Any work involving the Fire Protection Systems will require written permission to proceed from the COR and requires forty-eight (48) hours' notice. An impairment number will be issued through the COR by the Fire Safety Manager.
4. Do not tamper with or otherwise disturb any fire alarm system components without prior written permission. To do so without written permission will result in an adverse action.
5. Storage of hazardous materials within buildings will be minimal with only enough on hand to perform daily work tasks. Flammable materials will either be removed from buildings at the end of the work shift or stored in approved flammable storage containers.

**I. Permit Required Confined Spaces:**

1. Contractors performing work on this facility will follow all requirements outlined in OSHA Standards for working in confined spaces. There are numerous permits required for confined spaces on this facility. These spaces have been identified. Some spaces have been posted, but the majority have not due to their configuration. A complete listing of these areas will be provided upon request by the contractor at the NTP meeting.
2. Confined spaces are areas that are large enough to be entered have limited egress/exit potential and are not designed for permanent human occupancy. If Contractor encounter any space that meets this definition, and if it is a suspected confined space, Contractor must contact and inform the COR immediately.
3. Contractors performing work in confined spaces are responsible for compliance with all applicable standards and regulations.

**J. Housekeeping:**

1. Protect patients and VA personnel in occupied areas from the hazards of dust, noise, construction debris and material associated with a construction environment. Keep work area clear, clean and free of loose debris, construction materials and partially installed work that would create a safety hazard or interfere with VA personnel duties and traffic.
2. Clean and remove any accumulation of dust/debris from any surface at the end of each workday.

- 3. Make every effort to keep dust and noise to a minimum at all times. Take special precautions to protect VA equipment from damage including excessive dust.
- 4. Maintain clear access to mechanical, electrical devices, equipment and main corridors. This will ensure access to existing systems in the event of an emergency.
- 5. Clean area of all construction debris and dust upon completion of demolition and/or renovation.
- 6. During construction operations, keep existing finishes protected from damage. Cover and protect all flooring materials during construction. Any flooring materials or surfaces damaged as a result of construction activities will be replaced at the expense of the Contractor.

**K. Emergency Medical Services:**

Emergency medical services for stabilization purposes are available for Contractor at this facility. For medical emergencies, dial “0” when inside any building. Report the nature of the emergency and location. The operator will dispatch in-house personnel or coordinate an outside emergency assistance based on the nature of the emergency.

**L. Use of Government-Owned Material and Equipment:**

Use of Government-owned material and equipment is prohibited.

**M. Superintendent Communications:**

At all times during the performance of this contract, the Contractors Superintendent is to be on site and available by cellular phone. At the beginning of the contract and prior to beginning any construction, supply the COR with the telephone number for the Superintendent.

**N. Traffic:**

- 1. Traffic hazards are minimal at this facility. Drivers should be particularly concerned with pedestrian traffic.
- 2. Seat belt use is mandatory on the station.
- 3. Federal police officers maintain a twenty-four (24)-hour patrol of the area.

**O. Contractor's Trailers:**

Contractor's trailers shall be located at the area assigned. All utility connections to the trailer shall be installed at the contractor expense. Trailer removal is required upon completion of the contract, unless approved by the CO to leave in place.

**P. Smoking:**

There are designated smoking areas around the facility. Smoking is allowed only in designated areas. Any smoking inside a government building is subject to a fine without warning.

## 1.5 FIRE SAFETY

**A. Applicable Publications:** Publications listed below form part of this Article to extent referenced. Publications are referenced in text by basic designations only.

- 1. American Society for Testing and Materials (ASTM):  
E84-2009                               Surface Burning Characteristics of Building Materials
- 2. National Fire Protection Association (NFPA):  
NFPA 10                                   Standard for Portable Fire Extinguishers

NFPA 30	Flammable and Combustible Liquids Code
NFPA 51B	Standard for Fire Prevention During Welding, Cutting and Other Hot Work
NEC 70	National Electrical Code
NFPA 241	Standard for Safeguarding Construction, Alteration, and Demolition Operations
NFPA 101	Life Safety Code
NFPA 99	Health Care Facilities

3. Occupational Safety and Health Administration (OSHA):  
29 CFR 1926 Safety and Health Regulations for Construction.

- B. **Fire Safety Plan:** Establish and maintain a fire protection program in accordance with 29 CFR 1926. Prior to start of work, prepare a plan detailing project-specific fire safety measures, including periodic status reports, and submit to COR for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES. Prior to beginning work, all the contractor’s employees and the sub-contractors shall undergo a safety briefing provided by the Contractor’s competent person per OSHA requirements. This briefing shall include information on the construction limits, VAMC safety guidelines, means of egress, break areas, work hours, locations of restrooms, use of VAMC equipment, etc. Documentation shall be provided to the COR that individuals have undergone contractor’s safety briefing.
- C. **Site and Building Access:** Maintain free and unobstructed access to facility emergency services and for Fire, Police and other Emergency Response Forces in accordance with NFPA 241.
- D. Separate temporary facilities, such as trailers, storage sheds, and dumpsters, from existing buildings and new construction by distances in accordance with NFPA 241. For small facilities with less than 6 m (20 feet) exposing overall length, separate by 3m (10 feet).
- E. **Fire Protection During Construction:**
  1. Coordinate with the facility prior to and concurrent with design.
  2. In the event that the Fire Protection Systems within the construction space are disabled, one-hour fire protection is required from floor to deck per NFPA requirements.
  3. Coordinate construction as necessary to ensure that obstruction of any exit is minimized or avoided. If exits are obstructed during construction, provide alternate exit routes during each phase of construction and identify the alternate routes on the construction drawings.
  4. Minimize or avoid disruptions to fire alarm and sprinkler systems. Delineate phasing of construction to ensure that installations of new systems are expedited, and where possible, maintain existing systems in service until the replacement system is operational. If fire protection systems are to be disrupted, ensure procedures are incorporated to maintain equivalent levels of fire protection and provide formal notification to the facility while systems are down.
  5. Separations are to be maintained daily by the Contractor.
- F. **Temporary Heating and Electrical:** Install, use and maintain installations in accordance with 29 CFR 1926, NFPA 241 and NFPA 70.

- G. **Means of Egress:** Do not block exiting for occupied buildings, including paths from exits to roads. Minimize disruptions and coordinate with COR. When necessary an Interim Life Safety Measure (ILSM) survey will be provided by the Life Safety Manager. This document will be adhered to the construction barrier as with locations identified by the COR.
- H. **Egress Routes for Construction Workers:** Maintain free and unobstructed egress. Inspect daily. Contractor shall report findings and corrective actions weekly to COR.
- I. **Fire Extinguishers:** Provide and maintain extinguishers in construction areas and temporary storage areas in accordance with 29 CFR 1926, NFPA 241 and NFPA 10.
- J. **Flammable and Combustible Liquids:** Store, dispense and use liquids in accordance with 29 CFR 1926, NFPA 241 and NFPA 30.
- K. Coordinate with COR for modifications to sprinkler system so as to maintain fire protection to all portions of the building. Forty-eight (48) hours prior to shutting down any and all fire protection devices, submit a verbal request to the COR. An impairment number will be issued by the facility Life Safety manager for a period not to exceed four hours. Anticipated shutdowns of these systems will require written notice five (5) days prior to the anticipated shutdown.
- L. **Existing Fire Protection:** Do not impair automatic sprinklers, smoke and heat detection, and fire alarm systems, except for portions immediately under construction, and temporarily for connections. Provide fire watch for impairments more than four (4) hours in a twenty-four (24)-hour period. Request interruptions in accordance with Article, OPERATIONS AND STORAGE AREAS, and coordinate with COR and facility Safety Officer. All existing or temporary Fire Protection Systems (fire alarms, sprinklers) located in construction areas shall be tested as coordinated with the medical center. Parameters for the testing and results of any tests performed shall be recorded by the medical center and copies provided to the COR.
- M. **Smoke Detectors:** Prevent accidental operation. Remove temporary covers at end of work operations each day. Coordinate with COR and facility Safety Officer.
- N. **Hot Work:** Any hot work operations including cutting, welding, thermal welding, brazing, soldering, grinding, thermal spraying, thawing pipes or any other similar activity, will require a Hot Work Permit to be obtained from the COR. The Contractor will be responsible for conforming to all Medical Center regulations, policies and procedures concerning Hot Work Permits as outlined below:
  - 1. Prior to the performance of hot work in occupied buildings, a request for a Hot Work Permit will be made to the COR.
  - 2. The COR will inspect the area and ensure that the requirements of NFPA 241, 51b and OSHA standards have been satisfied. Approved Hot Work Permits will be posted in the immediate area of the work.
  - 3. The Hot Work Permit will apply only to the location and work identified on the permit. If additional areas involve hot work, additional permits must be requested.
  - 4. Upon completion of all hot work, the COR will be notified by the responsible individual to perform a re-inspection of the area.

- a Do not use any of the extinguishers in the medical center for standby purpose while conducting hot work. Contractors are required to supply their own Class ABC extinguishers. Medical Center extinguishers are only to be used in the event of a fire.
- b Hot work is not permitted on any roofing area unless authorized by the Authority Having Jurisdiction.
- O. Fire Hazard Prevention and Safety Inspections: Inspect entire construction areas weekly. Coordinate with, and report findings and corrective actions weekly to COR and facility Safety Officer.
- P. **Smoking:** Smoking is prohibited in and adjacent to construction areas inside existing building or grounds and additions under construction. Smoking is prohibited on station except in designated smoking areas.
- Q. Dispose of waste and debris in accordance with NFPA 241. Remove from buildings daily.
- R. Perform other construction, alteration and demolition operations in accordance with 29 CFR 1926.
- S. If required, submit documentation to the COR that personnel have been trained in the fire safety aspects of working in areas with impaired structural or compartmentalization features.

## 1.6 OPERATIONS AND STORAGE AREAS

- A. Working space and space available for storing materials shall be as determined by the COR.
- B. Workmen are subject to rules of Medical Center applicable to their conduct.
- C. Keep roads clear of construction material, debris, standing construction equipment and vehicles at all times.
- D. Execute work in such a manner as to interfere as little as possible with normal functioning of Medical Center as a whole, including operations of utility services, fire protection systems and any existing equipment, and with work being done by others. Use of equipment and tools that transmit vibrations and noises through the building structure, are not permitted in buildings that are occupied, during construction, jointly by patients or medical personnel, and Contractor's personnel, except as permitted by COR where required by limited working space.
  - 1. Do not store materials and equipment in other than assigned areas.
  - 2. Schedule delivery of materials and equipment to immediate construction working areas in quantities sufficient for not more than two (2) work days. Provide unobstructed access to Medical Center areas required to remain in operation.
  - 3. Where access by Medical Center personnel to vacated portions of buildings is not required, storage of Contractor's materials and equipment will be permitted subject to fire and safety requirements.
- E. **Phasing requirements:** To insure such executions, Contractor shall furnish the COR with a schedule of approximate phasing dates as required by the drawings on which the Contractor intends to accomplish work in each specific area of site, building or portion thereof. In addition, Contractor shall notify the COR two weeks in advance of the proposed date of starting work in each specific area of site, building or portion thereof.



- F. Coordinate with COR for removal of existing furnishings and equipment to permit Work to proceed. Contractor shall provide the COR with a copy of their LOTO procedure within ten days of receiving the NTP.
- G. Building(s) will be occupied during performance of work; but immediate areas of alterations will be vacated.
  - 1. Contractor shall take all measures and provide all material necessary for protecting existing equipment and property in the affected areas of construction against dust and debris, so that any equipment and affected areas of the occupied Medical Center Operations will not be hindered. Contractor shall permit access to the Department of Veterans Affairs personnel and patients through other construction areas which serve as routes of access to such affected areas and equipment. Coordinate alteration work with the COR in area S occupied by Department of Veterans Affairs in order to facilitate uninterrupted Medical Center operations during the construction period.
  - 2. Immediate areas of alterations not mentioned in preceding Subparagraph 1 will be temporarily vacated while alterations are performed.
- H. **Construction Fence:** Before construction operations begin, Contractor shall provide a chain link construction fence, 2.1m (seven-foot) minimum height, around each construction area indicated on the drawings. Provide gates as required for access with necessary hardware, including hasps and padlocks. Fasten fence fabric to terminal posts with tension bands and to line posts and top and bottom rails with tie wires spaced at maximum 375mm (fifteen-inches). Bottom of fences shall extend to 25mm (one-inch) above grade. The Contractor shall be responsible for control over access to the site and keep gates closed at all times during working hours and shall secure them with locks at the end of each work day and outside of working hours. Remove the fence when directed by COR.
- I. When a building or construction site is turned over to Contractor, Contractor shall accept entire responsibility therefore.
  - 1. Contractor shall maintain a minimum inside temperature of 4 degrees C (40 degrees F) at all times, except as otherwise specified.
  - 2. Contractor shall maintain in operating condition existing fire protection and alarm equipment. In connection with fire alarm equipment, Contractor shall make arrangements for pre-inspection of site with Fire Department or Company (Department of Veterans Affairs or municipal) whichever will be required to respond to an alarm from Contractor's employee or watchman.
- J. **Utilities Services:** Maintain existing utility services for Medical Center at all times. Provide temporary facilities, labor, materials, equipment, connections, and utilities to assure uninterrupted services as required by the drawings and specifications. Where necessary to cut existing water, steam, gases, sewer or air pipes, or conduits, wires, cables, etc. of utility services or of fire protection systems and communications systems (including telephone), they shall be cut and capped at suitable places where shown; or, in absence of such indication, where directed by COR.
  - 1. No utility service such as water, gas, steam, sewers or electricity, or fire protection systems and communications systems may be interrupted without prior approval of COR. Electrical work shall be accomplished with all affected circuits or equipment de-energized. When an electrical outage cannot be accomplished, work on any energized

- circuits or equipment shall not commence without the Medical Center Director's prior knowledge and written approval.
2. Contractor shall submit a request to interrupt any such services to the COR, in writing, a minimum of two (2) working days in advance of proposed interruption. Request shall state reason, date, exact time of, and approximate duration of such interruption. Interruptions that affect the daily operations of the facility are to be performed on non-business days. Contractor is responsible for the cost of performing this work on weekends or off hours.
  3. Contractor will be advised (in writing) of approval of request, or of which other date and/or time such interruption will cause least inconvenience to operations of Medical Center. Interruption time approved by Medical Center may occur at other than Contractor's normal working hours at the contractor's expense.
  4. Major interruptions of any system must be requested, in writing, a minimum of at least fifteen (15) working days prior to the desired time and shall be performed in cooperation with the COR and facility maintenance department during non-business days and at the expense of the Contractor.
  5. In case of a contract construction emergency, service will be interrupted on approval of COR. Such approval will be confirmed in writing as soon as practical.
  6. Whenever it is required that a connection fee be paid to a public utility provider for new permanent service to the construction project, for such items as water, sewer, electricity, gas or steam, payment of such fee shall be the responsibility of the Government and not the Contractor.
- K. **Abandoned Lines:** All service lines such as wires, cables, conduits, ducts, pipes and the like, and their hangers or supports, which are to be abandoned but are not required to be entirely removed as per the bid documents, shall be sealed, capped or plugged. The lines shall not be capped in finished areas, but shall be removed and sealed, capped or plugged in ceilings, within furred spaces, in unfinished areas, or within walls or partitions; so that they are completely behind the finished surfaces. All abandoned lines that remain in place are to be tagged as "abandoned in place" and dated. All abandoned lines are to be documented on the as-built drawings.
- L. Coordinate the work for this contract with other construction operations as directed by COR. This includes the scheduling of traffic and the use of roadways, as specified in Article, USE OF ROADWAYS.
- M. **Hazardous Communication (HAZCOM):** Contractor is to comply with the requirements for HAZCOM as per OSHA 1926 standards applicable to hazardous materials. SDS' are to be readily available to all employees of the GC and employees of VA. Prior to performing work that could result in dust, chemicals, fumes, etc. entering any occupied space, the GC shall notify the COR 48 hours in advance. Written approval from the COR is required prior to proceeding with the operation.

## 1.7 INFECTION PREVENTION MEASURES

- A. Implement the requirements of VAMC's Infection Control Risk Assessment (ICRA) team. ICRA Group may monitor dust in the vicinity of the construction work and require the Contractor to take corrective action immediately if the safe levels are exceeded.
- B. Establish and maintain a dust control program as part of the contractor's infection preventive measures in accordance with the guidelines provided by ICRA Group as specified here. Prior to start of work, prepare a plan detailing project-specific dust protection measures, including periodic status reports, and submit to COR and Facility ICRA team for review for compliance with contract requirements in accordance with Section 01 33 23, Shop Drawings, and Product Data and Samples and Section 01 33 24. All personnel involved in the construction or renovation activity shall be educated and trained in infection prevention measures established by the medical center.
- C. Medical Center Infection Control personnel shall monitor for airborne disease (e.g. aspergillosis) as appropriate during construction. A baseline of conditions may be established by the medical center prior to the start of work and periodically during the construction stage to determine impact of construction activities on indoor air quality. In addition:
  - 1. The COR and VAMC Infection Control personnel shall review pressure differential monitoring documentation to verify that pressure differentials in the construction zone and in the patient-care rooms are appropriate for their settings. The requirement for negative air pressure in the construction zone shall depend on the location and type of activity. Upon notification, the contractor shall implement corrective measures to restore proper pressure differentials as needed.
  - 2. In case of any problem, the medical center, along with assistance from the contractor, shall conduct an environmental assessment to find and eliminate the source.
- D. In general, the following preventive measures shall be adopted during construction to keep down dust and prevent mold.
  - 1. Dampen debris to keep down dust and provide temporary construction partitions in existing structures where directed by COR. Contractor shall blank off ducts and diffusers to prevent circulation of dust into occupied areas during construction.
  - 2. Do not perform dust producing tasks within occupied areas without the approval of the COR. For construction in any areas that will remain jointly occupied by the medical Center and Contractor's workers, the Contractor shall:
    - a. Provide dust proof one-hour fire-rated temporary drywall construction barriers from floor to deck to completely separate construction from the operational areas of the hospital in order to contain dirt debris and dust. Barriers shall be sealed and made presentable on hospital occupied side. Install a self-closing rated door in a metal frame, commensurate with the partition, to allow worker access. Maintain negative air at all times. A fire-retardant polystyrene, 6-mil thick or greater plastic barrier from floor to deck meeting local fire codes may be used where dust control is the only hazard, and an agreement is reached with the COR.
    - b. HEPA filtration is required where the exhaust dust may reenter the breathing zone. Contractor shall verify that construction exhaust to exterior is not reintroduced to the medical center through intake vents, or building openings. Install HEPA (High

Efficiency Particulate Accumulator) filter vacuum system rated at 95% capture of 0.3 microns including pollen, mold spores and dust particles. Insure continuous negative air pressures occurring within the work area. HEPA filters should have ASHRAE 85 or other pre-filter to extend the useful life of the HEPA. Provide both primary and secondary filtrations units. Exhaust hoses shall be heavy duty, flexible steel reinforced and exhausted so that dust is not reintroduced to the Medical Center.

- c. Adhesive Walk-off/Carpet Walk-off Mats, minimum 600mm x 900mm (24" x 36"), shall be used at all interior transitions from the construction area to occupied medical center area. These mats shall be changed daily to maintain clean work areas directly outside construction area at all times.
- d. Vacuum and/or wet mop all transition areas from construction to the occupied medical center at the end of each workday. Vacuum shall utilize HEPA filtration. Maintain surrounding area frequently. Remove debris as they are created. Transport these outside the construction area in containers with tightly fitting lids.
- e. The contractor shall not haul debris through patient-care areas without prior approval of the COR and the Medical Center. When, approved, debris shall be hauled in enclosed dust proof containers or wrapped in plastic and sealed with duct tape. No sharp objects should be allowed to cut through the plastic. Wipe down the exterior of the containers with a damp rag to remove dust. All equipment, tools, material, etc. transported through occupied areas shall be made free from dust and moisture by vacuuming and wipe down.
- f. Using a HEPA vacuum, clean inside the barrier and vacuum ceiling tile prior to replacement. Any ceiling access panels opened for investigation beyond sealed areas shall be sealed immediately when unattended.
- g. There shall be no standing water during construction. This includes water in equipment drip pans and open containers within the construction areas. All accidental spills must be cleaned up and dried within 12 hours. Remove and dispose of porous materials that remain damp for more than 72 hours.
- h. At completion, remove construction barriers and ceiling protection carefully, outside of normal work hours. Vacuum and clean all surfaces free of dust after the removal.

**E. Contact with Asbestos Containing Materials (ACM):**

1. Due to the age of buildings, many contain asbestos containing materials (ACM). Primary ACM uses in the medical center includes floor tile, mastic, piping and HVAC insulation. The medical center has performed a comprehensive asbestos survey and has identified accessible ACM. Some areas contain damaged asbestos and should not be accessed without prior abatement.
2. The most common type of ACM insulation you may encounter includes thermal system insulation (TSI) and floor tile. ACM TSI is generally covered with a cloth wrap or lagging, and the asbestos substrate generally appear white in color. Do not sand, drill, gouge or otherwise disturb this type of insulation. Contractors disturbing or releasing asbestos containing materials will be liable for all damages and cleanup costs.
3. Where disturbance of asbestos is likely, it has been addressed in the contract for removal. If contact with the presence of asbestos is presented, stop all work in the

immediate area and immediately contact the COR or Safety Officer to make necessary arrangements for removal.

4. In some areas, asbestos insulation has been identified on elbows, between fiberglass piping insulation, as patching materials among the fiberglass insulation. Fiberglass insulation used in this facility is usually yellow or pink in color, wrapped either by cloth or paper lagging.
5. To protect and ensure all your employees are aware that asbestos containing materials have been used in the construction of this facility, you are required to have them review this section and complete the awareness statement included as Attachment A. Once this documentation has been signed by all employees, forward to the COR for documentation.
6. A complete assessment of asbestos materials and conditions are available for viewing by contacting the facility Safety Officer. Prior to performing work above any ceiling or starting in a new area, consult with the COR concerning existing conditions of ACM.
7. Some of the areas in the facility are identified as restricted areas due to condition of ACM. These are readily labeled. Do not enter these areas unless first contacting the COR. Entry requirements to these areas are awareness of the hazards, proper protective clothing (coveralls and respirators) and personal monitoring in accordance with OSHA requirements.
8. Submit contractor asbestos awareness statements for all persons working on the site prior to commencing work.

**F. Final Cleanup:**

1. Upon completion of project, or as work progresses, remove all construction debris from above ceiling, vertical shafts and utility chases that have been part of the construction.
2. Perform HEPA vacuum cleaning of all surfaces in the construction area. This includes walls, ceilings, cabinets, furniture (built-in or free standing), partitions, flooring, etc.
3. All new air ducts shall be cleaned prior to final inspection.

## **1.8 DISPOSAL AND RETENTION**

- A. Materials and equipment accruing from work removed and from demolition of buildings or structures, or parts thereof, shall be disposed of as follows:
1. Reserved items which are to remain property of the Government are identified by attached tags as items to be stored. Items that remain property of the Government shall be removed or dislodged from present locations in such a manner as to prevent damage which would be detrimental to re-installation and reuse. Store such items where directed by COR.
  2. Items not reserved shall become property of the Contractor and be removed by Contractor from Medical Center.
  3. Items of portable equipment and furnishings located in rooms and spaces in which work is to be done under this contract shall remain the property of the Government. When rooms and spaces are vacated by the Department of Veterans Affairs during the alteration period, such items which are NOT required by drawings and specifications to be either relocated or reused will be removed by the Government in advance of work to avoid interfering with Contractor's operation.

## **1.9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS**

Refer to Section 01 57 19, TEMPORARY ENVIRONMENTAL CONTROLS, for additional requirements on protecting vegetation, soils and the environment. Refer to Articles, "Alterations", "Restoration", and "Operations and Storage Areas" for additional instructions concerning repair of damage to structures and site improvements.

### **1.10 RESTORATION**

- A. Remove, cut, alter, replace, patch and repair existing work as necessary to install new work. Except as otherwise shown or specified, do not cut, alter or remove any structural work, and do not disturb any ducts, plumbing, steam, gas, or electric work without approval of the COR. Existing work to be altered or extended and that is found to be defective in any way, shall be reported to the COR before it is disturbed. Materials and workmanship used in restoring work shall conform in type and quality to that of original existing construction, except as otherwise shown or specified.
- B. Upon completion of contract, deliver work complete and undamaged. Existing work (walls, ceilings, partitions, floors, mechanical and electrical work, lawns, paving, roads, walks, etc.) disturbed or removed as a result of performing required new work, shall be patched, repaired, reinstalled, or replaced with new work, and refinished and left in as good condition as existed before commencing work.
- C. At Contractor's own expense, Contractor shall immediately restore to service and repair any damage caused by Contractor's workmen to existing piping and conduits, wires, cables, etc., of utility services or of fire protection systems and communications systems (including telephone) which are indicated on drawings and which are not scheduled for discontinuance or abandonment.

### **1.11 PHYSICAL DATA**

- A. Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.
- B. Government does not guarantee that other materials will not be encountered nor that proportions, conditions or character of several materials will not vary from those indicated by explorations. Contractors will be expected to examine site of work and logs of borings; and, after investigation, decide for themselves character of materials and make their bids accordingly.
- C. Upon proper application to Department of Veterans Affairs, Contractor will be permitted to make their own subsurface explorations of the site at no cost to the Government.

## 1.12 PROFESSIONAL SERVICES

Registered professional whose services are retained and paid for by the Contractor shall perform services specified herein and in other specification sections. The Contractor shall certify that the registered professional is not one who is a regular employee of the Contractor, and that the registered professionals have no financial interest in this contract.

## 1.13 LAYOUT OF WORK

- A. The Contractor shall lay out the work from established base lines and bench marks, indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at Contractor's own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through Contractor's negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.
- B. Establish and plainly mark lines and grades that are reasonably necessary to properly assure that location, orientation, and elevations established for roads and parking lots that are in accordance with lines and elevations shown on the drawings.
- C. Following completion of general mass excavation and before any other permanent work is performed, establish and plainly mark (through use of appropriate batter boards or other means) sufficient additional survey control points or system of points as may be necessary to assure proper alignment, orientation, and grade of all major features of work. Survey shall include, but not be limited to, location of lines and grades of roadways, sidewalks, parking areas, light poles, and all site construction as indicated on the construction drawings.
  1. Such additional survey control points or system of points thus established shall be checked and certified by a registered land surveyor or registered civil engineer. Furnish such certification to the COR before any work (such as storm sewers, roadways, sidewalks, utilities, and other major controlling features) is placed.
- D. During progress of work, and particularly as work progresses, the Contractor shall have line grades of all major form work checked and certified by a registered land surveyor or registered civil engineer as meeting requirements of contract drawings. Furnish such certification to the COR.

#### **1.14 AS-BUILT DRAWINGS**

- A. The Contractor shall maintain two full size sets of as-built drawings which will be kept current during construction of the project, to include all contract changes, modifications and clarifications.
- B. All variations shall be shown in the same general detail as used in the contract drawings. To insure compliance, as-built drawings shall be made available for the COR's review, as often as requested.
- C. Contractor shall deliver two (2) approved completed sets of As-Built Drawings to the COR within fifteen (15) calendar days after each completed phase and after the acceptance of the project by the COR. D. Paragraphs A, B, & C shall also apply to all shop drawings.
- D. Paragraphs A, B, & C shall also apply to the Project Manual.

#### **1.15 USE OF ROADWAYS**

- A. For hauling, use only established public roads and roads on Medical Center property and, when authorized by the COR, such temporary roads which are necessary in the performance of contract work. Temporary roads shall be constructed by the Contractor at Contractor's expense. When necessary to cross curbing, sidewalks, or similar construction, they must be protected by well-constructed bridges.
- B. Debris tracked or hauled onto adjacent private or public roadways or rights-of-way shall be cleaned up and washed down as necessary to remove debris and dust by the Contractor at the end of each work day.

#### **1.16 COR'S FIELD OFFICE (NOT USED) 1.18 TEMPORARY USE OF MECHANICAL AND ELECTRICAL EQUIPMENT**

- A. Use of new installed mechanical and electrical equipment to provide heat, ventilation, plumbing, light and power will be permitted subject to compliance with the following provisions:
  - 1. Permission to use each unit or system must be given by COR. If the equipment is not installed and maintained in accordance with the following provisions, the COR will withdraw permission for use of the equipment.
  - 2. Electrical installations used by the equipment shall be completed in accordance with the drawings and specifications to prevent damage to the equipment and the electrical systems, i.e. transformers, relays, circuit breakers, fuses, conductors, motor controllers and their overload elements shall be properly sized, coordinated and adjusted. Voltage supplied to each item of equipment shall be verified to be correct and it shall be determined that motors are not overloaded. The electrical equipment shall be thoroughly cleaned before using it and again immediately before final inspection including vacuum cleaning and wiping clean interior and exterior surfaces.
  - 3. Units shall be properly lubricated, balanced, and aligned. Vibrations must be eliminated.
  - 4. Automatic temperature control systems for preheat coils shall function properly and all safety controls shall function to prevent coil freeze-up damage.



5. The air filtering system utilized shall be that which is designed for the system when complete, and all filter elements shall be replaced at completion of construction and prior to testing and balancing of system.
  6. All components of heat production and distribution system, metering equipment, condensate returns, and other auxiliary facilities used in temporary service shall be cleaned prior to use; maintained to prevent corrosion internally and externally during use; and cleaned, maintained and inspected prior to acceptance by the Government.
- B. Prior to final inspection, the equipment or parts used which show wear and tear beyond normal, shall be replaced with identical replacements, at no additional cost to the Government.
- C. This paragraph shall not reduce the requirements of the mechanical and electrical specifications sections.

#### **1.17 TEMPORARY TOILETS**

- A. Provide where directed, (for use of all Contractor's workmen) ample temporary sanitary toilet accommodations with suitable sewer and water connections; or, when approved by COR, provide suitable dry closets where directed. Keep such places clean and free from flies, and all connections and appliances connected therewith are to be removed prior to completion of contract, and premises left perfectly clean.
- B. Contractor may have for use of Contractor's workmen, such toilet accommodations as may be assigned to Contractor by Medical Center. Contractor shall keep such places clean and be responsible for any damage done thereto by Contractor's workmen. Failure to maintain satisfactory condition in toilets will deprive Contractor of the privilege to use such toilets.

#### **1.18 AVAILABILITY AND USE OF UTILITY SERVICES**

- A. The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. The amount to be paid by the Contractor for chargeable electrical services shall be the prevailing rates charged to the Government. The Contractor shall carefully conserve any utilities furnished without charge.
- B. The Contractor, at Contractor's expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of electricity used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.
- C. Contractor shall install meters at Contractor's expense and furnish the Medical Center a monthly record of the Contractor's usage of electricity as hereinafter specified.
- D. Heat: Furnish temporary heat necessary to prevent injury to work and materials through dampness and cold. Use of open salamanders or any temporary heating devices which may be fire hazards or may smoke and damage finished work, will not be permitted. Maintain minimum temperatures as specified for various materials:

1. If written permission is obtained from the COR, heat may be obtained by connecting to Medical Center heating distribution system. See drawings for nearby sources.
- E. Electricity (for Construction and Testing): Furnish all temporary electric services.
  1. Obtain electricity by connecting to the Medical Center electrical distribution system.
  2. The Contractor shall meter and pay for electricity required for electric cranes and hoisting devices, electrical welding devices and any electrical heating devices providing temporary heat. Electricity for all other uses is available at no cost to the Contractor.
- F. Water (for Construction and Testing): Furnish temporary water service.
  1. Obtain water by connecting to the Medical Center water distribution system. Provide reduced pressure backflow preventer at each connection. Water is available at no cost to the Contractor.
  2. Maintain connections, pipe, fittings and fixtures and conserve water-use so none is wasted. Failure to stop leakage or other wastes will be cause for revocation (at COR's discretion) of use of water from Medical Center's system.

#### **1.19 NEW TELEPHONE EQUIPMENT**

The Contractor shall coordinate with the work of installation of telephone equipment by others. This work shall be completed before the building is turned over to VA.

#### **1.20 TESTS**

- A. Pre-test mechanical and electrical equipment and systems and make corrections required for proper operation of such systems before requesting final tests. Final test will not be conducted unless pre-tested.
- B. Contractor shall develop and submit a commissioning plan and submit to the COR for approval before final testing/commissioning. Conduct final tests required in various sections of specifications in presence of an authorized representative of the Contracting Officer. Contractor shall furnish all labor, materials, equipment, instruments, and forms, to conduct and record such tests.
- C. Mechanical and electrical systems shall be balanced, controlled and coordinated. A system is defined as the entire complex which must be coordinated to work together during normal operation to produce results for which the system is designed. For example, air conditioning supply air is only one part of entire system which provides comfort conditions for a building. Other related components are return air, exhaust air, steam, chilled water, refrigerant, hot water, controls and electricity, etc. Another example of a complex which involves several components of different disciplines is a boiler installation. Efficient and acceptable boiler operation depends upon the coordination and proper operation of fuel, combustion air, controls, steam, feedwater, condensate and other related components.
- D. All related components as defined above shall be functioning when any system component is tested. Tests shall be completed within a reasonably short period of time during which operating and environmental conditions remain reasonably constant.

- E. Individual test result of any component, where required, will only be accepted when submitted with the test results of related components and of the entire system.

## 1.21 INSTRUCTIONS

- A. Contractor shall furnish Maintenance and Operating manuals and verbal instructions when required by the various sections of the specifications and as hereinafter specified.
- B. **Manuals:** Maintenance and operating manuals (four copies each) for each separate piece of equipment shall be delivered to the COR coincidental with the delivery of the equipment to the job site. Manuals shall be complete, detailed guides for the maintenance and operation of equipment. They shall include complete information necessary for starting, adjusting, maintaining in continuous operation for long periods of time and dismantling and reassembling of the complete units and sub-assembly components. Manuals shall include an index covering all component parts clearly cross-referenced to diagrams and illustrations. Illustrations shall include "exploded" views showing and identifying each separate item. Emphasis shall be placed on the use of special tools and instruments. The function of each piece of equipment, component, accessory and control shall be clearly and thoroughly explained. All necessary precautions for the operation of the equipment and the reason for each precaution shall be clearly set forth. Manuals must reference the exact model, style and size of the piece of equipment and system being furnished. Manuals referencing equipment similar to but of a different model, style, and size than that furnished will not be accepted.
- C. **Instructions:** Contractor shall provide qualified, factory-trained manufacturers' representatives to give detailed instructions to assigned Department of Veterans Affairs personnel in the operation and complete maintenance for each piece of equipment. All such training will be at the job site. These requirements are more specifically detailed in the various technical sections. Instructions for different items of equipment that are component parts of a complete system, shall be given in an integrated, progressive manner. All instructors for every piece of component equipment in a system shall be available until instructions for all items included in the system have been completed. This is to assure proper instruction in the operation of inter-related systems. All instruction periods shall be at such times as scheduled by the COR and shall be considered concluded only when the COR is satisfied in regard to complete and thorough coverage. The Department of Veterans Affairs reserves the right to request the removal of, and substitution for, any instructor who, in the opinion of the COR, does not demonstrate sufficient qualifications in accordance with requirements for instructors above.

## 1.22 GOVERNMENT-FURNISHED PROPERTY

- A. The Government shall deliver to the Contractor, the Government-furnished property shown on the drawings.
- B. Equipment furnished by Government to be installed by Contractor will be furnished to Contractor at the Medical Center.
- C. Storage space for equipment will be provided by the Government and the Contractor shall be prepared to unload and store such equipment therein upon its receipt at the Medical Center.

- D. Notify Contracting Officer in writing, sixty (60) calendar days in advance, of date on which Contractor will be prepared to receive equipment furnished by Government. Arrangements will then be made by the Government for delivery of equipment.
  - 1. Immediately upon delivery of equipment, Contractor shall arrange for a joint inspection thereof with a representative of the Government. At such time the Contractor shall acknowledge receipt of equipment described, make notations, and immediately furnish the Government representative with a written statement as to its condition or shortages.
  - 2. Contractor thereafter is responsible for such equipment until such time as acceptance of contract work is made by the Government.
- E. Equipment furnished by the Government will be delivered in a partially assembled (knock down) condition in accordance with existing standard commercial practices, complete with all fittings, fastenings, and appliances necessary for connections to respective services installed under contract. All fittings and appliances (i.e., couplings, ells, tees, nipples, piping, conduits, cables, and the like) necessary to make the connection between the Government furnished equipment item and the utility stub-up shall be furnished and installed by the contractor at no additional cost to the Government.
- F. Completely assemble and install the Government furnished equipment in place ready for proper operation in accordance with specifications and drawings.
- G. Furnish supervision of installation of equipment at construction site by qualified factory trained technicians regularly employed by the equipment manufacturer.

### **1.23 RELOCATED EQUIPMENT ITEMS**

- A. Contractor shall disconnect, dismantle as necessary, remove and reinstall in new location, all existing equipment and items indicated by symbol "R" or otherwise shown to be relocated by the Contractor.
- B. Perform relocation of such equipment or items at such times and in such a manner as directed by the COR.
- C. Suitably cap existing service lines, such as steam, condensate return, water, drain, gas, air, vacuum and/or electrical, whenever such lines are disconnected from equipment to be relocated. Remove abandoned lines in finished areas and cap as specified herein before under paragraph "Abandoned Lines".
- D. Provide all mechanical and electrical service connections, fittings, fastenings and any other materials necessary for assembly and installation of relocated equipment; and leave such equipment in proper operating condition.
- E. All service lines such as noted above for relocated equipment shall be in place at point of relocation ready for use before any existing equipment is disconnected. Make relocated existing equipment ready for operation or use immediately after reinstallation.

### **1.24 STORAGE SPACE FOR DEPARTMENT OF VETERANS AFFAIRS EQUIPMENT (NOT USED) 1.30 HISTORIC PRESERVATION**

Where the Contractor or any of the Contractor's employees, prior to, or during the construction work, are advised of or discover any possible archeological, historical and/or cultural

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resources, the Contractor shall immediately notify the COR verbally, and then with a written follow up.

--- E N D ---

**SECTION 01 12 16  
WORK SCHEDULE**

**PART 2 - GENERAL**

**2.1 DESCRIPTION:**

Work Sequence requirements for 550-17-111 Construct Bulk Oxygen Storage Pad.

**2.2 GENERAL REQUIREMENTS**

- A. Contractor is responsible to prepare and maintain a construction schedule describing the sequencing, means-and-methods of construction, installation and removal of temporary facilities and protections and their impact and coordination with the Owner's continued occupation and operations.
  - 1. Master Production Schedule shall be in the form of a bar graph (Gantt chart) using Critical Path Method (CPM), see Section 01 32 16.15 Project Schedules.
  - 2. Schedule shall be submitted to the Resident Engineer / COR for review not later than ten (10) calendar days after issuance of the Notice to Proceed.
  - 3. For each Construction Progress Meeting, submit a three (3) - Week Short-Interval Production Schedule (SIPS) or Construction Activity Plan (CAP) to show current work in process. Schedule is to reflect trades on sight, days for each trade on site during the period, and list any and all issues/concerns/delays. Milestone dates shall be in agreement with the Master Production Schedule.
- B. Sequencing, means-and-methods of construction, safety, and all temporary items remain the responsibility of the Contractor.

**PART 3 - PRODUCTS (NOT USED) PART 3 - EXECUTION (NOT USED)**

--- END ---

**SECTION 01 32 16.15  
PROJECT SCHEDULES**

**PART 4- GENERAL**

**4.1 DESCRIPTION:**

- A. The Contractor shall develop a Critical Path Method (CPM) plan and schedule demonstrating fulfillment of the contract requirements (Project Schedule), and shall keep the Project Schedule up-to-date in accordance with the requirements of this section and shall utilize the plan for scheduling, coordinating and monitoring work under this contract (including all activities of subcontractors, equipment vendors and suppliers). Conventional Critical Path Method (CPM) technique shall be utilized to satisfy both time and cost applications. The contractor's CPM shall be submitted within forty-five (45) calendar days of the Notice to Proceed. Contractor can mobilize, however physical work on contract cannot start until network analysis schedule is approved by the VA.

**4.2 CONTRACTOR'S REPRESENTATIVE:**

- A. The Contractor shall designate an authorized representative responsible for the Project Schedule including preparation, review and progress reporting with and to the Contracting Officer's Representative (COR).
- B. The Contractor's representative shall have direct project control and complete authority to act on behalf of the Contractor in fulfilling the requirements of this specification section.
- C. The Contractor's representative shall have the option of developing the project schedule within their organization or to engage the services of an outside consultant. If an outside scheduling consultant is utilized, Section 1.3 of this specification will apply.

**4.3 CONTRACTOR'S CONSULTANT:**

- A. The Contractor shall submit a qualification proposal to the COR, within ten (10) calendar days of bid acceptance. The qualification proposal shall include:
  - 1. The name and address of the proposed consultant.
  - 2. Information to show that the proposed consultant has the qualifications to meet the requirements specified in the preceding paragraph.
  - 3. A representative sample of prior construction projects, which the proposed consultant has performed complete project scheduling services. These representative samples shall be of similar size and scope.
- B. The Contracting Officer has the right to approve or disapprove the proposed consultant, and will notify the Contractor of the VA decision within seven (7) calendar days from receipt of the qualification proposal. In case of disapproval, the Contractor shall resubmit another consultant within ten (10) calendar days for renewed consideration. The Contractor shall have their scheduling consultant approved prior to submitting any schedule for approval.

#### 4.4 COMPUTER PRODUCED SCHEDULES

- A. The Contractor shall provide monthly, to the Department of Veterans Affairs (VA), all computer-produced time/cost schedules and reports generated from monthly project updates. This monthly computer service will include: three (3) copies of up to five (5) different reports (inclusive of all pages) available within the user defined reports of the scheduling software approved by the Contracting Officer; a hard copy listing of all project schedule changes, and associated data, made at the update and an electronic file of this data; and the resulting monthly updated schedule in PDM format. These must be submitted with and substantively support the contractor's monthly payment request and the signed look ahead report. The COR shall identify the five different report formats that the contractor shall provide.
- B. The Contractor shall be responsible for the correctness and timeliness of the computer produced reports. The Contractor shall also responsible for the accurate and timely submittal of the updated project schedule and all CPM data necessary to produce the computer reports and payment request that is specified.
- C. The VA will report errors in computer-produced reports to the Contractor's representative within ten calendar days from receipt of reports. The Contractor shall reprocess the computer produced reports and associated diskette(s), when requested by the Contracting Officer's representative, to correct errors which affect the payment and schedule for the project.

#### 4.5 THE COMPLETE PROJECT SCHEDULE SUBMITTAL

- A. **Within forty-five (45) calendar days** after receipt of Notice to Proceed, the Contractor shall submit for the Contracting Officers Representative's review; digital PDF file, three (3) blue line copies of **the interim schedule** on sheets of paper 765 x 1070 mm (30 x 42 inches) and an electronic file in the previously approved CPM schedule program. The submittal shall also include three (3) copies of a computer-produced activity/event ID schedule showing project duration; phase completion dates; and other data, including event cost. Each activity/event on the computer-produced schedule shall contain as a minimum, but not limited to, activity/event ID, activity/event description, duration, budget amount, early start date, early finish date, late start date, late finish date and total float. Work activity/event relationships shall be restricted to finish-to-start or start-to-start without lead or lag constraints. Activity/event date constraints, not required by the contract, will not be accepted unless submitted to and approved by the Contracting Officer. The Contractor shall make a separate written detailed request to the Contracting Officer identifying these date constraints and secure the Contracting Officer's written approval before incorporating them into the network diagram. The Contracting Officer's separate approval of the Project Schedule shall not excuse the Contractor of this requirement. Logic events (non-work) will be permitted where necessary to reflect proper logic among work events, but must have zero duration. The complete working schedule shall reflect the Contractor's approach to scheduling the complete project. **The final Project Schedule in its original form shall contain no contract changes or delays which may have been incurred during the final network diagram development period and shall reflect the entire contract duration as defined in the bid documents.** These changes/delays shall be entered at the first update after the **final Project Schedule** has been approved. The Contractor should provide their requests for time



and supporting time extension analysis for contract time as a result of contract changes/delays, after this update, and in accordance with Article, ADJUSTMENT OF CONTRACT COMPLETION.

- B. Within thirty (30) calendar days after receipt of the complete project **interim Project Schedule** and the complete **final Project Schedule**, the Contracting Officer will do one or both of the following:
  - 1. Notify the Contractor concerning his actions, opinions, and objections.
  - 2. A meeting with the Contractor for joint review, correction or adjustment of the proposed plan will be scheduled if required. Within fourteen (14) calendar days after the joint review, the Contractor shall revise and shall submit three (3) blue line copies of the revised Project Schedule, three copies of the revised computer-produced activity/event ID schedule and a revised electronic file as specified by the Contracting Officer. The revised submission will be reviewed by the Contracting Officer and, if found to be as previously agreed upon, will be approved.
- C. The approved baseline schedule and the computer-produced schedule(s) generated there from shall constitute the approved baseline schedule until subsequently revised in accordance with the requirements of this section.

#### 4.6 WORK ACTIVITY/EVENT COST DATA

- A. The Contractor shall cost load all work activities/events except procurement activities. The cumulative amount of all cost loaded work activities/events (including alternates) shall equal the total contract price. Prorate overhead, profit and general conditions on all work activities/events for the entire project length. The Contractor shall generate from this information cash flow curves indicating graphically the total percentage of work activity/event dollar value scheduled to be in place on early finish, late finish. These cash flow curves will be used by the Contracting Officer to assist him in determining approval or disapproval of the cost loading. Negative work activity/event cost data will not be acceptable, except on VA issued contract changes.
- B. The Contractor shall cost load work activities/events for guarantee period services, test, balance and adjust various systems in accordance with the provisions in Article, FAR 52.232 – 5 (PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS) and VAAR 852.236 – 83 (PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS).
- C. In accordance with FAR 52.236 – 1 (PERFORMANCE OF WORK BY THE CONTRACTOR) and VAAR 852.236 – 72 (PERFORMANCE OF WORK BY THE CONTRACTOR), the Contractor shall submit, simultaneously with the cost per work activity/event of the construction schedule required by this Section, a responsibility code for all activities/events of the project for which the Contractor's forces will perform the work.
- D. The Contractor shall cost load work activities/events for all BID ITEMS including ASBESTOS ABATEMENT. The sum of each BID ITEM work shall equal the value of the bid item in the Contractors' bid.

#### 4.7 PROJECT SCHEDULE REQUIREMENTS

- A. Show on the project schedule the sequence of work activities/events required for complete performance of all items of work. The Contractor Shall:

1. Show activities/events as:
    - a. Contractor's time required for submittal of shop drawings, templates, fabrication, delivery and similar pre-construction work.
    - b. Contracting Officer's and Architect-Engineer's review and approval of shop drawings, equipment schedules, samples, template, or similar items.
    - c. Interruption of VA Facilities utilities, delivery of Government furnished equipment, and rough-in drawings, project phasing and any other specification requirements.
    - d. Test, balance and adjust various systems and pieces of equipment, maintenance and operation manuals, instructions and preventive maintenance tasks.
    - e. VA inspection and acceptance activity/event with a minimum duration of five work days at the end of each phase and immediately preceding any VA move activity/event required by the contract phasing for that phase.
  2. Show not only the activities/events for actual construction work for each trade category of the project, but also trade relationships to indicate the movement of trades from one (1) area, floor, or building, to another area, floor, or building, for at least five trades who are performing major work under this contract.
  3. Break up the work into activities/events of a duration no longer than twenty **(20) calendar days** each or one reporting period, except as to non-construction activities/events (i.e., procurement of materials, delivery of equipment, concrete and asphalt curing) and any other activities/events for which the COR may approve the showing of a longer duration. The duration for VA approval of any required submittal, shop drawing, or other submittals will not be less than twenty **(20) calendar days**.
  4. Describe work activities/events clearly, so the work is readily identifiable for assessment of completion. Activities/events labeled "start," "continue," or "completion," are not specific and will not be allowed. Lead and lag time activities will not be acceptable.
  5. The schedule shall be generally numbered in such a way to reflect either discipline, phase or location of the work.
- B. The Contractor shall submit the following supporting data in addition to the project schedule:
1. The appropriate project calendar including working days and holidays.
  2. The planned number of shifts per day.
  3. The number of hours per shift.
- Failure of the Contractor to include this data shall delay the review of the submittal until the Contracting Officer is in receipt of the missing data.
- C. To the extent that the Project Schedule or any revised Project Schedule shows anything not jointly agreed upon, it shall not be deemed to have been approved by the COR. Failure to include any element of work required for the performance of this contract shall not excuse the Contractor from completing all work required within any applicable completion date of each phase regardless of the COR's approval of the Project Schedule.
- D. Compact Disk Requirements and CPM Activity/Event Record Specifications: Submit to the VA an electronic file(s) containing one file of the data required to produce a schedule, reflecting all the activities/events of the complete project schedule being submitted.
- E. The follow is a list of required inspections to be included in the project schedule. These inspections are to be included if the relevant trades are present in the project scope. See attached schedule at end of section.
1. Pre-site inspection of existing conditions
  2. ACM containment

3. Demo Completion
4. After ACM Clearance (prior to tear down)
5. Caulk line
6. Stud wall
7. MEP outlet box
8. MEP & Backing in-wall
9. MEP Insulation
10. Completion of Drywall
11. Above Ceiling
12. Penetration inspection before ceiling grid
13. Wall Hung Items; cabinets, mirrors, handrails
14. Finishes and trim
15. Flooring Seam Layout
16. Hardware
17. Final finishes and flooring
18. Commissioning
19. After punch list completion

#### **4.8 PAYMENT TO THE CONTRACTOR:**

- A. Monthly, the Contractor shall submit the AIA application and certificate for payment documents G702 & G703 reflecting updated schedule activities and cost data in accordance with the provisions of the following Article, PAYMENT AND PROGRESS REPORTING, as the basis upon which progress payments will be made pursuant to Article, FAR 52.232 – 5 (PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS) and VAAR 852.236 – 83 (PAYMENT UNDER FIXEDPRICE CONSTRUCTION CONTRACTS). The Contractor shall be entitled to a monthly progress payment upon approval of estimates as determined from the currently approved updated project schedule. Monthly payment requests shall include: a listing of all agreed upon project schedule changes and associated data; and an electronic file (s) of the resulting monthly updated schedule.
- B. Approval of the Contractor’s monthly Application for Payment shall be contingent, among other factors, on the submittal of a satisfactory monthly update of the project schedule.

#### **4.9 PAYMENT AND PROGRESS REPORTING**

- A. Monthly schedule update meetings will be held on dates mutually agreed to by the COR and the Contractor. Contractor and their CPM consultant (if applicable) shall attend all monthly schedule update meetings. The Contractor shall accurately update the Project Schedule and all other data required and provide this information to the COR **three (3) work days** in advance of the schedule update meeting. Job progress will be reviewed to verify:
  1. Actual start and/or finish dates for updated/completed activities/events.
  2. Remaining duration for each activity/event started, or scheduled to start, but not completed.
  3. Logic, time and cost data for change orders, and supplemental agreements that are to be incorporated into the Project Schedule.
  4. Changes in activity/event sequence and/or duration which have been made, pursuant to the provisions of following Article, ADJUSTMENT OF CONTRACT COMPLETION.

5. Completion percentage for all completed and partially completed activities/events.
  6. Logic and duration revisions required by this section of the specifications.
  7. Activity/event duration and percent complete shall be updated independently.
- B. After completion of the joint review, the contractor shall generate an updated computer produced calendar-dated schedule and supply the Contracting Officer's representative with reports in accordance with the Article, COMPUTER PRODUCED SCHEDULES, specified.
- C. After completing the monthly schedule update, the contractor's representative or scheduling consultant shall rerun all current period contract change(s) against the prior approved monthly project schedule. The analysis shall only include original workday durations and schedule logic agreed upon by the Contractor and Project Manager/ Contracting Officer's Representative for the contract change(s). When there is a disagreement on logic and/or durations, the Contractor shall use the schedule logic and/or durations provided and approved by the Project Manager/ Contracting Officer's Representative. After each rerun update, the resulting electronic project schedule data file shall be appropriately identified and submitted to the VA in accordance to the requirements listed in articles 1.4 and 1.7. This electronic submission is separate from the regular monthly project schedule update requirements and shall be submitted to the Project Manager/Contracting Officer's Representative within **fourteen (14) calendar days** of completing the regular schedule update. Before inserting the contract changes durations, care must be taken to ensure that only the original durations will be used for the analysis, not the reported durations after progress. In addition, once the final network diagram is approved, the Contractor must recreate all manual progress payment updates on this approved network diagram and associated reruns for contract changes in each of these update periods as outlined above for regular update periods. This will require detailed record keeping for each of the manual progress payment updates.
- D. Following approval of the CPM schedule, the VA, the Contractor, its approved CPM Consultant, RE office representatives, and all subcontractors needed, as determined by the SRE, shall meet to discuss the monthly updated schedule. The main emphasis shall be to address work activities to avoid slippage of project schedule and to identify any necessary actions required to maintain project schedule during the reporting period. The Government representatives and the Contractor should conclude the meeting with a clear understanding of those work and administrative actions necessary to maintain project schedule status during the reporting period. This schedule coordination meeting will occur after each monthly project schedule update meeting utilizing the resulting schedule reports from that schedule update. If the project is behind schedule, discussions should include ways to prevent further slippage as well as ways to improve the project schedule status, when appropriate.

#### 4.10 RESPONSIBILITY FOR COMPLETION

- A. If it becomes apparent from the current revised monthly progress schedule that phasing or contract completion dates will not be met, the Contractor shall execute some or all of the following remedial actions:
1. Increase construction manpower in such quantities and crafts as necessary to eliminate the backlog of work.
  2. Increase the number of working hours per shift, shifts per working day, working days per week, the amount of construction equipment, or any combination of the foregoing to eliminate the backlog of work.

3. Reschedule the work in conformance with the specification requirements.
- B. Prior to proceeding with any of the above actions, the Contractor shall notify and obtain approval from the COR for the proposed schedule changes. If such actions are approved, the representative schedule revisions shall be incorporated by the Contractor into the Project Schedule before the next update, at no additional cost to the Government.

#### **4.11 CHANGES TO THE SCHEDULE**

- A. Within thirty (30) calendar days after VA acceptance and approval of any updated project schedule, the Contractor shall submit a revised electronic file (s) and a list of any activity/event changes including predecessors and successors for any of the following reasons:
  1. Delay in completion of any activity/event or group of activities/events, which may be involved with contract changes, strikes, unusual weather, and other delays will not relieve the Contractor from the requirements specified unless the conditions are shown on the CPM as the direct cause for delaying the project beyond the acceptable limits.
  2. Delays in submittals, or deliveries, or work stoppage are encountered which make rescheduling of the work necessary.
  3. The schedule does not represent the actual prosecution and progress of the project.
  4. When there is, or has been, a substantial revision to the activity/event costs regardless of the cause for these revisions.
- B. CPM revisions made under this paragraph which affect the previously approved computer-produced schedules for Government furnished equipment, vacating of areas by the VA Facility, contract phase(s) and sub phase(s), utilities furnished by the Government to the Contractor, or any other previously contracted item, shall be furnished in writing to the Contracting Officer for approval.
- C. Contracting Officer's approval for the revised project schedule and all relevant data is contingent upon compliance with all other paragraphs of this section and any other previous agreements by the Contracting Officer or the VA representative.
- D. The cost of revisions to the project schedule resulting from contract changes will be included in the proposal for changes in work as specified in FAR 52.243 – 4 (Changes) and VAAR 852.236 – 88 (Changes – Supplemental), and will be based on the complexity of the revision or contract change, man hours expended in analyzing the change, and the total cost of the change.
- E. The cost of revisions to the Project Schedule not resulting from contract changes is the responsibility of the Contractor.

#### **4.12 ADJUSTMENT OF CONTRACT COMPLETION**

- A. The contract completion time will be adjusted only for causes specified in this contract. Request for an extension of the contract completion date by the Contractor shall be supported with a justification, CPM data and supporting evidence as the COR may deem necessary for determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract. Submission of proof based on revised activity/event logic, durations (in work days) and costs is obligatory to any approvals. The schedule must clearly display that the Contractor has used, in full, all the float time available for the work involved

in this request. The Contracting Officer's determination as to the total number of days of contract extension will be based upon the current computer-produced calendar-dated schedule for the time period in question and all other relevant information.

- B. Actual delays in activities/events which, according to the computer- produced calendar-dated schedule, do not affect the extended and predicted contract completion dates shown by the critical path in the network, will not be the basis for a change to the contract completion date. The Contracting Officer will within a reasonable time after receipt of such justification and supporting evidence, review the facts and advise the Contractor in writing of the Contracting Officer's decision.
- C. The Contractor shall submit each request for a change in the contract completion date to the Contracting Officer in accordance with the provisions specified under FAR 52.243 – 4 (Changes) and VAAR 852.236 – 88 (Changes – Supplemental). The Contractor shall include, as a part of each change order proposal, a sketch showing all CPM logic revisions, duration (in work days) changes, and cost changes, for work in question and its relationship to other activities on the approved network diagram.
- D. All delays due to non-work activities/events such as RFI's, WEATHER, STRIKES, and similar nonwork activities/events shall be analyzed on a month by month basis.

#### 4.13 REQUIRED INSPECTIONS

- 1 Pre-site inspection of existing conditions
- 2 ACM containment
- 3 Demo completion
- 4 After ACM clearance (prior to tear down)
- 5 Chalk line
- 6 Stud wall
- 7 MEP outlet box
- 8 MEP & Backing in-wall
- 9 MEP insulation
- 10 Completion of Drywall
- 11 Above Ceiling
- 12 Penetration inspection before ceiling grid
- 13 Wall Hung Items; cabinets, mirrors, handrails,
- 14 Finishes and Trim
- 15 Flooring Seam Layout
- 16 Hardware
- 17 Final finishes and flooring
- 18 Commissioning/Equipment Testing
- 19 Pre-Final Inspection (Punchlist)
- 20 Final Inspection (Punchlist Verification)

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**SECTION 01 32 16.16  
PROJECT SCHEDULES**

**PART 5- GENERAL**

**5.1 DESCRIPTION:**

- A. The Contractor shall develop a Critical Path Method (CPM) plan and schedule demonstrating fulfillment of the contract requirements (Project Schedule), and shall keep the Project Schedule up-to-date in accordance with the requirements of this section and shall utilize the plan for scheduling, coordinating and monitoring work under this contract (including all activities of subcontractors, equipment vendors and suppliers). Conventional Critical Path Method (CPM) technique shall be utilized to satisfy both time and cost applications. The contractor's CPM shall be submitted within fifteen (15) calendar days of the Notice to Proceed. Contractor can mobilize, however physical work on contract cannot start until network analysis schedule is approved by the VA.

**5.2 CONTRACTOR'S REPRESENTATIVE:**

- A. The Contractor shall designate an authorized representative responsible for the Project Schedule including preparation, review and progress reporting with and to the Contracting Officer's Representative.
- B. The Contractor's representative shall have direct project control and complete authority to act on behalf of the Contractor in fulfilling the requirements of this specification section.
- C. The Contractor's representative shall have the option of developing the project schedule within their organization or to engage the services of an outside consultant. If an outside scheduling consultant is utilized, Section 1.3 of this specification will apply.

**5.3 COMPUTER PRODUCED SCHEDULES**

- A. The Contractor shall provide monthly, to the Department of Veterans Affairs (VA), all computer produced time/cost schedules and reports generated from monthly project updates. This monthly computer service will include: three copies of up to five different reports (inclusive of all pages) available within the user defined reports of the scheduling software approved by the Contracting Officer; a hard copy listing of all project schedule changes, and associated data, made at the update and an electronic file of this data; and the resulting monthly updated schedule in PDM format. These must be submitted with and substantively support the contractor's monthly payment request and the signed look ahead report. The COR shall identify the five (5) different report formats that the contractor shall provide.
- B. The Contractor shall be responsible for the correctness and timeliness of the computer produced reports. The Contractor shall also responsible for the accurate and timely submittal of the updated project schedule and all CPM data necessary to produce the computer reports and payment request that is specified.
- C. The VA will report errors in computer-produced reports to the Contractor's representative **within ten (10) calendar days** from receipt of reports. The Contractor shall reprocess the computer-produced reports and associated diskette(s), when requested by the Contracting

Officer's Representative, to correct errors which affect the payment and schedule for the project.

#### 5.4 THE COMPLETE PROJECT SCHEDULE SUBMITTAL

- A. Within **fifteen (15) calendar days** after receipt of Notice to Proceed, the Contractor shall submit for the Contracting Officers Representative's review; digital PDF file, **three (3)** blue line copies of the interim schedule on sheets of paper 765 x 1070 mm (30 x 42 inches) and an electronic file in the previously approved CPM schedule program. The submittal shall also include three (3) copies of a computer-produced activity/event ID schedule showing project duration; phase completion dates; and other data, including event cost. Each activity/event on the computer-produced schedule shall contain as a minimum, but not limited to, activity/event ID, activity/event description, duration, budget amount, early start date, early finish date, late start date, late finish date and total float. Work activity/event relationships shall be restricted to finish-to-start or start-to-start without lead or lag constraints. Activity/event date constraints, not required by the contract, will not be accepted unless submitted to and approved by the Contracting Officer. The Contractor shall make a separate written detailed request to the Contracting Officer identifying these date constraints and secure the Contracting Officer's written approval before incorporating them into the network diagram. The Contracting Officer's separate approval of the Project Schedule shall not excuse the contractor of this requirement. Logic events (non-work) will be permitted where necessary to reflect proper logic among work events, but must have zero duration. The complete working schedule shall reflect the Contractor's approach to scheduling the complete project. The final Project Schedule in its original form shall contain no contract changes or delays which may have been incurred during the final network diagram development period and shall reflect the entire contract duration as defined in the bid documents. These changes/delays shall be entered at the first update after the final Project Schedule has been approved. The Contractor should provide their requests for time and supporting time extension analysis for contract time as a result of contract changes/delays, after this update, and in accordance with Article, ADJUSTMENT OF CONTRACT COMPLETION.
- B. Within **fifteen (15) calendar days** after receipt of the complete project interim Project Schedule and the complete final Project Schedule, the Contracting Officer or his representative, will do one or both of the following:
1. Notify the Contractor concerning his actions, opinions, and objections.
  2. A meeting with the Contractor at or near the job site for joint review, correction or adjustment of the proposed plan will be scheduled if required. Within **fourteen (14) calendar days** after the joint review, the Contractor shall revise and shall submit three blue line copies of the revised Project Schedule, three copies of the revised computer-produced activity/event ID schedule and a revised electronic file as specified by the Contracting Officer. The revised submission will be reviewed by the Contracting Officer and, if found to be as previously agreed upon, will be approved.
- C. The approved baseline schedule and the computer-produced schedule(s) generated there from shall constitute the approved baseline schedule until subsequently revised in accordance with the requirements of this section.



## 5.5 WORK ACTIVITY/EVENT COST DATA

- A. The Contractor shall cost load all work activities/events except procurement activities. The cumulative amount of all cost loaded work activities/events (including alternates) shall equal the total contract price. Prorate overhead, profit and general conditions on all work activities/events for the entire project length. The contractor shall generate from this information cash flow curves indicating graphically the total percentage of work activity/event dollar value scheduled to be in place on early finish, late finish. These cash flow curves will be used by the Contracting Officer to assist him in determining approval or disapproval of the cost loading. Negative work activity/event cost data will not be acceptable, except on VA issued contract changes.
- B. The Contractor shall cost load work activities/events for guarantee period services, test, balance and adjust various systems in accordance with the provisions in Article, FAR 52.232 – 5 (PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS) and VAAR 852.236 – 83 (PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS).
- C. In accordance with FAR 52.236 – 1 (PERFORMANCE OF WORK BY THE CONTRACTOR) and VAAR 852.236 – 72 (PERFORMANCE OF WORK BY THE CONTRACTOR), the Contractor shall submit, simultaneously with the cost per work activity/event of the construction schedule required by this Section, a responsibility code for all activities/events of the project for which the Contractor's forces will perform the work.
- D. The Contractor shall cost load work activities/events for all BID ITEMS including ASBESTOS ABATEMENT. The sum of each BID ITEM work shall equal the value of the bid item in the Contractors' bid.

## 5.6 PROJECT SCHEDULE REQUIREMENTS

- A. Show on the project schedule the sequence of work activities/events required for complete performance of all items of work. The Contractor Shall:
  - 1. Show activities/events as:
    - a. Contractor's time required for submittal of shop drawings, templates, fabrication, delivery and similar pre-construction work.
    - b. Contracting Officer's and Architect-Engineer's review and approval of shop drawings, equipment schedules, samples, template, or similar items.
    - c. Interruption of VA Facilities utilities, delivery of Government furnished equipment, and rough-in drawings, project phasing and any other specification requirements.
    - d. Test, balance and adjust various systems and pieces of equipment, maintenance and operation manuals, instructions and preventive maintenance tasks.
    - e. VA inspection and acceptance activity/event with a minimum duration of five (5) calendar days at the end of each phase and immediately preceding any VA move activity/event required by the contract phasing for that phase.
  - 2. Show not only the activities/events for actual construction work for each trade category of the project, but also trade relationships to indicate the movement of trades from one area, floor, or building, to another area, floor, or building, for at least five trades who are performing major work under this contract.

3. Break up the work into activities/events of a duration no longer than **twenty (20) calendar days** each or one reporting period, except as to non-construction activities/events (i.e., procurement of materials, delivery of equipment, concrete and asphalt curing) and any other activities/events for which the COR may approve the showing of a longer duration. The duration for VA approval of any required submittal, shop drawing, or other submittals will not be less than **twenty (20) calendar days**.
  4. Describe work activities/events clearly, so the work is readily identifiable for assessment of completion. Activities/events labeled "start," "continue," or "completion," are not specific and will not be allowed. Lead and lag time activities will not be acceptable.
  5. The schedule shall be generally numbered in such a way to reflect either discipline, phase or location of the work.
- B. The Contractor shall submit the following supporting data in addition to the project schedule:
1. The appropriate project calendar including working days and holidays.
  2. The planned number of shifts per day.
  3. The number of hours per shift.
- Failure of the Contractor to include this data shall delay the review of the submittal until the Contracting Officer is in receipt of the missing data.
- C. To the extent that the Project Schedule or any revised Project Schedule shows anything not jointly agreed upon, it shall not be deemed to have been approved by the COR. Failure to include any element of work required for the performance of this contract shall not excuse the Contractor from completing all work required within any applicable completion date of each phase regardless of the COR's approval of the Project Schedule.
- D. Compact Disk Requirements and CPM Activity/Event Record Specifications: Submit to the VA an electronic file(s) containing one file of the data required to produce a schedule, reflecting all the activities/events of the complete project schedule being submitted.
- E. The follow are a list of required inspections to be included in the project schedule. These inspections are to be included if the relevant trades are present in the project scope. See attached schedule at end of section.
1. Pre-site inspection of existing conditions.
  2. ACM containment
  3. Demo Completion
  4. After ACM Clearance (prior to tear down)
  5. Chaulk line
  6. Stud wall
  7. MEP outlet box
  8. MEP & Backing in-wall
  9. MEP Insulation
  10. Completion of Drywall
  11. Above Ceiling
  12. Penetration inspection before ceiling grid
  13. Wall Hung Items; cabinets, mirrors, handrails
  14. Finishes and trim
  15. Flooring Seam Layout
  16. Hardware
  17. Final finishes and flooring

- 18. Commissioning
- 19. After punch list completion

**5.7 PAYMENT TO THE CONTRACTOR:**

- A. Monthly, the Contractor shall submit the AIA application and certificate for payment documents G702 & G703 reflecting updated schedule activities and cost data in accordance with the provisions of the following Article, PAYMENT AND PROGRESS REPORTING, as the basis upon which progress payments will be made pursuant to Article, FAR 52.232 – 5 (PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS) and VAAR 852.236 – 83 (PAYMENT UNDER FIXEDPRICE CONSTRUCTION CONTRACTS). The Contractor shall be entitled to a monthly progress payment upon approval of estimates as determined from the currently approved updated project schedule. Monthly payment requests shall include: a listing of all agreed upon project schedule changes and associated data; and an electronic file (s) of the resulting monthly updated schedule.
- B. Approval of the Contractor’s monthly Application for Payment shall be contingent, among other factors, on the submittal of a satisfactory monthly update of the project schedule.

**5.8 PAYMENT AND PROGRESS REPORTING**

- A. Monthly schedule update meetings will be held on dates mutually agreed to by the COR and the Contractor. Contractor and their CPM consultant (if applicable) shall attend all monthly schedule update meetings. The Contractor shall accurately update the Project Schedule and all other data required and provide this information to the COR **five (5) calendar days** in advance of the schedule update meeting. Job progress will be reviewed to verify:
  - 1. Actual start and/or finish dates for updated/completed activities/events.
  - 2. Remaining duration for each activity/event started, or scheduled to start, but not completed.
  - 3. Logic, time and cost data for change orders, and supplemental agreements that are to be incorporated into the Project Schedule.
  - 4. Changes in activity/event sequence and/or duration which have been made, pursuant to the provisions of following Article, ADJUSTMENT OF CONTRACT COMPLETION.
  - 5. Completion percentage for all completed and partially completed activities/events.
  - 6. Logic and duration revisions required by this section of the specifications.
  - 7. Activity/event duration and percent complete shall be updated independently.
- B. After completion of the joint review, the contractor shall generate an updated computer produced calendar-dated schedule and supply the Contracting Officer’s representative with reports in accordance with the Article, COMPUTER PRODUCED SCHEDULES, specified.
- C. After completing the monthly schedule update, the contractor’s representative or scheduling consultant shall rerun all current period contract change(s) against the prior approved monthly project schedule. The analysis shall only include original workday durations and schedule logic agreed upon by the Contractor and Project Manager/Contracting Officer’s Representative for the contract change(s). When there is a disagreement on logic and/or durations, the Contractor shall use the schedule logic and/or durations provided and approved by the Project Manager/Contracting Officer’s Representative. After each rerun update, the resulting electronic project schedule data file shall be appropriately identified and submitted

to the VA in accordance to the requirements listed in articles 1.4 and 1.7. This electronic submission is separate from the regular monthly project schedule update requirements and shall be submitted to the Project Manager/Contracting Officer's Representative within **fourteen (14) calendar days** of completing the regular schedule update. Before inserting the contract changes durations, care must be taken to ensure that only the original durations will be used for the analysis, not the reported durations after progress. In addition, once the final network diagram is approved, the contractor must recreate all manual progress payment updates on this approved network diagram and associated reruns for contract changes in each of these update periods as outlined above for regular update periods. This will require detailed record keeping for each of the manual progress payment updates.

- D. Following approval of the CPM schedule, the VA, the Contractor, its approved CPM Consultant, RE office representatives, and all subcontractors needed, as determined by the SRE, shall meet to discuss the monthly updated schedule. The main emphasis shall be to address work activities to avoid slippage of project schedule and to identify any necessary actions required to maintain project schedule during the reporting period. The Government representatives and the Contractor should conclude the meeting with a clear understanding of those work and administrative actions necessary to maintain project schedule status during the reporting period. This schedule coordination meeting will occur after each monthly project schedule update meeting utilizing the resulting schedule reports from that schedule update. If the project is behind schedule, discussions should include ways to prevent further slippage as well as ways to improve the project schedule status, when appropriate.

## 5.9 RESPONSIBILITY FOR COMPLETION

- A. If it becomes apparent from the current revised monthly progress schedule that phasing or contract completion dates will not be met, the Contractor shall execute some or all of the following remedial actions:
  - 1. Increase construction manpower in such quantities and crafts as necessary to eliminate the backlog of work.
  - 2. Increase the number of working hours per shift, shifts per working day, working days per week, the amount of construction equipment, or any combination of the foregoing to eliminate the backlog of work.
  - 3. Reschedule the work in conformance with the specification requirements.
- B. Prior to proceeding with any of the above actions, the Contractor shall notify and obtain approval from the COR for the proposed schedule changes. If such actions are approved, the representative schedule revisions shall be incorporated by the Contractor into the Project Schedule before the next update, at no additional cost to the Government.

## 5.10 CHANGES TO THE SCHEDULE

- A. Within **thirty (30) calendar days** after VA acceptance and approval of any updated project schedule, the Contractor shall submit a revised electronic file (s) and a list of any activity/event changes including predecessors and successors for any of the following reasons:

1. Delay in completion of any activity/event or group of activities/events, which may be involved with contract changes, strikes, unusual weather, and other delays will not relieve the Contractor from the requirements specified unless the conditions are shown on the CPM as the direct cause for delaying the project beyond the acceptable limits.
  2. Delays in submittals, or deliveries, or work stoppage are encountered which make rescheduling of the work necessary.
  3. The schedule does not represent the actual prosecution and progress of the project.
  4. When there is, or has been, a substantial revision to the activity/event costs regardless of the cause for these revisions.
- B. CPM revisions made under this paragraph which affect the previously approved computer-produced schedules for Government furnished equipment, vacating of areas by the VA Facility, contract phase(s) and sub phase(s), utilities furnished by the Government to the Contractor, or any other previously contracted item, shall be furnished in writing to the Contracting Officer for approval.
- C. Contracting Officer's approval for the revised project schedule and all relevant data is contingent upon compliance with all other paragraphs of this section and any other previous agreements by the Contracting Officer or the VA representative.
- D. The cost of revisions to the project schedule resulting from contract changes will be included in the proposal for changes in work as specified in FAR 52.243 – 4 (Changes) and VAAR 852.236 – 88 (Changes – Supplemental), and will be based on the complexity of the revision or contract change, man hours expended in analyzing the change, and the total cost of the change.
- E. The cost of revisions to the Project Schedule not resulting from contract changes is the responsibility of the Contractor.

#### **5.11 ADJUSTMENT OF CONTRACT COMPLETION**

- A. The contract completion time will be adjusted only for causes specified in this contract. Request for an extension of the contract completion date by the Contractor shall be supported with a justification, CPM data and supporting evidence as the COR may deem necessary for determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract. Submission of proof based on revised activity/event logic, durations (in work days) and costs is obligatory to any approvals. The schedule must clearly display that the Contractor has used, in full, all the float time available for the work involved in this request. The Contracting Officer's determination as to the total number of days of contract extension will be based upon the current computer-produced calendar-dated schedule for the time period in question and all other relevant information.
- B. Actual delays in activities/events which, according to the computer-produced calendar-dated schedule, do not affect the extended and predicted contract completion dates shown by the critical path in the network, will not be the basis for a change to the contract completion date. The Contracting Officer will within a reasonable time after receipt of such justification and supporting evidence, review the facts and advise the Contractor in writing of the Contracting Officer's decision.
- C. The Contractor shall submit each request for a change in the contract completion date to the Contracting Officer in accordance with the provisions specified under FAR 52.243 – 4

(Changes) and VAAR 852.236 – 88 (Changes – Supplemental). The Contractor shall include, as a part of each change order proposal, a sketch showing all CPM logic revisions, duration (in work days) changes, and cost changes, for work in question and its relationship to other activities on the approved network diagram.

- D. All delays due to non-work activities/events such as RFI's, WEATHER, STRIKES, and similar nonwork activities/events shall be analyzed on a month by month basis.

## 5.12 REQUIRED INSPECTIONS

1. Pre-site inspection of existing conditions
2. ACM containment
3. Demo completion
4. After ACM clearance (prior to tear down)
5. Chalk line
6. Stud wall
7. MEP outlet box
8. MEP & Backing in-wall
9. MEP insulation
10. Completion of Drywall
11. Above Ceiling
12. Penetration inspection before ceiling grid
13. Wall Hung Items; cabinets, mirrors, handrails
14. Finishes and Trim
15. Flooring Seam Layout
16. Hardware
17. Final finishes and flooring
18. Commissioning/Equipment Testing
19. Pre-Final Inspection (Punchlist)
20. Final Inspection (Punchlist Verification)

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**SECTION 01 33 23  
SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES**

**PART 6 – GENERAL**

**6.1 DESCRIPTION**

- A. Refer to Articles titled SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION and, SPECIAL NOTES in GENERAL CONDITIONS.
- B. For the purposes of this contract, samples, test reports, certificates, and manufacturers' literature and data shall also be subject to the previously referenced requirements. The following text refers to all items collectively as SUBMITTALS.
- C. Submit for approval, all of the items specifically mentioned under the separate sections of the specification, with information sufficient to evidence full compliance with contract requirements. Materials, fabricated articles and the like to be installed in permanent work shall equal those of approved submittals. After an item has been approved, no change in brand or make will be permitted unless:
  - 1. Satisfactory written evidence is presented to, and approved by Contracting Officer, that manufacturer cannot make scheduled delivery of approved item or;
  - 2. Item delivered has been rejected and substitution of a suitable item is an urgent necessity or;
  - 3. Other conditions become apparent which indicates approval of such substitute item to be in best interest of the Government.
- D. Forward submittals in sufficient time to permit proper consideration and approval action by Government. Time submission to assure adequate lead time for procurement of contract - required items. Delays attributable to untimely and rejected submittals will not serve as a basis for extending contract time for completion.
- E. Submittals will be reviewed for compliance with contract requirements by Engineer of Record, and action thereon will be taken by Resident Engineer on behalf of the Contracting Officer.
- F. Upon receipt of submittals, Engineer of Record will assign a file number thereto. Contractor, in any subsequent correspondence, shall refer to this file and identification number to expedite replies relative to previously approved or disapproved submittals.
- G. The Government reserves the right to require additional submittals, whether or not particularly mentioned in this contract. If additional submittals beyond those required by the contract are furnished pursuant to request therefor by Contracting Officer, adjustment in contract price and time will be made in accordance with Articles titled CHANGES and CHANGES - SUPPLEMENT of the GENERAL CONDITIONS.
- H. Schedules called for in specifications and shown on shop drawings shall be submitted for use and information of Department of Veterans Affairs and Engineer of Record. However, the Contractor shall assume responsibility for coordinating and verifying schedules. The Contracting Officer and Engineer of Record assumes no responsibility

- for checking schedules or layout drawings for exact sizes, exact numbers and detailed positioning of items.
- I. Submittals must be submitted by Contractor only and shipped prepaid. Contracting Officer assumes no responsibility for checking quantities or exact numbers included in such submittals.
1. Submittals will receive consideration only when covered by a transmittal letter signed by Contractor. Letter shall be sent via first class mail and shall contain the list of items, name of Medical Center, name of Contractor, contract number, applicable specification paragraph numbers, applicable drawing numbers (and other information required for exact identification of location for each item), manufacturer and brand, ASTM or Federal Specification Number (if any) and such additional information as may be required by specifications for particular item being furnished. In addition, catalogs shall be marked to indicate specific items submitted for approval.
  2. A copy of letter must be enclosed with items, and any items received without identification letter will be considered "unclaimed goods" and held for a limited time only.
  3. Each sample, certificate, manufacturers' literature and data shall be labeled to indicate the name and location of the Medical Center, name of Contractor, manufacturer, brand, contract number and ASTM or Federal Specification Number as applicable and location(s) on project.
  4. Required certificates shall be signed by an authorized representative of manufacturer or supplier of material, and by Contractor.
  5. If submittal samples have been disapproved, resubmit new samples as soon as possible after notification of disapproval. Such new samples shall be marked "Resubmitted Sample" in addition to containing other previously specified information required on label and in transmittal letter.
  6. Approved samples will be kept on file by the Resident Engineer at the site until completion of contract, at which time such samples will be delivered to Contractor as Contractor's property. Where noted in technical sections of specifications, approved samples in good condition may be used in their proper locations in contract work. At completion of contract, samples that are not approved will be returned to Contractor only upon request and at Contractor's expense. Such request should be made prior to completion of the contract. Disapproved samples that are not requested for return by Contractor will be discarded after completion of contract.
  7. Submittal drawings (shop, erection or setting drawings) and schedules, required for work of various trades, shall be checked before submission by technically qualified employees of Contractor for accuracy, completeness and compliance with contract requirements. These drawings and schedules shall be stamped and signed by Contractor certifying to such check.
    - a. For each drawing required, submit one legible photographic paper or vellum reproducible.



- b. Reproducible shall be full size.
  - c. Each drawing shall have marked thereon, proper descriptive title, including Medical Center location, project number, manufacturer's number, reference to contract drawing number, detail Section Number, and Specification Section Number.
  - d. A space 120 mm by 125 mm (4-3/4 by 5 inches) shall be reserved on each drawing to accommodate approval or disapproval stamp.
  - e. Submit drawings, ROLLED WITHIN A MAILING TUBE, fully protected for shipment.
  - f. One (1) reproducible print of approved or disapproved shop drawings will be forwarded to Contractor.
  - g. When work is directly related and involves more than one trade, shop drawings shall be submitted to Engineer of Record under one cover.
- J. Samples shop drawings, test reports, certificates and manufacturers' literature and data, shall be submitted for approval to the Engineer of Record:  
VA Illiana Health Care System  
Facility Management Service (138)  
1900 East Main Street, Danville, IL 61832
- K. At the time of transmittal to the Engineer of Record, the Contractor shall also send a copy of the complete submittal directly to the Resident Engineer.

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**SECTION 01 33 24**  
**ELECTRONIC SUBMITTAL PROCEDURES**

**PART 7 – GENERAL**

**7.1 DESCRIPTION**

A. This section specifies requirements for provision and use of an electronic, web-based service for submittal and tracking of construction submittals for the Project.

**7.2 REFERENCED DOCUMENTS**

A. Additional submittal requirements: Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

**7.3 SUMMARY**

- A. The intent of electronic submittals is to expedite the construction process by reducing paperwork, improving information flow, and decreasing turnaround time.
- B. Shop drawing and product data submittals shall be transmitted to Architect in electronic (PDF) format using a web-based service designed specifically for transmitting and tracking submittals between construction team members.
- C. The electronic submittal process is not intended for color samples, color charts, or physical material samples.

**7.4 GENERAL DESCRIPTION OF PROCEDURES**

- A. Submittal Preparation - Contractor may use any or all of the following options:
  - 1. Subcontractors and Suppliers provide electronic (PDF) submittals to Contractor via the selected web-based service.
  - 2. Subcontractors and Suppliers provide paper submittals to Contractor who electronically scans and converts to PDF format.
  - 3. Subcontractors and Suppliers provide paper submittals to Scanning Service which electronically scans and converts to PDF format.
- B. Contractor shall review, comment, and apply electronic stamp certifying that the submittal (as noted) complies with the requirements of the Contract Documents including verification of manufacturer / product, dimensions and coordination of information with other parts of the work.
- C. Contractor shall transmit each submittal to Architect and Owner (simultaneously) using the selected web-based service.
- D. Architect / Engineer review comments will be made available on the selected web-based service. Contractor shall receive email notice of completed review.
- E. Distribution of reviewed submittals to subcontractors and suppliers is the responsibility of the Contractor.

**7.5 REQUIREMENTS AND RESPONSIBILITIES**

- A. The selected web-based service for submittal and tracking of construction submittals must provide:

1. Web-based tracking and approval system.
  2. Automated email notice for new submittals and reminders for submittals approaching the review deadline.
  3. Tracking and exchange of ITC/RFI/CO's and other similar documents as well as product and equipment submittals.
  4. Means for tracking of the status such documents including whether they have been approved and released by the Owner.
  5. Organized storage of submittals that is accessible for review by the designated construction team members at any time.
  6. Submit a complete set of submittals on CD to the Owner at the end of the Project. Include all submittals included product submittals, shop drawings, ITC/RFI/CO's and other similar submittals.
- B. Contractor responsibilities:
1. The cost of services shall be paid in full by the Contractor. Contractor shall include the full cost of the service and all related costs in their proposal.
  2. Training in the use of the service by the team members shall be at the option of the Contractor and, if chosen, shall be paid by the Contractor.
  3. Contractor shall have or obtain required hardware and software: Internet Service and Equipment Requirements:
    - i Email address and Internet access at Contractor's main office.
    - ii Adobe Acrobat ([www.adobe.com](http://www.adobe.com)), Bluebeam PDF Revu ([www.bluebeam.com](http://www.bluebeam.com)), or other similar PDF review software for applying electronic stamps and comments.
  4. Contractor shall prepare or have prepared all required submittals in the PDF format required.
    - i PDF files must be readable. As a general rule, a resolution of 300 dpi should be used.
    - ii If the Architect can download more readable product data directly from the manufacturer's website than was submitted by the Contractor, the Architect shall reserve the right to reject the submittal.
  5. Other responsibilities for submittals shall be as described in Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
    - i Color samples, color charts, or physical material samples shall be submitted as described in Section 01 33 23.

## 7.6 ACCEPTABLE SERVICES

- A. Service must be pre-approved by the Owner.
- B. The Contractor may submit any service meeting these requirements for approval.
- C. The following services have been pre-approved:
  1. Submittal Exchange: 1-800-714-0024; [www.submittalexchange.com](http://www.submittalexchange.com).

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**SECTION 01 35 26  
SAFETY REQUIREMENTS**

**PART 8 – GENERAL**

**8.1 APPLICABLE PUBLICATIONS:**

- A. Latest publications listed below form part of this Article to extent referenced. Publications are referenced in text by basic designations only.
- B. American Society of Safety Engineers (ASSE):
  - A10.1-2011 Pre-Project & Pre-Task Safety and Health Planning
  - A10.34-2012 Protection of the Public on or Adjacent to Construction Sites
  - A10.38-2013 Basic Elements of an Employer’s Program to Provide a Safe and Healthful Work Environment American National Standard Construction and Demolition Operations
- C. American Society for Testing and Materials (ASTM):
  - E84-2013 Surface Burning Characteristics of Building Materials
- D. The Facilities Guidelines Institute (FGI):
  - FGI Guidelines-2010 Guidelines for Design and Construction of Healthcare Facilities
- E. National Fire Protection Association (NFPA):
  - 10-2013 Standard for Portable Fire Extinguishers
  - 30-2012 Flammable and Combustible Liquids Code
  - 51B-2014 Standard for Fire Prevention During Welding, Cutting and Other Hot Work
  - 70-2014 National Electrical Code
  - 70B-2013 Recommended Practice for Electrical Equipment Maintenance
  - 70E-2012 Standard for Electrical Safety in the Workplace
  - 99-2012 Health Care Facilities Code
  - 241-2013 Standard for Safeguarding Construction, Alteration, and Demolition Operations
- F. The Joint Commission (TJC)
  - TJC Manual Comprehensive Accreditation and Certification Manual
- G. U.S. Nuclear Regulatory Commission
  - 10 CFR 20 Standards for Protection Against Radiation
- H. U.S. Occupational Safety and Health Administration (OSHA):
  - 29 CFR 1904 Reporting and Recording Injuries & Illnesses

29 CFR 1910	Safety and Health Regulations for General Industry
29 CFR 1926	Safety and Health Regulations for Construction Industry
	CPL 2-0.124 ..... Multi-Employer Citation Policy

I. VHA Directive 2005-007

**8.2 DEFINITIONS:**

- A. OSHA “Competent Person” (CP). One who is capable of identifying existing and predictable hazards in the surroundings and working conditions which are unsanitary, hazardous or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them (see 29 CFR 1926.32(f)).
- B. "Qualified Person" means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.
- C. High Visibility Accident is any mishap which may generate publicity or high visibility.
- D. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.
- E. Recordable Injuries or Illnesses. Any work-related injury or illness that results in:
  - 1. Death, regardless of the time between the injury and death, or the length of the illness;
  - 2. Days away from work (any time lost after day of injury/illness onset);
  - 3. Restricted work;
  - 4. Transfer to another job;
  - 5. Medical treatment beyond first aid;
  - 6. Loss of consciousness; or,
  - 7. A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.

**8.3 REGULATORY REQUIREMENTS:**

A. In addition to the detailed requirements included in the provisions of this contract, comply with 29 CFR 1926, comply with 29 CFR 1910 as incorporated by reference within 29 CFR 1926, comply with ASSE A10.34, and all applicable federal, state, and local laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern except with specific approval and acceptance by the Contracting Officer Representative.

#### 8.4 ACCIDENT PREVENTION PLAN (APP):

A. The APP (aka Construction Safety & Health Plan) shall interface with the Contractor's overall safety and health program. Include any portions of the Contractor's overall safety and health program referenced in the APP in the applicable APP element and ensure it is site-specific. The Government considers the Contractor to be the "controlling authority" for all worksite safety and health of each subcontractor(s). Contractor shall be responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. B. The APP shall be prepared as follows:

1. Written in English by a qualified person who is employed by the Contractor articulating the specific work and hazards pertaining to the contract (model language can be found in ASSE A10.33). Specifically articulating the safety requirements found within these VA contract safety specifications.
2. Address both the Contractors and the subcontractors work operations.
3. State measures to be taken to control hazards associated with materials, services, or equipment provided by suppliers.
4. Address all the elements/sub-elements and in order as follows
  - a. **SIGNATURE SHEET.** Title, signature, and phone number of the following:
    - (1) Plan preparer (Qualified Person such as corporate safety staff person or contracted Certified Safety Professional with construction safety experience);
    - (2) Plan approver (company/corporate officers authorized to obligate the company);
    - (3) Plan concurrence (e.g., Chief of Operations, Corporate Chief of Safety, Corporate Industrial Hygienist, project manager or superintendent, project safety professional). Provide concurrence of other applicable corporate and project personnel (Contractor).
  - b. **BACKGROUND INFORMATION.** List the following:
    - (1) Contractor;
    - (2) Contract number;
    - (3) Project name;
    - (4) Brief project description, description of work to be performed, and location; phases of work anticipated (these will require an AHA).
  - c. **STATEMENT OF SAFETY AND HEALTH POLICY.** Provide a copy of current corporate/company Safety and Health Policy Statement, detailing commitment to providing a safe and healthful workplace for all employees. The Contractor's written safety program goals, objectives, and accident experience goals for this contract should be provided.
  - d. **RESPONSIBILITIES AND LINES OF AUTHORITIES.** Provide the following:

- (1) A statement of the employer's ultimate responsibility for the implementation of his SOH program;
  - (2) Identification and accountability of personnel responsible for safety at both corporate and project level. Contracts specifically requiring safety or industrial hygiene personnel shall include a copy of their resumes.
  - (3) The names of Competent and/or Qualified Person(s) and proof of competency/qualification to meet specific OSHA Competent/Qualified Person(s) requirements must be attached;
  - (4) Requirements that no work shall be performed unless a designated competent person is present on the job site;
  - (5) Requirements for pre-task Activity Hazard Analysis (AHAs);
  - (6) Lines of authority;
  - (7) Policies and procedures regarding noncompliance with safety requirements (to include disciplinary actions for violation of safety requirements) should be identified;
- e. **SUBCONTRACTORS AND SUPPLIERS.** If applicable, provide procedures for coordinating SOH activities with other employers on the job site:
- (1) Identification of subcontractors and suppliers (if known);
  - (2) Safety responsibilities of subcontractors and suppliers.
- f. **TRAINING.**
- (1) Site-specific SOH orientation training at the time of initial hire or assignment to the project for every employee before working on the project site is required.
  - (2) Mandatory training and certifications that are applicable to this project (e.g., explosive actuated tools, crane operator, rigger, crane signal person, fall protection, electrical lockout/NFPA 70E, machine/equipment lockout, confined space, etc.) and any requirements for periodic retraining/recertification are required.
  - (3) Procedures for ongoing safety and health training for supervisors and employees shall be established to address changes in site hazards/conditions.
  - (4) OSHA 10-hour training is required for all workers on site and the OSHA 30-hour training is required for Competent Persons (CPs).
- g. **SAFETY AND HEALTH INSPECTIONS.**
- (1) Specific assignment of responsibilities for a minimum daily job site safety and health inspection during periods of work activity: Who will conduct (e.g., "Site Safety and Health CP"), proof of inspector's training/qualifications, when inspections will be conducted, procedures for documentation, deficiency tracking system, and follow-up procedures.
  - (2) Any external inspections/certifications that may be required (e.g., contracted CSP or CSHT)
- h. **ACCIDENT INVESTIGATION & REPORTING.** The Contractor shall conduct mishap investigations of all OSHA Recordable Incidents. The APP shall

include accident/incident investigation procedure & identify person(s) responsible to provide the following to the Contracting Officer Representative:

- (1) Exposure data (man-hours worked);
- (2) Accident investigations, reports, and logs.

- i. **PLANS (PROGRAMS, PROCEDURES) REQUIRED.** Based on a risk assessment of contracted activities and on mandatory OSHA compliance programs, the Contractor shall address all applicable occupational risks in site-specific compliance and accident prevention plans. These Plans shall include but are not be limited to procedures for addressing the risks associates with the following:
  - (1) Emergency response;
  - (2) Contingency for severe weather;
  - (3) Fire Prevention;
  - (4) Medical Support;
  - (5) Posting of emergency telephone numbers;
  - (6) Prevention of alcohol and drug abuse;
  - (7) Site sanitation (housekeeping, drinking water, toilets);
  - (8) Night operations and lighting;
  - (9) Hazard communication program;
  - (10) Welding/Cutting “Hot” work;
  - (11) Electrical Safe Work Practices (Electrical LOTO/NFPA 70E);
  - (12) General Electrical Safety;
  - (13) Hazardous energy control (Machine LOTO);
  - (14) Site-Specific Fall Protection & Prevention;
  - (15) Excavation/trenching;
  - (16) Asbestos abatement;
  - (17) Lead abatement;
  - (18) Crane Critical lift;
  - (19) Respiratory protection;
  - (20) Health hazard control program;
  - (21) Radiation Safety Program;
  - (22) Abrasive blasting;
  - (23) Heat/Cold Stress Monitoring;
  - (24) Crystalline Silica Monitoring (Assessment);
  - (25) Demolition plan (to include engineering survey);
  - (26) Formwork and shoring erection and removal;
  - (27) Precast Concrete.
- C. Submit the APP to the Contracting Officer Representative for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP.
- D. Once accepted by the Contracting Officer Representative, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the



accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

- E. Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer Representative. Should any severe hazard exposure, i.e. imminent danger, become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate/remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ASSE/SAFE A10.34) and the environment.

### **8.5 ACTIVITY HAZARD ANALYSES (AHAS):**

- A. AHAs are also known as Job Hazard Analyses, Job Safety Analyses, and Activity Safety Analyses. Before beginning each work activity involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform the work, the Contractor(s) performing that work activity shall prepare an AHA (Example electronic AHA forms can be found on the US Army Corps of Engineers web site).
- B. AHAs shall define the activities being performed and identify the work sequences, the specific anticipated hazards, site conditions, equipment, materials, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level of risk.
- C. Work shall not begin until the AHA for the work activity has been accepted by the Contracting Officer Representative and discussed with all engaged in the activity, including the Contractor, subcontractor(s), and Government on-site representatives at preparatory and initial control phase meetings.
  - 1. The names of the Competent/Qualified Person(s) shall be identified and included in the AHA. Certification of their competency/qualification shall be submitted to the Government Designated Authority (GDA) for acceptance prior to the start of that work activity.
  - 2. The AHA shall be reviewed and modified as necessary to address changing site conditions, operations, or change of competent/qualified person(s).
    - a. If more than one Competent/Qualified Person is used on the AHA activity, a list of names shall be submitted as an attachment to the AHA. Those listed must be Competent/Qualified for the type of work involved in the AHA and familiar with current site safety issues.
    - b. If a new Competent/Qualified Person (not on the original list) is added, the list shall be updated (an administrative action not requiring an updated AHA). The new person shall acknowledge in writing that he or she has reviewed the AHA and is familiar with current site safety issues.
  - 3. Submit AHAs to the Contracting Officer Representative for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES for review at least 15 calendar days prior to the

- start of each phase. Subsequent AHAs as shall be formatted as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.
4. The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.
  5. Develop the activity hazard analyses using the project schedule as the basis for the activities performed. All activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier, or subcontractor and provided to the prime contractor for review and approval and then submitted to the Contracting Officer Representative.

**8.6 PRECONSTRUCTION CONFERENCE:**

- A. Contractor representatives who have a responsibility or significant role in implementation of the accident prevention program, as required by 29 CFR 1926.20(b)(1), on the project shall attend the preconstruction conference to gain a mutual understanding of its implementation. This includes the project superintendent, subcontractor superintendents, and any other assigned safety and health professionals.
- B. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, review, and acceptance of AHAs to preclude project delays.
- C. Deficiencies in the submitted APP will be brought to the attention of the Contractor within 14 days of submittal, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Do not begin work until there is an accepted APP.

**8.7 “SITE SAFETY AND HEALTH OFFICER” (SSHO) AND “COMPETENT PERSON” (CP):**

- A. The Contractor shall designate a minimum of one SSHO at each project site that will be identified as the SSHO to administer the Contractor's safety program and government-accepted Accident Prevention Plan. The Contractor shall designate a minimum of one CP in compliance with 29 CFR 1926.20 (b)(2) that will be identified as a CP to administer their safety program.
- B. These Competent Persons can have collateral duties as the subcontractor’s superintendent and/or work crew lead persons.
- C. The SSHO or an equally-qualified Designated Representative/alternate will maintain a presence on the site during construction operations in accordance with FAR Clause 52.236-6: *Superintendence by the Contractor*. CPs will maintain presence during their construction activities in accordance with above mentioned clause. A listing of the

designated SSHO and all the CPs shall be submitted prior to the start of work as part of the APP with the training documentation and/or AHA as listed in Section 1.8 below.

- D. The repeated presence of uncontrolled hazards during a contractor's work operations will result in the designated CP as being deemed incompetent and result in the required removal of the employee in accordance with FAR Clause 52.236-5: Material and Workmanship, Paragraph (c).

### 8.8 TRAINING:

- A. The Contractor SSHO must meet the requirements of all applicable OSHA standards and be capable (through training, experience, and qualifications) of ensuring that the requirements of 29 CFR 1926.16 and other appropriate Federal, State and local requirements are met for the project. As a minimum the SSHO must have completed the OSHA 30-hour Construction Safety class and **have five (5) years** of construction industry safety experience or **three (3) years** if he/she possesses a Certified Safety Professional (CSP) or certified Construction Safety and Health Technician (CSHT) certification or have a safety and health degree from an accredited university or college.
- B. All designated CPs shall have completed the OSHA 30-hour Construction Safety course within the **past five (5) years**.
- C. All other construction workers shall have the OSHA ten (10)-hour Construction Safety Outreach course and any necessary safety training to be able to identify hazards within their work environment.
- D. Submit training records associated with the above training requirements to the Contracting Officer Representative /for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES 15 calendar days prior to the date of the preconstruction conference for acceptance.
- E. Prior to any worker for the Contractor or subcontractors beginning work, they shall undergo a safety briefing provided by the SSHO or his/her designated representative. As a minimum, this briefing shall include information on the site-specific hazards, construction limits, VAMC safety guidelines, means of egress, break areas, work hours, locations of restrooms, use of VAMC equipment, emergency procedures, accident reporting etc... Documentation shall be provided to the Resident Engineer that individuals have undergone contractor's safety briefing.
- F. Ongoing safety training will be accomplished in the form of weekly documented safety meeting.

### 8.9 INSPECTIONS:

- A. The SSHO shall conduct frequent and regular safety inspections (daily) of the site and each of the subcontractors CPs shall conduct frequent and regular safety inspections (daily) of their work operations as required by 29 CFR 1926.20(b)(2). Each week, the SSHO shall conduct a formal documented inspection of the entire construction areas with the subcontractors' present in their work areas. Coordinate with, and report findings and corrective actions weekly to Contracting Officer Representative.

- B. A Certified Safety Professional (CSP) with specialized knowledge in construction safety or a certified Construction Safety and Health Technician (CSHT) shall randomly conduct a monthly site safety inspection. The CSP or CSHT can be a corporate safety professional or independently contracted. The CSP or CSHT will provide their certificate number on the required report for verification as necessary.
  - 1. Results of the inspection will be documented with tracking of the identified hazards to abatement.
  - 2. The Contracting Officer Representative will be notified immediately prior to start of the inspection and invited to accompany the inspection.
  - 3. Identified hazard and controls will be discussed to come to a mutual understanding to ensure abatement and prevent future reoccurrence.
  - 4. A report of the inspection findings with status of abatement will be provided to the Contracting Officer Representative within one (1) week of the onsite inspection.

**8.10 ACCIDENTS, OSHA 300 LOGS, AND MAN-HOURS:**

- A. Notify the Contracting Officer Representative as soon as practical, but no more than four hours after any accident meeting the definition of OSHA Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$5,000, or any weight handling equipment accident. Within notification include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Contracting Officer Representative determine whether a government investigation will be conducted.
- B. Conduct an accident investigation for recordable injuries and illnesses, for Medical Treatment defined in paragraph DEFINITIONS, and property damage accidents resulting in at least \$20,000 in damages, to establish the root cause(s) of the accident. Complete the VA Form 2162, and provide the report to the Contracting Officer Representative within five (5) calendar days of the accident. The Contracting Officer Representative will provide copies of any required or special forms.
- C. A summation of all man-hours worked by the Contractor and associated sub-contractors for each month will be reported to the Contracting Officer Representative monthly.
- D. A summation of all OSHA recordable accidents experienced on site by the contractor and associated sub-contractors for each month will be provided to the Contracting Officer Representative monthly. The Contractor and associated sub-contractors' OSHA 300 logs will be made available to the Contracting Officer Representative as requested.

**8.11 PERSONAL PROTECTIVE EQUIPMENT (PPE):**

PPE is governed in all areas by the nature of the work the employee is performing. For example, specific PPE required for performing work on electrical equipment is identified in NFPA 70E, Standard for Electrical Safety in the Workplace. B. Mandatory PPE includes:

1. Hard Hats – unless written authorization is given by the Contracting Officer Representative in circumstances of work operations that have limited potential for falling object hazards such as during finishing work or minor remodeling. With authorization to relax the requirement of hard hats, if a worker becomes exposed to an overhead falling object hazard, then hard hats would be required in accordance with the OSHA regulations.
2. Safety glasses – unless written authorization is given by the Contracting Officer Representative, appropriate safety glasses meeting the ANSI Z.87.1 standard must be worn by each person on site.
3. Appropriate Safety Shoes – based on the hazards present, safety shoes meeting the requirements of ASTM F2413-11 shall be worn by each person on site unless written authorization is given by the Contracting Officer Representative.
4. Hearing protection – Use personal hearing protection at all times in designated noise hazardous areas or when performing noise hazardous tasks.

## 8.12 INFECTION CONTROL

Infection Control is critical in all Medical Center facilities. Interior construction activities causing disturbance of existing dust, or creating new dust, must be conducted within ventilation controlled areas that minimize the flow of airborne particles into patient areas. Exterior construction activities causing disturbance of soil or creates dust in some other manner must be controlled. Refer to Specification Section 01 01 10 IC for more detailed information regarding Infection Control.

## 8.13 FIRE SAFETY

- A. **Fire Safety Plan:** Establish and maintain a site-specific fire protection program in accordance with 29 CFR 1926. Prior to start of work, prepare a plan detailing project-specific fire safety measures, including periodic status reports, and submit to Contracting Officer Representative for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES. This plan may be an element of the Accident Prevention Plan. Refer to Specification Section 01 01 10 FSS for more detailed information regarding Fire Safety.
- B. **Site and Building Access:** Maintain free and unobstructed access to facility emergency services and for fire, police and other emergency response forces in accordance with NFPA 241.
- C. Separate temporary facilities, such as trailers, storage sheds, and dumpsters, from existing buildings and new construction by distances in accordance with NFPA 241. For small facilities with less than 6 m (20 feet) exposing overall length, separate by 3m (10 feet).
- D. Temporary Construction Partitions:
  1. Install and maintain temporary construction partitions to provide smoke-tight separations between construction areas, the areas that are described in phasing requirements, and adjoining areas. Construct partitions of gypsum board or treated plywood (flame spread rating of 25 or less in accordance with ASTM E84) on both

- sides of fire retardant treated wood or metal steel studs. Extend the partitions through suspended ceilings to floor slab deck or roof. Seal joints and penetrations. At door openings, install Class C, ¾ hour fire/smoke rated doors with self-closing devices.
2. Install one-hour, two-hour fire-rated temporary construction partitions as shown on drawings to maintain integrity of existing exit stair enclosures, exit passageways, fire-rated enclosures of hazardous areas, horizontal exits, smoke barriers, vertical shafts and openings enclosures.
  3. Close openings in smoke barriers and fire-rated construction to maintain fire ratings. Seal penetrations with listed through-penetration firestop materials in accordance with Section 07 84 00, FIRESTOPPING.
- E. Temporary Heating and Electrical: Install, use and maintain installations in accordance with 29 CFR 1926, NFPA 241 and NFPA 70.
  - F. Means of Egress: Do not block exiting for occupied buildings, including paths from exits to roads. Minimize disruptions and coordinate with Contracting Officer Representative.
  - G. Egress Routes for Construction Workers: Maintain free and unobstructed egress. Inspect daily. Report findings and corrective actions weekly to Contracting Officer Representative.
  - H. Fire Extinguishers: Provide and maintain extinguishers in construction areas and temporary storage areas in accordance with 29 CFR 1926, NFPA 241 and NFPA 10.
  - I. Flammable and Combustible Liquids: Store, dispense and use liquids in accordance with 29 CFR 1926, NFPA 241 and NFPA 30.
  - J. Standpipes: Install and extend standpipes up with each floor in accordance with 29 CFR 1926 and NFPA 241. Do not charge wet standpipes subject to freezing until weather protected.
  - K. Sprinklers: Install, test and activate new automatic sprinklers prior to removing existing sprinklers.
  - L. Existing Fire Protection: Do not impair automatic sprinklers, smoke and heat detection, and fire alarm systems, except for portions immediately under construction, and temporarily for connections. Provide fire watch for impairments more than 4 hours in a 24-hour period. Request interruptions in accordance with Article, OPERATIONS AND STORAGE AREAS, and coordinate with Contracting Officer Representative. All existing or temporary fire protection systems (fire alarms, sprinklers) located in construction areas shall be tested as coordinated with the medical center. Parameters for the testing and results of any tests performed shall be recorded by the medical center and copies provided to the Contracting Officer Representative.
  - M. Smoke Detectors: Prevent accidental operation. Remove temporary covers at end of work operations each day. Coordinate with Contracting Officer Representative.
  - N. Hot Work: Perform and safeguard hot work operations in accordance with NFPA 241 and NFPA 51B. Coordinate with Contracting Officer Representative at least **ten (10) calendar days** in advance. Designate contractor's responsible project-site fire prevention program manager to permit hot work.

- O. Fire Hazard Prevention and Safety Inspections: Inspect entire construction areas weekly. Coordinate with, and report findings and corrective actions weekly to Contracting Officer Representative.
- P. Smoking: Smoking is prohibited in and adjacent to construction areas inside existing buildings and additions under construction. In separate and detached buildings under construction, smoking is prohibited except in designated smoking rest areas.
- Q. Dispose of waste and debris in accordance with NFPA 241. Remove daily.
- R. If required, submit documentation to the Contracting Officer Representative that personnel have been trained in the Fire Safety aspects of working in areas with impaired structural or compartmentalization features.

#### **8.14 ELECTRICAL**

- A. All electrical work shall comply with NFPA 70 (NEC), NFPA 70B, NFPA 70E, 29 CFR Part 1910 Subpart J – General Environmental Controls, 29 CFR Part 1910 Subpart S – Electrical, and 29 CFR 1926 Subpart K in addition to other references required by contract.
- B. All qualified persons performing electrical work under this contract shall be licensed journeyman or master electricians. All apprentice electricians performing under this contract shall be deemed unqualified persons unless they are working under the immediate supervision of a licensed electrician or master electrician.
- C. All electrical work will be accomplished de-energized and in the Electrically Safe Work Condition (refer to NFPA 70E for Work Involving Electrical Hazards, including Exemptions to Work Permit). Any Contractor, subcontractor or temporary worker who fails to fully comply with this requirement is subject to immediate termination in accordance with FAR clause 52.236-5(c). Only in rare circumstance where achieving an electrically safe work condition prior to beginning work would increase or cause additional hazards, or is infeasible due to equipment design or operational limitations is energized work permitted. The Contracting Officer Representative with approval of the Medical Center Director will make the determination if the circumstances would meet the exception outlined above. An AHA specific to energized work activities will be developed, reviewed, and accepted prior to the start of that work.
  - 1. Development of a Hazardous Electrical Energy Control Procedure is required prior to deenergizing. A single Simple Lockout/Tagout Procedure for multiple work operations can only be used for work involving qualified person(s) de-energizing one set of conductors or circuit part source. Task specific Complex Lockout/Tagout Procedures are required at all other times.
  - 2. Verification of the absence of voltage after de-energizing and lockout/tagout is considered “energized electrical work” (live work) under NFPA 70E, and shall only be performed by qualified persons wearing appropriate shock protective (voltage rated) gloves and arc rate personal protective clothing and equipment, using Underwriters Laboratories (UL) tested and appropriately rated contact electrical testing instruments or equipment appropriate for the environment in which they will be used.

3. Personal Protective Equipment (PPE) and electrical testing instruments will be readily available for inspection by the Contracting Officer Representative.
- D. Before beginning any electrical work, an Activity Hazard Analysis (AHA) will be conducted to include Shock Hazard and Arc Flash Hazard analyses (NFPA Tables can be used only as a last alternative and it is strongly suggested a full Arc Flash Hazard Analyses be conducted). Work shall not begin until the AHA for the work activity has been accepted by the Contracting Officer Representative and discussed with all engaged in the activity, including the Contractor, subcontractor(s), and Government on-site representatives at preparatory and initial control phase meetings.
- E. Ground-fault circuit interrupters. All 120-volt, single-phase 15- and 20-ampere receptacle outlets on construction sites shall have approved ground-fault circuit interrupters for personnel protection. "Assured Equipment Grounding Conductor Program" only is not allowed.

### **8.15 FALL PROTECTION**

The fall protection (FP) threshold height requirement is 6 ft. (1.8 m) for ALL WORK, unless specified differently or the OSHA 29 CFR 1926 requirements are more stringent, to include steel erection activities, systems-engineered activities (prefabricated) metal buildings, residential (wood) construction and scaffolding work.

1. The use of a Safety Monitoring System (SMS) as a fall protection method is prohibited.
2. The use of Controlled Access Zone (CAZ) as a fall protection method is prohibited.
3. A Warning Line System (WLS) may ONLY be used on floors or flat or low-sloped roofs (between 0 - 18.4 degrees or 4:12 slope) and shall be erected around all sides of the work area (See 29 CFR 1926.502(f) for construction of WLS requirements). Working within the WLS does not require FP. No worker shall be allowed in the area between the roof or floor edge and the WLS without FP. FP is required when working outside the WLS.
4. Fall protection while using a ladder will be governed by the OSHA requirements.

### **8.16 SCAFFOLDS AND OTHER WORK PLATFORMS**

- A. All scaffolds and other work platforms construction activities shall comply with 29 CFR 1926 Subpart L.
- B. The fall protection (FP) threshold height requirement is 6 ft. (1.8 m) as stated in Section 1.16.
- C. The following hierarchy and prohibitions shall be followed in selecting appropriate work platforms.
  1. Scaffolds, platforms, or temporary floors shall be provided for all work except that can be performed safely from the ground or similar footing.
  2. Ladders less than 20 feet may be used as work platforms only when use of small hand tools or handling of light material is involved.
  3. Ladder jacks, lean-to, and prop-scaffolds are prohibited.
  4. Emergency descent devices shall not be used as working platforms.



- D. Contractors shall use a scaffold tagging system in which all scaffolds are tagged by the Competent Person. Tags shall be color-coded: green indicates the scaffold has been inspected and is safe to use; red indicates the scaffold is unsafe to use. Tags shall be readily visible, made of materials that will withstand the environment in which they are used, be legible and shall include:
  - 1. The Competent Person's name and signature;
  - 2. Dates of initial and last inspections.
- E. Mast Climbing work platforms: When access ladders, including masts designed as ladders, exceed 20 ft. (6 m) in height, positive fall protection shall be used.

### **8.17 EXCAVATION AND TRENCHES**

- A. All excavation and trenching work shall comply with 29 CFR 1926 Subpart P.
- B. All excavations and trenches 5 feet in depth or greater shall require a written trenching and excavation permit (NOTE – some States and other local jurisdictions require separate state/jurisdiction-issued excavation permits). The permit shall be completed and provided to the Contracting Officer Representative prior to commencing work for the day. At the end of the day, the permit shall be closed out and provided to the Contracting Officer Representative and/or other Government Designated Authority. The permit shall be maintained onsite and include the following:
  - 1. Determination of soil classification.
  - 2. Indication that utilities have been located and identified. If utilities could not be located after all reasonable attempt, then excavating operations will proceed cautiously.
  - 3. Indication of selected excavation protective system.
  - 4. Indication that the spoil pile will be stored at least 2 feet from the edge of the excavation and safe access provided within 25 feet of the workers.
  - 5. Indication of assessment for a potential toxic, explosive, or oxygen deficient atmosphere.
- C. If not using an engineered protective system such as a trench box, shielding, shoring, or other Professional Engineer designed system and using a sloping or benching system, soil classification cannot be Solid Rock or Type A. All soil will be classified as Type B or Type C and sloped or benched in accordance with Appendix B of 29 CFR 1926.

### **8.18 CRANES**

- A. All crane work shall comply with 29 CFR 1926 Subpart C.
- B. Prior to operating a crane, the operator must be licensed, qualified or certified to operate the crane. Thus, all the provisions contained with Subpart CC are effective and there is no "Phase In" date of November 10, 2014.
- C. A detailed lift permit shall be submitted 14 days prior to the scheduled lift complete with route for truck carrying load, crane load analysis, siting of crane and path of swing. The lift will not be allowed without approval of this document.
- D. Crane operators shall not carry loads:
  - 1. Over the general public or VAMC personnel

2. Over any occupied building unless
  - a. The top two floors are vacated
  - b. Or overhead protection with a design live load of 300 psf is provided.

### **8.19 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)**

All installation, maintenance, and servicing of equipment or machinery shall comply with 29 CFR 1910.147 except for specifically referenced operations in 29 CFR 1926 such as concrete & masonry equipment 1926.702(j), heavy machinery & equipment 1926.600(a)(3)(i), and process safety management of highly hazardous chemicals (1926.64). Control of hazardous electrical energy during the installation, maintenance, or servicing of electrical equipment shall comply with Section 1.15 to include NFPA 70E and other VA specific requirements discussed in the section.

### **8.20 CONFINED SPACE ENTRY**

- A. All confined space entry shall comply with 29 CFR 1910.146 except for specifically referenced operations in 29 CFR 1926 such as excavations/trenches 1926.651(g).
- B. A site-specific Confined Space Entry Plan (including permitting process) shall be developed and submitted to the Contracting Officer Representative.

### **8.21 WELDING AND CUTTING**

As specified in section 1.14, Hot Work: Perform and safeguard hot work operations in accordance with NFPA 241 and NFPA 51B. Coordinate with Contracting Officer Representative. Obtain permits from Contracting Officer Representative at least ten (10) calendar days in advance.

### **8.22 LADDERS**

- A. All Ladder use shall comply with 29 CFR 1926 Subpart X.
- B. All portable ladders shall be of sufficient length and shall be placed so that workers will not stretch or assume a hazardous position.
- C. Manufacturer safety labels shall be in place on ladders.
- D. Step Ladders shall not be used in the closed position.
- E. Top steps or cap of step ladders shall not be used as a step.
- F. Portable ladders, used as temporary access, shall extend at least 3 ft (0.9 m) above the upper landing surface.
  1. When a 3 ft. (0.9-m) extension is not possible, a grasping device (such as a grab rail) shall be provided to assist workers in mounting and dismounting the ladder.
  2. In no case shall the length of the ladder be such that ladder deflection under a load would, by itself, cause the ladder to slip from its support.
- G. Ladders shall be inspected for visible defects on a daily basis and after any occurrence that could affect their safe use. Broken or damaged ladders shall be immediately tagged "DO NOT USE," or with similar wording, and withdrawn from service until restored to a condition meeting their original design.

### 8.23 FLOOR & WALL OPENINGS

- A. All floor and wall openings shall comply with 29 CFR 1926 Subpart M.
- B. Floor and roof holes/openings are any that measure over 2 in (51 mm) in any direction of a walking/working surface which persons may trip or fall into or where objects may fall to the level below. See 21.F for covering and labeling requirements. Skylights located in floors or roofs are considered floor or roof hole/openings.
- C. All floor, roof openings or hole into which a person can accidentally walk or fall through shall be guarded either by a railing system with toe boards along all exposed sides or a load-bearing cover. When the cover is not in place, the opening or hole shall be protected by a removable guardrail system or shall be attended when the guarding system has been removed or other fall protection system.
  - 1. Covers shall be capable of supporting, without failure, at least twice the weight of the worker, equipment and material combined.
  - 2. Covers shall be secured when installed, clearly marked with the word “HOLE”, “COVER” or “Danger, Roof Opening-Do Not Remove” or color-coded or equivalent methods (e.g., red or orange “X”). Workers must be made aware of the meaning for color coding and equivalent methods.
  - 3. Roofing material, such as roofing membrane, insulation or felts, covering or partly covering openings or holes, shall be immediately cut out. No hole or opening shall be left unattended unless covered.
  - 4. Non-load-bearing skylights shall be guarded by a load-bearing skylight screen, cover, or railing system along all exposed sides.
  - 5. Workers are prohibited from standing/walking on skylights.

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**SECTION 01 74 19  
CONSTRUCTION WASTE MANAGEMENT**

**PART 9- GENERAL**

**9.1 DESCRIPTION**

- A. This section specifies the requirements for the management of non-hazardous building construction and demolition waste.
- B. Waste disposal in landfills shall be minimized to the greatest extent possible. Of the inevitable waste that is generated, as much of the waste material as economically feasible shall be salvaged, recycled or reused.
- C. Contractor shall use all reasonable means to divert construction and demolition waste from landfills and incinerators, and facilitate their salvage and recycle not limited to the following:
  - Waste Management Plan development and implementation.
  - Techniques to minimize waste generation.
  - Sorting and separating of waste materials.
  - Salvage of existing materials and items for reuse or resale.
  - Recycling of materials that cannot be reused or sold.
- D. At a minimum, the following waste categories shall be diverted from landfills:
  - Metal products (e.g., steel, wire, beverage containers, copper, etc.).

**9.2 RELATED WORK**

- A. Section 01 00 00 GENERAL CONDITIONS
- B. Section 01 83 88.13 LEAD-BASED PAINT REMOVAL AND DISPOSAL
- C. Section 09 91 01 ELEVATED WATER TANK REPAINTING

**9.3 QUALITY ASSURANCE**

- A. Contractor shall practice efficient waste management when sizing, cutting and installing building products. Processes shall be employed to ensure the generation of as little waste as possible. Construction /Demolition waste includes products of the following:
  - Excess or unusable construction materials.
  - Packaging used for construction products.
  - Poor planning and/or layout.
  - Construction error.
  - Over ordering.
  - Weather damage.
  - Contamination.
  - Mishandling.
  - Breakage.
- B. Establish and maintain the management of non-hazardous building construction and demolition waste set forth herein. Conduct a site assessment to estimate the types of materials that will be generated by demolition and construction.

- C. Contractor shall develop and implement procedures to reuse and recycle new materials to a minimum of 50 percent.
- D. Contractor shall be responsible for implementation of any special programs involving rebates or similar incentives related to recycling. Any revenues or savings obtained from salvage or recycling shall accrue to the contractor.
- E. Contractor shall provide all demolition, removal and legal disposal of materials. Contractor shall ensure that facilities used for recycling, reuse and disposal shall be permitted for the intended use to the extent required by local, state, federal regulations. The Whole Building Design Guide website <http://www.wbdg.org> provides a Construction Waste Management Database that contains information on companies that haul, collect, and process recyclable debris from construction projects.
- F. Contractor shall assign a specific area to facilitate separation of materials for reuse, salvage, recycling, and return. Such areas are to be kept neat and clean and clearly marked in order to avoid contamination or mixing of materials.
- G. Contractor shall provide on-site instructions and supervision of separation, handling, salvaging, recycling, reuse and return methods to be used by all parties during waste generating stages.
- H. Record on daily reports any problems in complying with laws, regulations and ordinances with corrective action taken.

#### 9.4 TERMINOLOGY

- A. **Class III Landfill:** A landfill that accepts non-hazardous resources such as household, commercial and industrial waste resulting from construction, remodeling, repair and demolition operations.
- B. **Clean:** Untreated and unpainted; uncontaminated with adhesives, oils, solvents, mastics and like products.
- C. **Construction and Demolition Waste:** Includes all non-hazardous resources resulting from construction, remodeling, alterations, repair and demolition operations.
- D. **Dismantle:** The process of parting out a building in such a way as to preserve the usefulness of its materials and components.
- E. **Disposal:** Acceptance of solid wastes at a legally operating facility for the purpose of land filling (includes Class III landfills and inert fills).
- F. **Inert Backfill Site:** A location, other than inert fill or other disposal facility, to which inert materials are taken for the purpose of filling an excavation, shoring or other soil engineering operation.
- G. **Inert Fill:** A facility that can legally accept inert waste, such as asphalt and concrete exclusively for the purpose of disposal.
- H. **Inert Solids/Inert Waste:** Non-liquid solid resources including, but not limited to, soil and concrete that does not contain hazardous waste or soluble pollutants at concentrations in excess of water-quality objectives established by a regional water board, and does not contain significant quantities of decomposable solid resources.
- I. **Mixed Debris:** Loads that include commingled recyclable and non-recyclable materials generated at the construction site.

- J. **Mixed Debris Recycling Facility:** A solid resource processing facility that accepts loads of mixed construction and demolition debris for the purpose of recovering re-usable and recyclable materials and disposing non-recyclable materials.
- K. **Permitted Waste Hauler:** A company that holds a valid permit to collect and transport solid wastes from individuals or businesses for the purpose of recycling or disposal.
- L. **Recycling:** The process of sorting, cleansing, treating, and reconstituting materials for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating or thermally destroying solid waste.
1. **On-site Recycling:** Materials that are sorted and processed on site for use in an altered state in the work, i e. concrete crushed for use as a sub-base in paving.
  2. **Off-site Recycling:** Materials hauled to a location and used in an altered form in the manufacture of new products.
- M. **Recycling Facility:** An operation that can legally accept materials for the purpose of processing the materials into an altered form for the manufacture of new products. Depending on the types of materials accepted and operating procedures, a recycling facility may or may not be required to have a solid waste facilities permit or be regulated by the local enforcement agency.
- N. **Reuse:** Materials that are recovered for use in the same form, on-site or off-site.
- O. **Return:** To give back reusable items or unused products to vendors for credit.
- P. **Salvage:** To remove waste materials from the site for resale or re-use by a third party.
- Q. **Source-Separated Materials:** Materials that are sorted by type at the site for the purpose of reuse and recycling.
- R. **Solid Waste:** Materials that have been designated as non-recyclable and are discarded for the purposes of disposal.
- S. **Transfer Station:** A facility that can legally accept solid waste for the purpose of temporarily storing the materials for re-loading onto other trucks and transporting them to a landfill for disposal, or recovering some materials for re-use or recycling.

## 9.5 SUBMITTALS

- A. In accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, and SAMPLES, furnish the following:
- B. Prepare and submit to the Resident Engineer a written demolition debris management plan. The plan shall include, but not be limited to, the following information:
  - Procedures to be used for debris management.
  - Techniques to be used to minimize waste generation.
- C. Analysis of the estimated job site waste to be generated:
  - List of each material and quantity to be salvaged, reused, recycled.
  - List of each material and quantity proposed to be taken to a landfill.
  - Detailed description of the Means/Methods to be used for material handling.
  - On site: Material separation, storage, protection where applicable.
  - Off site: Transportation means and destination. Include list of materials.
    - 1) Description of materials to be site-separated and self-hauled to designated facilities.

- 2) Description of mixed materials to be collected by designated waste haulers and removed from the site.
  - The names and locations of mixed debris reuse and recycling facilities or sites.
  - The names and locations of trash disposal landfill facilities or sites.
  - Documentation that the facilities or sites are approved to receive the materials.
- D. Designated Manager responsible for instructing personnel, supervising, documenting and administer over meetings relevant to the Waste Management Plan.
- E. Monthly summary of construction and demolition debris diversion and disposal, quantifying all materials generated at the work site and disposed of or diverted from disposal through recycling.

## 9.6 RECORDS

Maintain records to document the quantity of waste generated; the quantity of waste diverted through sale, reuse, or recycling; and the quantity of waste disposed by landfill or incineration.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- A. List of each material and quantity to be salvaged, recycled, reused.
- B. List of each material and quantity proposed to be taken to a landfill.
- C. Material tracking data: Receiving parties, dates removed, transportation costs, weight tickets, tipping fees, manifests, invoices, net total costs or savings.

## **PART 3 - EXECUTION 3.1 COLLECTION**

- A. Provide all necessary containers, bins and storage areas to facilitate effective waste management.
- B. Clearly identify containers, bins and storage areas so that recyclable materials are separated from trash and can be transported to respective recycling facility for processing.
- C. Hazardous wastes shall be separated, stored, disposed of according to local, state, federal regulations.

### **3.2 DISPOSAL**

- A. Contractor shall be responsible for transporting and disposing of materials that cannot be delivered to a source-separated or mixed materials recycling facility to a transfer station or disposal facility that can accept the materials in accordance with state and federal regulations.
- B. Construction or demolition materials with no practical reuse or that cannot be salvaged or recycled shall be disposed of at a landfill or incinerator.

### **3.3 REPORT**

- A. With each application for progress payment, submit a summary of construction and demolition debris diversion and disposal including beginning and ending dates of period covered.
- B. Quantify all materials diverted from landfill disposal through salvage or recycling during the period with the receiving parties, dates removed, transportation costs, weight tickets, manifests, invoices. Include the net total costs or savings for each salvaged or recycled material.
- C. Quantify all materials disposed of during the period with the receiving parties, dates removed, transportation costs, weight tickets, tipping fees, manifests, invoices. Include the net total costs for each disposal.

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**SECTION 02 83 33.13**

**LEAD-BASED PAINT REMOVAL AND DISPOSAL**

**PART 1 – GENERAL**

**1.1 SUMMARY**

A. Section Includes:

1. Removing and disposal of lead-based paint at exterior elevated water storage tank locations.

**1.2 RELATED REQUIREMENTS**

- A. Surface Preparation Disturbing Lead-Based Paint: Section 09 91 01, ELEVATED WATER STORAGE TANK REPAINTING.

**1.3 DEFINITIONS**

- A. **Action Level:** Employee exposure, without regard to use of respirator, to lead airborne concentration of 30 micrograms per cubic meter (0.03 parts per million) of air averaged over 8-hour period. As used in this section, "30 micrograms per cubic meter of air (0.03 parts per million)" refers to action level.
- B. **Area Monitoring:** Sampling of lead concentrations within lead control area and inside physical boundaries which are representative of airborne lead concentrations which may reach breathing zone of personnel potentially exposed to lead.
- C. **Breathing Zone:** Area within hemisphere, forward of shoulders, with 150 mm to 225 mm (6 to 9 inches) radius and center at nose or mouth of employee.
- D. **Certified Industrial Hygienist (CIH):** As used in this section, refers to an Industrial Hygienist employed by Contractor.
- E. **Change Rooms and Shower Facilities:** Rooms within designated physical boundary around lead control area equipped with separate storage facilities for clean protective work clothing and equipment and for street clothes which prevent cross- contamination.
- F. **Competent Person:** Person capable of identifying lead hazards in work area and authorized by contractor to take corrective action.
- G. **Decontamination Room:** Room for removal of contaminated personal protective equipment (PPE).
- H. **Eight-Hour Time Weighted Average (TWA):** Airborne concentration of lead averaged over 8-hour workday to which an employee is exposed.
- I. **High Efficiency Particulate Air (HEPA) Filter Equipment:** HEPA filtered vacuuming equipment with UL 586 filter system capable of collecting and retaining lead-contaminated paint dust. HEPA filter means 99.97 percent efficient against 0.3 micron (0.012 mil) size particles.
- J. **Lead:** Metallic lead, inorganic lead compounds, and organic lead soaps. Excluded from this definition are other organic lead compounds.

- K. **Lead Control Area:** Enclosed area or structure with full containment to prevent spreading lead dust, paint chips, and debris from lead-based paint removal operations. Lead control area is isolated by physical boundaries to prevent unauthorized entry of personnel.
- L. **Lead Permissible Exposure Limit (PEL):** Fifty micrograms per cubic meter (0.05 parts per million) of air as 8-hour time weighted average as determined by 29 CFR Part 1910.1025. When employee is exposed for more than 8 hours per work day, determine PEL by following formula. PEL micrograms/cubic meter (parts per million) of air = 400/No. of hrs. worked per day.
- M. **Personnel Monitoring:** Sampling of lead concentrations within employee breathing zone to determine 8-hour time weighted average concentration according to 29 CFR Part 1910.1025. Take samples representative of employee's work tasks.
- N. **Physical Boundary:** Area physically roped or partitioned off around enclosed lead control area to limit unauthorized entry of personnel. As used in this section, "inside boundary" shall mean same as "outside lead control area."

#### 1.4 APPLICABLE PUBLICATIONS

- A. Comply with references to extent specified in this section.
- B. American National Standards Institute (ANSI):
  - 1. Z9.2-12 - Fundamentals Governing the Design & Operation of Local Exhaust Ventilation Systems.
- C. Code of Federal Regulations (CFR):
  - 1. 29 CFR Part 1910 - Occupational Safety and Health Standards.
  - 2. 29 CFR Part 1926 - Safety and Health Regulations for Construction.
  - 3. 40 CFR Part 260 - Hazardous Waste Management System: General.
  - 4. 40 CFR Part 261 - Identification and Listing of Hazardous Waste.
  - 5. 40 CFR Part 262 - Standards Applicable to Generators of Hazardous Waste.
  - 6. 40 CFR Part 263 - Standards Applicable to Transporters of Hazardous Waste.
  - 7. 40 CFR Part 264 - Standards for Owners and Operations of Hazardous Waste Treatment, Storage, and Disposal Facilities.
  - 8. 40 CFR Part 265 - Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
  - 9. 40 CFR Part 268 - Land Disposal Restrictions.
  - 10. 49 CFR Part 172 - Hazardous Material Table, Special Provisions, Hazardous Material Communications, Emergency Response Information, and Training Requirements, and Security Plans.
  - 11. 49 CFR Part 178 - Specifications for Packagings. D. Underwriters Laboratories (UL):
    - a. 586-09 - High-Efficiency, Particulate, Air Filter Units.

#### 1.5 PRE-REMOVAL MEETINGS

- A. Conduct pre-removal meeting at project site minimum thirty (30) calendar days before beginning Work of this section.
  - 1. Required Participants:

- a. Contracting Officer's Representative.
  - b. Certified Industrial Hygienist.
  - c. Contractor.
  - d. Paint removal contractor.
  - e. Other installers responsible for finishing resulting surfaces.
2. Meeting Agenda: Distribute agenda to participants minimum three (3) calendar days before meeting.
- a. Respiratory protection program.
  - b. Hazard communication program.
  - c. Hazardous waste management plan.
  - d. Safety and health regulation compliance.
  - e. Employee training.
  - f. Removal schedule.
  - g. Removal sequence.
  - h. Preparatory work.
  - i. Protection before, during, and after removal.
  - j. Removal.
  - k. Inspecting and testing.
  - l. Other items affecting successful completion.
3. Document and distribute meeting minutes to participants to record decisions affecting installation.

## 1.6 SUBMITTALS

- A. Submittal Procedures: Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturer's Literature and Data:
1. Description of each product.
    - a. Paint removal products.
    - b. Vacuum filters.
    - c. Respirators.
  2. Safety data sheet for each paint removal product.
  3. Installation instructions.
    - a. Paint removal products.
- C. Qualifications: Substantiate qualifications comply with specifications.
1. Paint removal contractor.
  2. Testing laboratory.
    - a. Name, address, and telephone number.
    - b. Current evidence of participation in NIOSH PAT Program.
    - c. Copy of current AIHA accreditation certificate.
  3. Industrial hygienist.
    - a. Name, address, and telephone number.
    - b. Resume showing previous experience.
    - c. Copy of current ABIH CIH certification.

4. Paint disposal facility.
  - a. Name, address, and telephone number.
  - b. Current license or authorization to receive and dispose lead contaminated waste.

D. Record Documents:

1. Completed and signed hazardous waste manifest from waste transporter.
2. Paint disposal facility receipts and disposition reports.
3. Certification of medical examinations.
4. Employee training certification.

## 1.7 QUALITY ASSURANCE

A. Safety and Health Regulation Compliance:

1. Comply with applicable laws, ordinances, rules, and regulations of federal, state, and local authorities having jurisdiction regarding removing, handling, storing, transporting, and disposing lead waste materials.
  - a. Comply with applicable requirements of 29 CFR Part 1910.1025.
  - b. Notify Contracting Officer's Representative and request resolution of conflicts between regulations and specified requirements before starting work.

B. Paint Removal Contractor: Experienced contractor, registered or licensed by applicable state agency regulating lead-based paint removal.

C. Paint Disposal Facility: State certified disposal facility qualified to receive and dispose lead-based paint.

D. Lead-based Paint Removal Plan:

1. Submit detailed, site-specific plan describing lead-based paint removal procedures.
2. Include sketch showing location, size, and details of lead control areas, decontamination rooms, change rooms, shower facilities, and mechanical ventilation system.
3. Include eating, drinking, and restroom procedures, interface of trades, work sequencing, collected wastewater and paint debris disposal plan, air sampling plan, respirators, protective equipment, and detailed description of containment methods ensuring airborne lead concentrations do not exceed action level outside lead control area.
  - a. Eating, drinking, and smoking are not acceptable within lead control area.
4. Include air sampling, training and strategy, sampling methodology, frequency, duration, and qualifications of air monitoring personnel.

E. Respiratory Protection Program: Establish and implement program required by 29 CFR Part 1910.134, 29 CFR Part 1910.1025, and 29 CFR Part 1926.62.

1. Provide each employee negative pressure or other appropriate respirator.
  - a. Test fit each employee's respirator at initial fitting and maximum 6 month intervals, as required by 29 CFR Part 1926.62.

F. Hazard Communication Program: Establish and implement program required by 29 CFR Part 1910.1200.

G. Hazardous Waste Management Plan: Establish and implement plan according to applicable requirements of Federal, State, and local hazardous waste regulations including the following:

1. Identification of hazardous wastes associated with work.

2. Estimated quantities of generated and disposed waste.
3. Names and qualifications of each contractor transporting, storing, treating, and disposing wastes. Include facility location and 24-hour point of contact. Provide two (2) copies of EPA, state, and local hazardous waste permit applications permits and EPA Identification numbers.
4. Names and qualifications (experience and training) of personnel working on-site with hazardous wastes.
5. List of required waste handling equipment including cleaning, volume reduction, and transport equipment.
6. Spill prevention, containment, and cleanup contingency implementation measures.
7. Work plan and schedule for waste containment, removal, and disposal with daily waste cleaned up and containerization.
8. Hazardous waste disposal cost.

## **1.8 WARRANTY**

- A. Construction Warranty: FAR clause 52.246-21, "Warranty of Construction."

## **PART 2 – PRODUCTS**

### **2.1 PAINT REMOVAL PRODUCTS**

- A. Chemical Stripper: Biodegradable, non-toxic, capable of removing existing paint layers in one application, and acceptable to CIH.
- B. Abrasive blast cleaning, See Section 09 91 01 Elevated Water Storage Tank Re-Painting.

### **2.2 ACCESSORIES**

- A. Waste Collection Drums: 49 CFR Part 178; Type 1A2, steel, removable head, 200 L (55 gal.) capacity, capable of containing waste without loss.
- B. Vacuum Cleaner: HEPA filtered type.
- C. Scrapers:
  1. Metal type for use on metal, concrete, and masonry surfaces.
  2. Plastic type for use on wood, plaster, gypsum board, and other surfaces.
- D. Rinse Water: Potable.
- E. Cleaning Cloths: Cotton.

## **PART 3 – EXECUTION**

### **3.1 EXAMINATION**

- A. Before exposure to lead-contaminated dust, provide workers with comprehensive medical examination required by 29 CFR Part 1926.62 (I) (1) (i) and (ii).

1. Exemption: Examination is not required when employee medical records show last examination required by 29 CFR Part 1926.62(I) was completed within previous twelve (12) months.
- B. Maintain complete and accurate employee medical records according to 29 CFR Part 1910.20.
- C. Train each employee performing paint removal, disposal, and air sampling operations according to 29 CFR Part 1926.62.
  1. Certify training is completed before employee is permitted to work on project and enter lead control area.

### **3.2 PREPARATION**

- A. Protect existing work indicated to remain.
  1. Perform paint removal work without damaging and contaminating adjacent work.
  2. Restore damage and contamination to original condition.
- B. Notify Contracting Officer at least twenty (20) calendar days before starting paint removal work.
- C. Lead Control Area Requirements:
  1. Establish lead control area by completely enclosing lead-based paint removal work area with containment screens.
- D. Boundary Requirements: Provide physical boundaries around lead control area by roping off area or providing curtains, portable partitions or other enclosures to ensure that airborne lead concentrations do not meet or exceed action level outside of lead control area.
- E. Personnel Protection: Provide and use required protective clothing and equipment within lead control area.
- F. Warning Signs: Provide warning signs complying with 29 CFR Part 1926.62 at lead control area approaches. Locate signs so personnel read signs and take necessary precautions before entering lead control area.

### **3.3 WORK PROCEDURES**

- A. Remove lead-based paint according to approved lead-based paint removal plan.
  1. Perform work only in presence of CIH or Industrial Hygienist (IH) Technician under direction of CIH ensuring continuous inspection of work in progress and direction of air monitoring activities.
  2. Handle, store, transport, and dispose lead or and lead contaminated waste according to 40 CFR Part 260, 40 CFR Part 261, 40 CFR Part 262, 40 CFR Part 263, 40 CFR Part 264, and 40 CFR Part 265. Comply with land disposal restriction notification requirements as required by 40 CFR Part 268.
- B. Use procedures and equipment required to limit occupational and environmental lead exposure when lead-based paint is removed according to 29 CFR Part 1926.62.
- C. Dispose removed paint and waste according to Environmental Protection Agency (EPA), Federal, State, and Local requirements.
- D. Personnel Exiting Procedures:

1. When personnel exit lead control area, comply with the following procedures:
  - a. Vacuum exposed clothing surfaces.
  - b. Remove protective clothing and equipment in decontamination room. Place clothing in approved impermeable disposal bag.
  - c. Shower.
  - d. Dress in clean clothes before leaving lead control area.
- E. Monitoring During Paint Removal:
  1. Perform personal and area monitoring during entire paint removal operation.
  2. Conduct area monitoring at physical boundary daily for each work shift to ensure unprotected personnel are not exposed above action level anytime.
  3. For outdoor operations, take at least one sample on each shift leeward of lead control area. When adjacent areas are contaminated, clean area of contamination and have CIH visually inspect and certify lead contamination is cleaned.
  4. Stop work when outside boundary lead levels meet or exceed action level. Notify Contracting Officer's Representative, immediately.
  5. Correct conditions causing increased lead concentration as directed by CIH.
  6. Review sampling data collected during work stoppage to determine if conditions require additional work method modifications as determined by CIH.
  7. Resume paint removal when approved by CIH.

### **3.4 LEAD-BASED PAINT REMOVAL**

- A. Remove paint within areas indicated on drawings completely exposing substrate. Minimize damage to substrate.
- B. Comply with paint removal processes described lead paint removal plan.
- C. Lead-Based Paint Removal: Select processes for each application to minimize work area lead contamination and waste.

### **3.5 SUBSTRATE SURFACE PREPARATION**

- A. Protect substrates from deterioration and contamination until refinished.
  1. Protect metal substrates from flash rusting.
- B. Prepare and paint substrates according to Section 09 91 01, ELEVATED WATER STORAGE TANK REPAINTING.

### **3.6 CLEANING AND DISPOSAL**

- A. Cleaning:
  1. Maintain lead control area surfaces free of accumulating paint chips and dust. Confine dust, debris, and waste to work area.
  2. Clean work area daily, at end of each shift, and when paint removal operation is complete.
- B. CIH Certification: Certify in writing that inside and outside lead control area air monitoring samples are less than action level, employee respiratory protection was adequate, the work

was performed according to 29 CFR Part 1926.62, and no visible accumulations of lead-based paint and dust remain on worksite.

1. Do not remove lead control area or roped-off boundary and warning signs before Contracting Officer's Representative's receipt of CIH's certification.
  2. Reclean areas showing dust or residual paint chips.
- C. Testing: Where indicated and when directed by Contracting Officer's Representative, test lead-based paint residue and used abrasive according to 40 CFR Part 261 for hazardous waste.
- D. Waste Collection:
1. Collect lead-contaminated materials including waste, scrap, debris, bags, containers, equipment, and clothing, which may produce airborne lead contamination.
  2. Place lead contaminated materials in waste disposal drums. Label each drum identifying waste type according to 49 CFR Part 172 and date waste materials were first put into drum. Obtain and complete the Uniform Hazardous Waste Manifest forms. Comply with land disposal restriction notification requirements required by 40 CFR Part 268.
  3. Coordinate temporary storage location on project site with Contracting Officer's Representative.
- E. Waste Disposal:
1. Minimum fourteen (14) calendar days before delivery, notify Contracting Officer's Representative who will arrange for job site inspection of drums and manifests by paint disposal facility personnel.
  2. Contracting Officer's Representative will arrange hazardous wastes removal, transport and delivery to paint disposal facility to ensure drums do not remain on project site longer than ninety (90) calendar days from drum label date.
- F. Waste Disposal:
1. Do not store hazardous waste drums in temporary storage location longer than ninety (90) calendar days from drum label date.
  2. Remove, transport, and deliver drums to paint disposal facility.
    - a. Obtain signed receipt including date, time, quantity, and description of materials received according to 40 CFR Part 262.
    - b. Obtain final report of materials disposition after disposal completion.

- - - E N D - - -



**SECTION 05 50 00  
METAL FABRICATIONS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

A. Related Documents:

1. Drawings and general provisions of the Subcontract apply to this Section.
2. Review these documents for coordination with additional requirements and information that apply to work under this Section.

B. Section Includes: Provide metal fabrications, miscellaneous metal, and related accessory items, galvanized and prime painted, complete, as shown and specified. The work includes, but is not limited to, the following:

1. Steel railings, guardrails, handrails, brackets, and sockets.
2. Ladders.

C. Related Sections:

1. Division 01 Section "General Requirements."
2. Division 03 Section "Cast-in-Place Concrete".
3. Division 09 Section "Painting".

**1.2 REFERENCES**

A. General:

1. The following documents form part of the Specifications to the extent stated. Where differences exist between codes and standards, the one affording the greatest protection shall apply.
2. Unless otherwise noted, the referenced standard edition is the current one at the time of commencement of the Work.
3. Refer to Division 01 Section "General Requirements" for the list of applicable regulatory requirements.

B. AISC, "Specifications for the Design of Cold-Formed Steel Structural Members."

C. AWS, "Structural Welding Code, D1.1."

D. SSPC, "Steel Structures Painting Council."

**1.3 SUBMITTALS**

A. Submit under provisions of Divisions 01 Section "General Requirements" and "Special Procedures."

B. Product Data for each product specified.

C. Submit calculations for guardrails signed by a Structural Engineer licensed to practice in the State of California, and shop drawings of fabricated items for review before fabrication and installation.

1. Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories.

D. Submit certification that manufactured products (including bolts, nuts and washers) meet or exceed specified requirements. Certification numbers must appear on product containers for

bolts, nuts and washers and the numbers shall correspond to the identification numbers on the Manufacturer's Certificate. The Manufacturer's symbol and grade markings must appear on bolts, nuts and washers.

#### 1.4 QUALITY ASSURANCE

- A. Structural Performance: Shop-engineer, fabricate, and install guardrails to meet CBC requirements to withstand a live load of at least [200 lbf (0.89 kN)] applied in any direction to the top of rail.
- B. Structural Performance:
  - 1. Provide railings capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
  - 2. Handrails and Top Rails of Guards:
    - a. Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.
    - b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.
    - c. Uniform and concentrated loads need not be assumed to act concurrently.
  - 3. Infill of Guards:
    - a. Concentrated load of 50 lbf (0.22 kN) applied horizontally on an area of 1 sq. ft. (0.093 sq. m).
    - b. Infill load and other loads need not be assumed to act concurrently.
- C. Make field measurements as required prior to fabrication and installation.
- D. Coordinate with other trades to ensure proper sequencing and fitting of construction.
- E. Preassemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordination of installation.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store steel materials, either plain or fabricated, above ground on platforms, pallets, skids, or other supports. Keep material free from dirt, grease, and other foreign matter and protect from corrosion.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS

- A. Steel Sections: ASTM A992, hot-dip galvanized for exterior use.
- B. Steel Pipe: ASTM A53, Type S, Grade B, Schedule 40 typical unless otherwise noted. Pipe used for handrails and railings shall be hot-dip galvanized after fabrication for exterior use, [1-1/2 inch][32mm] ID, unless otherwise noted.
- C. Steel Tubing: Cold formed, ASTM A500; or hot rolled, ASTM A501; seamless.
- D. Cold-Rolled Carbon Steel Sheets: ASTM A653. Provide "Commercial" galvanizing, for exterior use.
- E. Stainless Steel: Steel: ASTM A240 for plate or sheet, A269 for tubing and A312 for pipe.
  - 1. Interior Use: Type 304, 18-8 grade, USS gauge, #4 finish.
  - 2. Exterior Use: Type 316L, 18-8 grade, USS gauge, #4 finish.

- F. Bolts, Nuts, and Washers: ASTM A307. Provide zinc-coated fasteners for exterior use or where built into exterior walls.
- G. Drilled Anchors for Use in Concrete: Use anchors with a current ICC evaluation report appropriate to the application.
- H. Welding Materials: AWS D1.1; type required for materials being welded.
- I. Primers: Prime paint for ferrous metal shall be as specified in Division 09 Section "Painting" Tnemec Series 4 or an approved equal free of chromate or lead.
- J. Nonshrink Grout: Master Builders "Embeco," Sonneborn "Ferrolith G Redi-Mixed Grout," or equal.

## 2.2 MANUFACTURED UNITS

- A. Handrail Brackets: Provide Julius Blum & Co. Inc. No. 385, Blumcraft of Pittsburgh, or equal, cast malleable iron wall bracket.
  - 1. Provide metal bracket filler (spacer) between base of bracket and stud where bracket is mounted against gypsum board wall.
  - 2. Provide galvanized finish for exterior applications.

## 2.3 FABRICATION - GENERAL, ALL FABRICATED ITEMS

- A. Verify dimensions on site prior to shop fabrication. Coordinate metalwork with adjoining work for details of attachment and fit. Be responsible for fabrication detailing and correct fitting of steel members to each other and to their supports.
- B. Use materials of size and thickness shown or, if not shown, of size and thickness to produce strength and durability in the finished product for the utility intended.
- C. Fabricate items with joints tightly fitted and secured. Make exposed joints butt tight, flush, and hairline.
- D. Grind exposed welds flush and smooth with adjacent finished surface. Ease exposed edges to small uniform radius.
- E. Fit and shop assemble in largest practical sections, for delivery to site and handling through building openings.
- F. Provide components required for anchorage of metal fabrications. Fabricate anchorage and related components of same material and finish as metal fabrication, except where specifically noted otherwise.

## 2.4 FABRICATION ASSEMBLIES

- A. Rails:
  - 1. Form rails and posts from steel pipe and shapes as shown on Drawings, with welded jointing. Fabricate right-angle and 45 degree bends of rail with 3 inches (75 mm) radius to center line of pipe without flattening the rail member noticeably.
  - 2. For fittings, elbows, wall brackets, and escutcheons provide machined steel. Provide splice connectors of steel as shown.
  - 3. Provide return at free ends of handrails to 1 inch (25 mm) from face of wall. Provide end cap for free ends of tube handrails and railings. Weld joints, end caps, returns, and transitions. Grind smooth and make flush.
  - 4. Provide extension for handrails and railings at edges of stairs and ramp to comply with California Code of Regulations, Title 24, requirements for the physically handicapped.
  - 5. Provide mounting brackets and flanges, for secure anchorage of handrails and railings.

6. Fabricate guardrails to comply with the specified loading requirements.

B. Vertical Ladders:

1. Comply with ANSI A14.3 except as otherwise indicated.
2. 1/4 inch (6.4 mm) by 2 inches (50 mm) side rails spaced at 12 inches (300 mm) apart, with rungs of 3/4 inch (19 mm) diameter solid rod spaced 6 inches (300 mm) on center.
3. Space rungs 6 inches (150 mm) from wall surface using steel mounting brackets and attachments.

C. Edge Angles: Provide anchors welded to angle for embedding in concrete construction, spaced no more than 6 inches (150 mm) from each end and 24 inches (600 mm) on center, unless otherwise shown.

## 2.5 WELDING

- A. All surfaces shall be clean, free of rust, paint, and foreign matter of any kind. Burned edges to be welded shall be chipped clean and wire brushed before welding. Clamp members as required, space and alternate welds, as may be necessary to prevent warping or misalignment.
- B. **Weld Metal:** Weld metal shall be thoroughly fused with the base metal along surfaces and edges of the union. Penetration shall be 1/8 inch (4 mm) minimum and shall be into the root of the joint.
- C. **Weld Quality:** Welds shall present a uniform surface, free of imperfections, without undercutting or overlapping, and free from excessive oxides, gas pockets, and nonmetallic inclusions. Welds shall be made with the proper number of beads or passes to secure sound, thoroughly fused joints. Provide backup bars, temporary backup bars, or backup welds for full-penetration butt welds. Each deposit shall not exceed 1/2 inch (12 mm) of weld for each pass of bead. Preceding layers shall be cleaned by wire brushing or preening to remove scale and slag before placing new weld material.
- D. **Faulty and Defective Welding:** Welding showing cracks, slag inclusion, lack of fusion, bad undercut, or other defects ascertained by visual or other means of inspection, shall be chipped out and properly replaced.

## 2.6 FINISH

- A. **Cleaning:** Thoroughly clean mill scale, rust, dirt, grease, and other foreign matter from ferrous metal prior to galvanizing, hot-phosphate treatment, powder coating or painting.  
<Retain paragraph above or paragraph below.>
1. Remove oil, grease, and similar contaminants in accordance with SSPC SP-1, "Solvent Cleaning. "
- B. **Shop Priming:** Shop-paint metal work except members or portions of members to be embedded in concrete, surfaces and edges to be field welded, and galvanized surfaces.
1. Immediately after surface preparation, brush or spray on primer in accordance with the paint manufacturer's instructions. Use painting methods which will result in full coverage of joints, corners, edges, and exposed surfaces.
  2. Apply one shop coat to metal items, except apply two coats to surfaces inaccessible after assembly or erection. Change color of the second coat to distinguish it from the first.
- C. **Galvanizing:** Provide a zinc coating for exposed exterior items (unless specified to be powder coated) and items to be embedded in concrete, complying with the following:
1. For galvanizing iron and steel hardware, ASTM A153.

2. For galvanizing rolled, pressed, and forged steel shapes, plates, bars, and strips 3mm thick and heavier, ASTM A123.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine the substrate and conditions in which the work is to be installed. Correct unsatisfactory substrate and conditions prior to start of installation.

### 3.2 PREPARATION

- A. Furnish setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as concrete inserts, anchor bolts, and miscellaneous items having integral anchor, which are to be embedded in concrete construction. Coordinate delivery of such items to project site.
- B. Coordinate metalwork with adjoining work. Do cutting, shearing, drilling, punching, threading, tapping, etc., required for metal work and for attachment of adjacent work. Drill or punch holes; do not use cutting torch. Shearing and punching shall leave true lines and surfaces.
- C. Obtain Architect-Engineer's review prior to site cutting or making adjustments to structural members not indicated to be cut or adjusted.
- D. Clean and strip primed steel items to bare metal where site welding is to be done.
- E. Make provision for erection loads with temporary bracing. Keep work in alignment.

### 3.3 INSTALLATION

- A. **Fastening to In-Place Construction:** Provide anchorage devices and fasteners for securing metal work to in-place construction, including threaded fasteners for concrete inserts, through bolts, lag bolts, screws, and other connectors as required.
  - 1. Conceal fastenings where practical. Thickness of metal and details of assembly and supports shall give ample strength and stiffness. Form joints exposed to weather to exclude water.
- B. **Cutting, Fitting, and Placement:** Perform cutting, drilling, and fitting required for installation of metal work. Set work accurately in location, alignment, and elevation, plumb, level, true, and free of rack, measured from established lines and levels. Provide temporary bracing anchors in formwork for items which are to be built into concrete or similar construction.
  - 1. Fit exposed connections accurately together to form tight hairline joints. Weld connections which are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Grind exposed joints smooth and touch up shop paint coat. Do not weld, cut, or abrade the surfaces of exterior units which have been hot-dip galvanized after fabrication and are intended for bolted or screwed field connections.
- C. **Field Welding:** Comply with AWS D1.1 for procedures of manual shielded metal-arc welding, appearance and quality of welds made, and methods used in correcting welding work.
- D. **Corrosion Protection:** Protect dissimilar metals from galvanic corrosion by pressure tapes, coating, or isolators as acceptable to Architect-Engineer.
- E. **Grouting:** Do grouting of frames, plates, sills, bolts, and similar items with non-shrink grout.
- F. **Alignment:** Verify alignment of items with adjacent construction. Coordinate related work.
- G. **Handrails:** Secure steel handrails with bracket. Unless otherwise noted, locate brackets 6 inches (150 mm) from ends of handrail, 6 feet (1.8 m) on center maximum, and space brackets equidistant at each handrail. Where bracket is fastened to stud wall, provide steel plate backing securely fastened to studs; toggle bolt secured to gypsum wallboard is not acceptable.
- H. **Miscellaneous Steel for Elevators:** Examine carefully, and coordinate with requirements for elevator installation. Furnish and install miscellaneous steel parts relative to the elevator

installation, except those items being provided under **Section [ ]**. See drawings for definition of frames, angles, trim, etc., around elevator openings and for brackets to receive elevator tracks.

**3.4 CLEAN AND TOUCH-UP**

- A. Immediately after erection, clean field welds, bolted connections, and abraded areas and paint exposed areas with same material as used for shop painting. Apply by brush or spray to provide a minimum dry-film thickness of 2.0 mils.

END OF SECTION

**SECTION 09 91 01  
ELEVATED WATER STORAGE TANK REPAINTING**

**PART 1 - GENERAL**

**1.1 DESCRIPTION:**

- A. Work of this Section includes all labor, materials, equipment, services and workmanship necessary to produce a quality coating system. All painting work shall be implemented in strict accordance with the manufacturer's instructions and shall be performed in a manner satisfactory to the Contracting Officer Representative (COR) and the Contracting Officer (CO). The work shall include that as shown on the construction documents and/or specified herein, including, but not limited to, the following:
1. Painting of elevated water storage tank utilizing exterior (wet) and interior (wet/dry) coating systems.

**1.2 RELATED WORK:**

- A. Construction waste management: Section 01 74 19 CONSTRUCTION WASTE MANAGEMENT.
- B. Safety Hazard Analysis: Section 01 74 19 SAFETY REQUIREMENTS.
- C. Lead Paint Removal: Section 02 83 33.13, LEAD-BASED PAINT REMOVAL AND DISPOSAL.

**1.3 SUBMITTALS:**

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Contractor Qualifications: As a prerequisite to commencing work on the contract, the contractor shall provide the following:
- C. Documentation pertaining to tank painting work performed in the last five (5) years and a list of ten (minimum) tanks of like size and painting requirements completed by the contractor.
- D. Painter Qualifications: As a prerequisite to commencing work on the contract, the contractor shall provide the following:
1. Submit evidence that key personnel have successfully performed surface preparation and application of coating on a minimum of five (5) similar projects within the past five (5) years.
  2. Proof of participation in apprenticeship and training programs approved and registered with the United States Department of Labor's Bureau of Apprenticeship and Training for all construction contracts in excess of \$25,000.
- E. Manufacturer's Literature and Data:
- i. Before work is started, or sample panels are prepared, submit manufacturer's literature and technical data, the current Master Painters Institute (MPI) "Approved Product List" indicating brand label, product name and product code as of the date of contract award, will be used to determine compliance with the submittal



requirements of this specification. The Contractor may choose to use subsequent MPI "Approved Product List", however, only one (1) list may be used for the entire contract and each coating system is to be from a single manufacturer. All coats on a particular substrate must be from a single manufacturer. No variation from the MPI "Approved Product List" where applicable is acceptable.

- ii. **NSF Certification:** All coatings in contact with potable water or applied to the inside wet area of the tank shall be listed by NSF International or UL under ANSI/NSF Standard 61, Section 5, Protective (Barrier) Materials, Potable Water Tank Coatings.
- iii. **Quality of Paint:** The paint products mentioned in the specifications are set up as standards of quality. The standard "or equal" clause shall apply. No substitution will be considered unless a written request for approval has been received in accordance with Section 01 33 23 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES by the COR at least 15 calendar days. Each such request shall include the name of the specified material for which a substitute is being requested; the name of the proposed substitute material; and a complete description of the proposed substitute including performance and test data and any other information necessary for an evaluation. The burden of proof of the merit of the proposed substitute is upon the contractor.

#### **1.4 DELIVERY AND STORAGE:**

- A. Deliver materials to site in manufacturer's sealed container marked to show following:
  1. Name of manufacturer.
  2. Product type.
  3. Batch number.
  4. Instructions for use.
  5. Safety precautions.
- B. In addition to manufacturer's label, provide a label legibly printed as following:
  1. Federal Specification Number, where applicable, and name of material.
  2. Surface upon which material is to be applied.
  3. Specify Coat Types: Prime; body; finish; etc.
- C. Maintain space for storage, and handling of painting materials and equipment in a ventilated, neat and orderly condition to prevent spontaneous combustion from occurring or igniting adjacent items.
- D. Store materials at site at least 24 hours before using, at a temperature between 7 and 30 degrees C (45 and 85 degrees F).

#### **1.5 QUALITY ASSURANCE:**

- A. Qualification of Painters: Use only qualified journeyman painters for the mixing and application of paint on exposed surfaces. Submit evidence that key personnel have successfully performed surface preparation and application of coating on a minimum of five (5) similar projects within the past five (5) years.

- B. Paint Coordination: Provide finish coats which are compatible with the prime paints used. Review other Sections of these specifications in which prime paints are to be provided to ensure compatibility of the total coatings system for the various substrates. Notify the Contracting Officer Representative (COR) in writing of any anticipated problems using the coating systems as specified with substrates primed by others.

**1.6 REGULATORY REQUIREMENTS:**

- A. Paint materials are to conform to the restrictions of the local Environmental and Toxic Control jurisdiction.
  - 1. Volatile Organic Compounds (VOC) Emissions Requirements: Field-applied paints and coatings that are inside the waterproofing system to not exceed limits of authorities having jurisdiction.
  - 2. Lead-Based Paint:
    - a. Comply with Section 410 of the Lead-Based Paint Poisoning Prevention Act, as amended, and with implementing regulations promulgated by Secretary of Housing and Urban Development.
    - b. Regulations concerning prohibition against use of lead-based paint in federal and federally assisted construction, or rehabilitation of residential structures are set forth in Subpart F, Title 24, Code of Federal Regulations, Department of Housing and Urban Development.
    - c. Do not use coatings having a lead content over 0.06 percent by weight of non-volatile content.
    - d. For lead-paint removal, see Section 02 83 33.13, LEAD-BASED PAINT REMOVAL AND DISPOSAL.
  - 3. Asbestos: Provide materials that do not contain asbestos.
  - 4. Chromate, Cadmium, Mercury, and Silica: Provide materials that do not contain zinc chromate, strontium-chromate, Cadmium, mercury or mercury compounds or free crystalline silica.
  - 5. Human Carcinogens: Provide materials that do not contain any of the ACGIH-BKLT and ACGHI-DOC confirmed or suspected human carcinogens.
  - 6. Use high performance acrylic paints in place of alkyd paints.

**1.7 SAFETY AND HEALTH:**

- A. Apply paint materials using safety methods and equipment in accordance with the following: Comply with applicable Federal, State, and local laws and regulations, and with the ACCIDENT PREVENTION PLAN, including the Activity Hazard Analysis (AHA) as specified in Section 01 35 26, SAFETY REQUIREMENTS. The AHA is to include analyses of the potential impact of painting operations on painting personnel and on others involved in and adjacent to the work zone.
- B. Safety Methods Used During Paint Application: Comply with the requirements of SSPC PA Guide 10.

- C. Toxic Materials: To protect personnel from overexposure to toxic materials, conform to the most stringent guidance of:
  - 1. The applicable manufacturer’s Material Safety Data Sheets (MSDS) or local regulation.
  - 2. 29 CFR 1910.1000.
  - 3. ACHIH-BKLT and ACGHI-DOC, threshold limit values.

**1.8 APPLICABLE PUBLICATIONS:**

- A. Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by basic designation only.
- B. American Conference of Governmental Industrial Hygienists (ACGIH):
  - ACGIH TLV-BKLT-2012 Threshold Limit Values (TLV) for Chemical Substances and Physical Agents and Biological Exposure Indices (BEIs)
  - ACGIH TLV-DOC-2012 Documentation of Threshold Limit Values and Biological Exposure Indices, (Seventh Edition)
- C. ASME International (ASME):
  - A13.1-07(R2013) Scheme for the Identification of Piping Systems
- D. Code of Federal Regulation (CFR):
  - 40 CFR 59 Determination of Volatile Matter Content, Water Content, Density Volume Solids, and Weight Solids of Surface Coating G. Master Painters Institute (MPI):
    - 1 Organic Zinc Rich Primer
    - 2 Polyurethane, Moisture Cured, Clear Gloss
    - 3 Polyurethane, Moisture Cured, Clear, Flat
    - 4 Epoxy Cold Cured, Gloss
    - 5 Marine Alkyd Metal Primer
    - 6 Interior Wood Stain, Semi-Transparent
    - 7 Exterior Alkyd, Semi-Gloss
    - 8 Fast Drying Metal Primer
    - 9 High Build Epoxy Coating
    - 10 Epoxy Anti-Corrosive Metal Primer
    - 11 High Build Epoxy Coating, Low Gloss
    - 12 Galvanized Water Based Primer
    - 13 Non-Cementitious Galvanized Primer
    - 14 Exterior Water Based Semi-Gloss Light Industrial Coating, MPI Gloss Level 5 G. Society for Protective Coatings (SSPC):

SSPC SP 1-82(R2004)	Solvent Cleaning
SSPC SP 2-82(R2004)	Hand Tool Cleaning
SSPC SP 3-28(R2004)	Power Tool Cleaning
SSPC SP 10/NACE No.2	Near-White Blast Cleaning
SSPC PA Guide 10	Guide to Safety and Health Requirements
H. Maple Flooring Manufacturer's Association (MFMA):	
I. U.S. National Archives and Records Administration (NARA):	
29 CFR 1910.1000	Air Contaminants
J. Underwriter's Laboratory (UL)	

**PART 2 - PRODUCTS**

**2.1 MATERIALS:**

A. Conform to the coating specifications and standards referenced in PART 3. Submit manufacturer's technical data sheets for specified coatings and solvents.

**2.2 PAINT PROPERTIES:**

- A. Use ready-mixed (including colors), except two component epoxies, polyurethanes, polyesters, paints having metallic powders packaged separately and paints requiring specified additives.
- B. Where no requirements are given in the referenced specifications for primers, use primers with pigment and vehicle, compatible with substrate and finish coats specified.
- C. Provide undercoat paint produced by the same manufacturer as the finish coats. Use only thinners approved by the paint manufacturer, and use only to recommended limits.

**PART 3 - EXECUTION**

**3.1 JOB CONDITIONS:**

- A. Safety: Observe required safety regulations and manufacturer's warning and instructions for storage, handling and application of painting materials.
  - 1. Take necessary precautions to protect personnel and property from hazards due to falls, injuries, toxic fumes, fire, explosion, or other harm.
  - 2. Deposit soiled cleaning rags and waste materials in metal containers approved for that purpose. Dispose of such items off the site at end of each day's work.
- B. Atmospheric and Surface Conditions:
  - 1. Do not apply coating when air or substrate conditions are:

- a. Less than 3 degrees C (5 degrees F) above dew point.
  - b. Below 10 degrees C (50 degrees F) or over 35 degrees C (95 degrees F), unless specifically pre-approved by the COR and the product manufacturer. Under no circumstances are application conditions to exceed manufacturer recommendations.
  - c. When the relative humidity exceeds 85 percent; or to damp or wet surfaces; unless otherwise permitted by the paint manufacturer's printed instructions.
2. Maintain interior temperatures until paint dries hard.
  3. Do no exterior painting when it is windy and dusty.
  4. Do not paint in direct sunlight or on surfaces that the sun will warm.
  5. Apply only on clean, dry and frost free surfaces except as follows:
    - a. Apply water thinned acrylic and cementitious paints to damp (not wet) surfaces only when allowed by manufacturer's printed instructions.
    - b. Concrete and masonry when permitted by manufacturer's recommendations, dampen surfaces to which water thinned acrylic and cementitious paints are applied with a fine mist of water on hot dry days to prevent excessive suction and to cool surface.
  6. Varnishing:
    - a. Apply in clean areas and in still air.
    - b. Before varnishing vacuum and dust area.
    - c. Immediately before varnishing wipe down surfaces with a tack rag.

### **3.2 INSPECTION:**

A. Examine the areas and conditions where painting and finishing are to be applied and correct any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

### **3.3 GENERAL WORKMANSHIP REQUIREMENTS:**

- A. AMERICAN WATER WORKS ASSOCIATION: All work shall be implemented in accordance with the American Water Works Association's Standard D102-011.
- B. Application may be by brush or roller. Spray application only upon acceptance from the COR in writing.
- C. Furnish to the COR a painting schedule indicating when the respective coats of paint for the various areas and surfaces will be completed. This schedule is to be kept current as the job progresses.
- D. Protect work at all times. Protect all adjacent work and materials by suitable covering or other method during progress of work. Upon completion of the work, remove all paint and varnish spots from floors, glass and other surfaces. Remove from the premises all rubbish and accumulated materials of whatever nature not caused by others and leave work in a clean condition.

- E. Remove and protect hardware, accessories, device plates, lighting fixtures, and factory finished work, and similar items, or provide in place protection. Upon completion of each space, carefully replace all removed items by workmen skilled in the trades involved.
- F. When indicated to be painted, remove electrical panel box covers and doors before painting walls. Paint separately and re-install after all paint is dry.
- G. Materials are to be applied under adequate illumination, evenly spread and flowed on smoothly to avoid runs, sags, holidays, brush marks, air bubbles and excessive roller stipple.
- H. Apply materials with a coverage to hide substrate completely. When color, stain, dirt or undercoats show through final coat of paint, the surface is to be covered by additional coats until the paint film is of uniform finish, color, appearance and coverage, at no additional cost to the Government.
- I. All coats are to be dry to manufacturer's recommendations before applying succeeding coats.
- J. All suction spots or "hot spots" in plaster after the application of the first coat are to be touched up before applying the second coat.
- K. Do not apply paint behind frameless mirrors that use mastic for adhering to wall surface.

### **3.4 SURFACE PREPARATION:**

#### **A. General:**

- 1. The Contractor shall be held wholly responsible for the finished appearance and satisfactory completion of painting work. Properly prepare all surfaces to receive paint, which includes cleaning, sanding, and touching-up of all prime coats applied under other Sections of the work. Broom clean all spaces before painting is started. All surfaces to be painted or finished are to be completely dry, clean and smooth.
- 2. See other sections of specifications for specified surface conditions and prime coat.
- 3. Perform preparation and cleaning procedures in strict accordance with the paint manufacturer's instructions and as herein specified, for each particular substrate condition.
- 4. Clean surfaces before applying paint or surface treatments with materials and methods compatible with substrate and specified finish. Remove any residue remaining from cleaning agents used. Do not use solvents, acid, or steam on concrete and masonry. Schedule the cleaning and painting so that dust and other contaminants from the cleaning process will not fall in wet, newly painted surfaces.

#### **B. Ferrous Metals:**

- 1. Remove oil, grease, soil, drawing and cutting compounds, flux and other detrimental foreign matter in accordance with SSPC-SP 1 (Solvent Cleaning).
- 2. Remove loose mill scale, rust, and paint, by hand or power tool cleaning, as defined in SSPCSP 2 (Hand Tool Cleaning) and SSPC-SP 3 (Power Tool Cleaning).
- 3. Fill dents, holes and similar voids and depressions in flat exposed surfaces of hollow steel doors and frames, access panels, roll-up steel doors and similar items specified to have semi-gloss or gloss finish with TT-F-322D (Filler, Two-Component Type, For Dents, Small Holes and Blow-Holes). Finish flush with adjacent surfaces.
  - a. Fill flat head countersunk screws used for permanent anchors.
  - b. Do not fill screws of item intended for removal such as glazing beads.

4. Spot prime abraded and damaged areas in shop prime coat which expose bare metal with same type of paint used for prime coat. Feather edge of spot prime to produce smooth finish coat.
5. Spot prime abraded and damaged areas which expose bare metal of factory finished items with paint as recommended by manufacturer of item.

### **3.5 PAINT PREPARATION:**

- A. Thoroughly mix painting materials to ensure uniformity of color, complete dispersion of pigment and uniform composition.
- B. Do not thin unless necessary for application and when finish paint is used for body and prime coats. Use materials and quantities for thinning as specified in manufacturer's printed instructions.
- C. Remove paint skins, then strain paint through commercial paint strainer to remove lumps and other particles.
- D. Mix two (2) component and two (2) part paint and those requiring additives in such a manner as to uniformly blend as specified in manufacturer's printed instructions unless specified otherwise.
- E. For tinting required to produce exact shades specified, use color pigment recommended by the paint manufacturer.

### **3.6 APPLICATION:**

- A. Start of surface preparation or painting will be construed as acceptance of the surface as satisfactory for the application of materials.
- B. Unless otherwise specified, apply paint in three (3) coats; prime, body, and finish. When two (2) coats applied to prime coat are the same, first coat applied over primer is body coat and second coat is finish coat.
- C. Apply each coat evenly and cover substrate completely.
- D. Allow not less than 48 hours between application of succeeding coats, except as allowed by manufacturer's printed instructions, and approved by COR.
- E. Apply by brush or roller. Spray application for new or existing occupied spaces only upon approval by acceptance from COR in writing.
  1. Apply painting materials specifically required by manufacturer to be applied by spraying.
  2. In new construction and in existing occupied spaces, where paint is applied by spray, mask or enclose with polyethylene, or similar air tight material with edges and seams continuously sealed including items specified in "Building and Structural Work Field Painting"; "Work not Painted"; motors, controls, telephone, and electrical equipment, fronts of sterilizes and other recessed equipment and similar prefinished items.
- F. Do not paint in closed position operable items such as access doors and panels, window sashes, overhead doors, and similar items except overhead roll-up doors and shutters.

### **3.7 EXTERIOR COATING SYSTEM:**

- A. **SURFACE PREPARATION:** Remove all oil and grease from the surface prior to blast cleaning. All exterior surfaces shall be abrasive blast cleaned to a Commercial Finish, removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating's Specification SP-6. A minimum angular blast profile of 2.0 mils is required.
- B. **PRIME COAT:** Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one (1) coat of Tnemec Series 91-H2O Hydro-Zinc to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5 – 3.5 mils.
- C. **ADDITIONAL PRIME COAT:** Apply by brush only, one (1) additional spot prime coat to all inaccessible and hard to reach areas, such as the inside of anchor bolt chairs, vent, manways, tie rods, turnbuckles, and accessories, with one coat of Tnemec Series 135-color Chembuild
- D. **INTERMEDIATE COAT:** Apply one (1) complete coat of Tnemec Series N69-color Hi-Build Epoxoline II at a dry film thickness of 2.0 – 3.0 mils.
- E. **FIRST FINISH COAT:** Apply one (1) complete coat of Tnemec Series 1075 -color\* Endura-Shield II at a dry film thickness of 2.0 – 3.0 mils  
\* 15BL Tank White & 84GN Old Plantation
- F. **SECOND FINISH COAT:** Apply one complete coat of 1074U-11WH Tnemec White Endura-Shield at a dry film thickness of 2.0 - 3.0 mils.
- G. **LETTERING/LOGO:** Apply VA Logo

### 3.8 INTERIOR (WET) COATING SYSTEM:

- A. **SURFACE PREPARATION:** The entire surface shall be abrasive blast cleaned to a Near White Finish, removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating's Specification SP-10. A minimum angular anchor profile of 2.0 mils is required.
- B. **PRIME COAT:** Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one (1) coat of Tnemec Series 91-H2O Hydro-Zinc to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5 - 3.5 mils.
- C. **STRIPE COAT:** After the primer has cured in accordance with the manufacturer's recommendations, apply one stripe coat, by brush only, of Tnemec Series N140- 39BL Delft Blue Pota-Pox Plus to all weld seams, edges of unseal welded roof plates, angles, and sharp edges.
- D. **INTERMEDIATE COAT:** Apply one (1) complete coat of Tnemec Series N140-1255 Chicago Beige Pota-Pox Plus to all surfaces. This coating shall be applied at a dry film thickness of 4.0 - 6.0 mils.
- E. **FINISH COAT:** Apply one complete coat of Tnemec Series N140-15BL Tank White Pota-Pox Plus at a dry film thickness of 4.0 - 6.0 mils.

### 3.9 INTERIOR (DRY AREA) COATING SYSTEM:

#### A. SURFACE PREPARATION:

1. The topside of the upper platform and 1' up the riser wall, the topside of the lower condensate plate and 1' up the riser wall and the access tube, and the belly of the tank



shall be abrasive blast cleaned to a Commercial Blast Finish removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating's Specification SP-6. A blast profile of 1.5 mils is required.

2. All other rusted and failed surfaces on the interior dry shall be spot abrasive blast clean to a Commercial Finish, SSPC SP-6.
  3. Feather edges to form a smooth transition to tight existing paint.
- B. **PRIME COAT:** Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one (1) coat of Tnemec Series N140-1255 Chicago Beige Pota-Pox Plus to all bare steel surfaces. This coating shall be applied at a dry film thickness of 3.0 - 5.0 mils.
- C. **FINISH COAT:** Apply one (1) complete coat of N140-15BL Tank White Pota-Pox Plus to all bare steel surfaces. This coating shall be applied at a dry film thickness of 4.0 - 6.0 mils.

### 3.10 APPLICATION OF PAINT:

- A. The Contractor shall apply each coating in accordance with these specifications and the paint manufacturer's recommendations. The coating shall be applied at the specified thickness. If the specified thickness is not obtained, an additional coat(s) of paint shall be applied.
- B. All paint shall be applied in strict accordance with the applicable manufacturer's printed data sheet and container label outlining recommended minimum and maximum surface and air temperatures required for application. Paint shall not be applied to wet or damp surfaces and shall not be applied in rain, snow, fog or mist, or when the relative humidity exceeds 85%.
- C. No paint shall be applied when it is expected that the relative humidity will exceed 85% and/or the air temperature will drop below recommended levels within twelve (12) hours after paint application. Dew or moisture condensation should be anticipated, and if such conditions are prevalent, painting shall be delayed until certain that the surfaces are dry. Painting should be completed well in advance of the probable time of day when condensation will occur in order to permit the film an appropriate drying time prior to the formation of moisture on the surface.

### 3.11 DRY FILM THICKNESS:

Dry film thickness shall be measured in accordance with current SSPC PA2, "Dry Paint Thickness with Magnetic Gauges".

### 3.12 CONTAINMENT AND DISPOSAL REQUIREMENTS:

- A. When required by Federal, State or Local regulation, the entire tank and structure shall be enclosed and surface preparation debris contained. Refer to SSPC-GUIDE 6 (CON), "Guide for Containing Debris Generated During Paint Removal Operations".
- B. Refer to SSPC-GUIDE 7 (DIS). **NOTE:** All surface preparation debris must be disposed of in accordance with applicable federal, state and local regulations.

- C. The Government is the generator of and is responsible for the proper containment and disposal of all waste resulting from the surface preparation of this tank(s). As part of this contract, the Contractor shall arrange and pay for all containment, tests, permits, transportation and disposal of all waste resulting from the surface preparation of this tank(s) in strict accordance with Illinois EPA regulations. Copies of all documentation required by Illinois EPA regulations shall be submitted to the COR for verification prior to the submission of the Contractor's request for final payment.
- D. The Contractor shall cut and grind flush all exterior containment structure lugs and prepare and paint areas as described in the exterior painting section of these specifications.
- E. Upon removal of the exterior lugs, the Contractor shall also repair any damaged interior coating by methods described in the interior painting section of these specifications. Abrasive blasting to bare metal (SSPC-SP10) will be required in the damaged areas.

**3.13 DISINFECTION AND FILLING OF THE TANK:**

Adequate ventilation that will effectively remove solvent vapors shall be provided for proper drying of paint on interior surfaces. Following final coat application, the tank shall not be disinfected or filled until the coating system is fully cured. Refer to applicable product data sheet(s) for dry time / temperature requirements. Disinfection shall be done in accordance with the current American Water Works Association standard, AWWA C652, or as instructed by the Owner.

**3.14 FIRST ANNIVERSARY INSPECTION:**

Approximately eleven (11) months after the completion of the work, the Contractor and CITY and or the CITY'S representative shall inspect the inside and outside surfaces of the tank, in accordance with Section 5.2 of AWWA Standard D102 to determine whether any repair work is necessary.

**3.15 PROTECTION CLEAN UP, AND TOUCH-UP:**

- A. Protect work from paint droppings and spattering by use of masking, drop cloths, removal of items or by other approved methods.
- B. Upon completion, clean paint from hardware, glass and other surfaces and items not required to be painted of paint drops or smears.
- C. Before final inspection, touch-up or refinished in a manner to produce solid even color and finish texture, free from defects in work which was damaged or discolored.

- - - E N D - - -

**SECTION 26 05 11  
REQUIREMENTS FOR ELECTRICAL INSTALLATIONS**

**PART 1 –**

**GENERAL**

**1.1 DESCRIPTION**

- A. This section applies to all sections of Division 26.
- B. Furnish and install electrical systems, materials, equipment, and accessories in accordance with the specifications and drawings. Capacities and ratings of conductors and other items and arrangements for the specified items are shown on the drawings.
- C. Conductor ampacities specified or shown on the drawings are based on copper conductors, with the conduit and raceways sized per NEC. Aluminum conductors are prohibited.

**1.2 MINIMUM REQUIREMENTS**

- A. The International Building Code (IBC), National Electrical Code (NEC), Underwriters Laboratories, Inc. (UL), and National Fire Protection Association (NFPA) codes and standards are the minimum requirements for materials and installation.
- B. The drawings and specifications shall govern in those instances where requirements are greater than those stated in the above codes and standards.

**1.3 TEST STANDARDS**

- A. All materials and equipment shall be listed, labeled, or certified by a Nationally Recognized Testing Laboratory (NRTL) to meet Underwriters Laboratories, Inc. (UL), standards where test standards have been established. Materials and equipment which are not covered by UL standards will be accepted, providing that materials and equipment are listed, labeled, certified or otherwise determined to meet the safety requirements of a NRTL. Materials and equipment which no NRTL accepts, certifies, lists, labels, or determines to be safe, will be considered if inspected or tested in accordance with national industrial standards, such as ANSI, NEMA, and NETA. Evidence of compliance shall include certified test reports and definitive shop drawings.
- B. Definitions:
  - 1. Listed: Materials and equipment included in a list published by an organization that is acceptable to the Authority Having Jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production or listed materials and equipment or periodic evaluation of services, and whose listing states that the materials and equipment either meets appropriate designated standards or has been tested and found suitable for a specified purpose.
  - 2. Labeled: Materials and equipment to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the Authority Having Jurisdiction and concerned with product evaluation, that maintains periodic inspection of

production of labeled materials and equipment, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

3. Certified: Materials and equipment which:
  - a. Have been tested and found by a NRTL to meet nationally recognized standards or to be safe for use in a specified manner.
  - b. Are periodically inspected by a NRTL.
  - c. Bear a label, tag, or other record of certification.
4. Nationally Recognized Testing Laboratory: Testing laboratory which is recognized and approved by the Secretary of Labor in accordance with OSHA regulations.

#### **1.4 QUALIFICATIONS (PRODUCTS AND SERVICES)**

- A. Manufacturer's Qualifications: The manufacturer shall regularly and currently produce, as one of the manufacturer's principal products, the materials and equipment specified for this project, and shall have manufactured the materials and equipment for at least three (3) years.
- B. Product Qualification:
  1. Manufacturer's materials and equipment shall have been in satisfactory operation, on three installations of similar size and type as this project, for at least three (3) years.
  2. The Government reserves the right to require the Contractor to submit a list of installations where the materials and equipment have been in operation before approval.

#### **1.5 APPLICABLE PUBLICATIONS**

- A. Applicable publications listed in all Sections of Division 26 are the latest issue, unless otherwise noted.
- B. Products specified in all sections of Division 26 shall comply with the applicable publications listed in each section.

#### **1.6 MANUFACTURED PRODUCTS**

- A. Materials and equipment furnished shall be of current production by manufacturers regularly engaged in the manufacture of such items, and for which replacement parts shall be available.
- B. When more than one unit of the same class or type of materials and equipment is required, such units shall be the product of a single manufacturer. C. Equipment Assemblies and Components:
  1. Components of an assembled unit need not be products of the same manufacturer.
  2. Manufacturers of equipment assemblies, which include components made by others, shall assume complete responsibility for the final assembled unit.
  3. Components shall be compatible with each other and with the total assembly for the intended service.
  4. Constituent parts which are similar shall be the product of a single manufacturer.
- C. Factory wiring and terminals shall be identified on the equipment being furnished and on all wiring diagrams.

## **1.7 VARIATIONS FROM CONTRACT REQUIREMENTS**

Where the Government or the Contractor requests variations from the contract requirements, the connecting work and related components shall include, but not be limited to additions or changes to branch circuits, circuit protective devices, conduits, wire, feeders, controls, panels and installation methods.

## **1.8 MATERIALS AND EQUIPMENT PROTECTION**

- A. Materials and equipment shall be protected during shipment and storage against physical damage, vermin, dirt, corrosive substances, fumes, moisture, cold and rain.
  - 1. Store materials and equipment indoors in clean dry space with uniform temperature to prevent condensation.
  - 2. During installation, equipment shall be protected against entry of foreign matter, and be vacuum-cleaned both inside and outside before testing and operating. Compressed air shall not be used to clean equipment. Remove loose packing and flammable materials from inside equipment.
  - 3. Damaged equipment shall be repaired or replaced, as determined by the COR.
  - 4. Painted surfaces shall be protected with factory installed removable heavy Kraft paper, sheet vinyl or equal.
  - 5. Damaged paint on equipment shall be refinished with the same quality of paint and workmanship as used by the manufacturer so repaired areas are not obvious.

## **1.9 WORK PERFORMANCE**

- A. All electrical work shall comply with the requirements of NFPA 70 (NEC), NFPA 70B, NFPA 70E, OSHA Part 1910 subpart J – General Environmental Controls, OSHA Part 1910 subpart K – Medical and First Aid, and OSHA Part 1910 subpart S – Electrical, in addition to other references required by contract.
- B. Job site safety and worker safety is the responsibility of the Contractor.
- C. Electrical work shall be accomplished with all affected circuits or equipment de-energized. When an electrical outage cannot be accomplished in this manner for the required work, the following requirements are mandatory:
  - 1. Electricians must use full protective equipment (i.e., certified and tested insulating material to cover exposed energized electrical components, certified and tested insulated tools, etc.) while working on energized systems in accordance with NFPA 70E.
  - 2. Before initiating any work, a job specific work plan must be developed by the Contractor with a peer review conducted and documented by the Resident Engineer. The work plan must include procedures to be used on and near the live electrical equipment, barriers to be installed, safety equipment to be used, and exit pathways.
  - 3. Work on energized circuits or equipment cannot begin until prior written approval is obtained from the Resident Engineer.

- D. For work that affects existing electrical systems, arrange, phase and perform work to assure minimal interference with normal functioning of the facility. Refer to Article OPERATIONS AND STORAGE AREAS under Section 01 00 00, GENERAL REQUIREMENTS.
- E. New work shall be installed and connected to existing work neatly, safely and professionally. Disturbed or damaged work shall be replaced or repaired to its prior conditions, as required by Section 01 00 00, GENERAL REQUIREMENTS.
- F. Coordinate location of equipment and conduit with other trades to minimize interference.

### **1.10 EQUIPMENT INSTALLATION AND REQUIREMENTS**

- A. Equipment location shall be as close as practical to locations shown on the drawings.
- B. Working clearances shall not be less than specified in the NEC.
- C. Inaccessible Equipment:
  - 1. Where the Government determines that the Contractor has installed equipment not readily accessible for operation and maintenance, the equipment shall be removed and reinstalled as directed at no additional cost to the Government.
  - 2. "Readily accessible" is defined as being capable of being reached quickly for operation, maintenance, or inspections without the use of ladders, or without climbing or crawling under or over obstacles such as, but not limited to, motors, pumps, belt guards, transformers, piping, ductwork, conduit and raceways.
- D. Electrical service entrance equipment and arrangements for temporary and permanent connections to the electric utility company's system shall conform to the electric utility company's requirements. Coordinate fuses, circuit breakers and relays with the electric utility company's system, and obtain electric utility company approval for sizes and settings of these devices.

### **1.11 EQUIPMENT IDENTIFICATION**

- A. In addition to the requirements of the NEC, install an identification sign which clearly indicates information required for use and maintenance of items such as switchboards and switchgear, panelboards, cabinets, motor controllers, fused and non-fused safety switches, generators, automatic transfer switches, separately enclosed circuit breakers, individual breakers and controllers in switchboards, switchgear and motor control assemblies, control devices and other significant equipment.
- B. Identification signs for Normal Power System equipment shall be laminated black phenolic resin with a white core with engraved lettering. Identification signs for Essential Electrical System (EES) equipment, as defined in the NEC, shall be laminated red phenolic resin with a white core with engraved lettering. Lettering shall be a minimum of 12 mm (1/2 inch) high. Identification signs shall indicate equipment designation, rated bus amperage, voltage, number of phases, number of wires, and type of EES power branch as applicable. Secure nameplates with screws.
- C. Install adhesive arc flash warning labels on all equipment as required by NFPA 70E. Label shall indicate the arc hazard boundary (inches), working distance (inches), arc flash incident energy at the working distance (calories/cm<sup>2</sup>), required PPE category and description

including the glove rating, voltage rating of the equipment, limited approach distance (inches), restricted approach distance (inches), prohibited approach distance (inches), equipment/bus name, date prepared, and manufacturer name and address.

## 1.12 SUBMITTALS

- A. Submit to the COTR in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. The Government's approval shall be obtained for all materials and equipment before delivery to the job site. Delivery, storage or installation of materials and equipment which has not had prior approval will not be permitted.
- C. All submittals shall include six copies of adequate descriptive literature, catalog cuts, shop drawings, test reports, certifications, samples, and other data necessary for the Government to ascertain that the proposed materials and equipment comply with drawing and specification requirements. Catalog cuts submitted for approval shall be legible and clearly identify specific materials and equipment being submitted.
- D. Submittals for individual systems and equipment assemblies which consist of more than one item or component shall be made for the system or assembly as a whole. Partial submittals will not be considered for approval.
  1. Mark the submittals, "SUBMITTED UNDER SECTION\_\_\_\_\_".
  2. Submittals shall be marked to show specification reference including the section and paragraph numbers.
  3. Submit each section separately.
- E. The submittals shall include the following:
  1. Information that confirms compliance with contract requirements. Include the manufacturer's name, model or catalog numbers, catalog information, technical data sheets, shop drawings, manuals, pictures, nameplate data, and test reports as required.
  2. Submittals are required for all equipment anchors and supports. Submittals shall include weights, dimensions, center of gravity, standard connections, manufacturer's recommendations and behavior problems (e.g., vibration, thermal expansion, etc.) associated with equipment or piping so that the proposed installation can be properly reviewed. Include sufficient fabrication information so that appropriate mounting and securing provisions may be designed and attached to the equipment.
  3. Elementary and interconnection wiring diagrams for communication and signal systems, control systems, and equipment assemblies. All terminal points and wiring shall be identified on wiring diagrams.
    4. Parts list which shall include information for replacement parts and ordering instructions, as recommended by the equipment manufacturer.
- F. Approvals will be based on complete submission of shop drawings, manuals, test reports, certifications, and samples as applicable.
- G. After approval and prior to installation, furnish the COR with one sample of each of the following:

1. A minimum 300 mm (12 inches) length of each type and size of wire and cable along with the tag from the coils or reels from which the sample was taken. The length of the sample shall be sufficient to show all markings provided by the manufacturer.
2. Each type of conduit coupling, bushing, and termination fitting.
3. Conduit hangers, clamps, and supports.
4. Each type of receptacle, toggle switch, lighting control sensor, outlet box, , device wall plate, engraved nameplate, wire and cable splicing and terminating material, and branch circuit single pole molded case circuit breaker.

### **1.13 SINGULAR NUMBER**

Where any device or part of equipment is referred to in these specifications in the singular number (e.g., "the switch"), this reference shall be deemed to apply to as many such devices as are required to complete the installation as shown on the drawings.

### **1.14 ACCEPTANCE CHECKS AND TESTS**

- A. The Contractor shall furnish the instruments, materials, and labor for tests.
- B. Where systems are comprised of components specified in more than one section of Division 26, the Contractor shall coordinate the installation, testing, and adjustment of all components between various manufacturer's representatives and technicians so that a complete, functional, and operational system is delivered to the Government.
- C. When test results indicate any defects, the Contractor shall repair or replace the defective materials or equipment, and repeat the tests. Repair, replacement, and retesting shall be accomplished at no additional cost to the Government.

### **1.15 WARRANTY**

All work performed and all equipment and material furnished under this Division shall be free from defects and shall remain so for a period of one year from the date of acceptance of the entire installation by the Contracting Officer for the Government.

---END---



**SECTION 26 05 26  
GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS**

**PART 1 –**

**GENERAL**

**1.1 DESCRIPTION**

- A. This section specifies the furnishing, installation, connection, and testing of grounding and bonding equipment, indicated as grounding equipment in this section.
- B. “Grounding electrode system” refers to grounding electrode conductors and all electrodes required or allowed by NEC, as well as made, supplementary, and lightning protection system grounding electrodes.
- C. The terms “connect” and “bond” are used interchangeably in this section and have the same meaning.

**1.2 RELATED WORK**

Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS: Requirements that apply to all sections of Division 26.

**1.3 QUALITY ASSURANCE**

Refer to Paragraph, QUALIFICATIONS (PRODUCTS AND SERVICES), in Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS.

**1.4 SUBMITTALS**

- A. Submit six (6) copies of the following in accordance with Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS.
  - 1. Shop Drawings:
    - a. Submit sufficient information to demonstrate compliance with drawings and specifications.
    - b. Submit plans showing the location of system grounding electrodes and connections, and the routing of aboveground and underground grounding electrode conductors.
  - 2. Test Reports:
    - a. Two (2) weeks prior to the final inspection, submit ground resistance field test reports to the COR.
  - 3. Certifications:
    - a. Certification by the Contractor that the grounding equipment has been properly installed and tested.

**1.5 APPLICABLE PUBLICATIONS**

- A. Publications listed below (including amendments, addenda, revisions, supplements, and errata) form a part of this specification to the extent referenced. Publications are referenced in the text by designation only.
- B. American Society for Testing and Materials (ASTM):
  - B1-07 Standard Specification for Hard-Drawn Copper Wire
  - B3-07 Standard Specification for Soft or Annealed Copper Wire
  - B8-11 Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft
- C. Institute of Electrical and Electronics Engineers, Inc. (IEEE):
  - 81-83 IEEE Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System Part 1: Normal Measurements
- D. National Fire Protection Association (NFPA):
  - 70-11 National Electrical Code (NEC)
  - 70E-12 National Electrical Safety Code
  - 99-12 Health Care Facilities
- E. Underwriters Laboratories, Inc. (UL):
  - 44-10 Thermoset-Insulated Wires and Cables
  - 83-08 Thermoplastic-Insulated Wires and Cables
  - 467-07 Grounding and Bonding Equipment

**PART 2 –**

**PRODUCTS**

**2.1 GROUNDING AND BONDING CONDUCTORS**

- A. Equipment grounding conductors shall be insulated stranded copper, except that sizes No. 10 AWG and smaller shall be solid copper. Insulation color shall be continuous green for all equipment grounding conductors, except that wire sizes No. 4 AWG and larger shall be identified per NEC.
- B. Bonding conductors shall be bare stranded copper, except that sizes No. 10 AWG and smaller shall be bare solid copper. Bonding conductors shall be stranded for final connection to motors, transformers, and vibrating equipment.
- C. Conductor sizes shall not be less than shown on the drawings, or not less than required by the NEC, whichever is greater.
- D. Insulation: THHN-THWN and XHHW-2.

## 2.2 GROUND RODS

- A. Steel or copper clad steel, 19 mm (0.75 inch) diameter by 3 M (10 feet) long.
- B. Quantity of rods shall be determined by the contractor as required to obtain the specified ground resistance.

## 2.3 CONCRETE ENCASED ELECTRODE

Concrete encased electrode shall be No. 4 AWG bare copper wire, installed per NEC.

## 2.4 GROUND CONNECTIONS

- A. Below Grade and Inaccessible Locations: Exothermic-welded type connectors.
- B. Above Grade:
  - 1. Bonding Jumpers: Listed for use with aluminum and copper conductors. For wire sizes No. 8 AWG and larger, use compression-type connectors. For wire sizes smaller than No. 8 AWG, use mechanical type lugs. Connectors or lugs shall use zinc-plated steel bolts, nuts, and washers. Bolts shall be torqued to the values recommended by the manufacturer.
  - 2. Connection to Building Steel: Exothermic-welded type connectors.
  - 3. Connection to Grounding Bus Bars: Listed for use with aluminum and copper conductors. Use mechanical type lugs, with zinc-plated steel bolts, nuts, and washers. Bolts shall be torqued to the values recommended by the manufacturer.
  - 4. Connection to Equipment Rack and Cabinet Ground Bars: Listed for use with aluminum and copper conductors. Use mechanical type lugs, with zinc-plated steel bolts, nuts, and washers. Bolts shall be torqued to the values recommended by the manufacturer.

## PART 3 –

### EXECUTION

#### 3.1 GENERAL

- A. Install grounding equipment in accordance with the NEC, as shown on the drawings, and as specified herein.
- B. System Grounding:
  - 1. Secondary service neutrals: Ground at the supply side of the secondary disconnecting means and at the related transformer.
  - 2. Separately derived systems (transformers downstream from the service entrance): Ground the secondary neutral.
- C. Equipment Grounding: Metallic piping, building structural steel, electrical enclosures, raceways, junction boxes, outlet boxes, cabinets, machine frames, and other conductive items in close proximity with electrical circuits, shall be bonded and grounded.

#### 3.2 SECONDARY VOLTAGE EQUIPMENT AND CIRCUITS

- A. Main Bonding Jumper: Bond the secondary service neutral to the ground bus in the service equipment.
- B. Metallic Piping, Building Structural Steel, and Supplemental Electrode(s):
  - 1. Provide a grounding electrode conductor sized per NEC between the service equipment ground bus and all metallic water pipe systems, building structural steel, and supplemental or made electrodes. Provide jumpers across insulating joints in the metallic piping.
  - 2. Provide a supplemental ground electrode as shown on the drawings and bond to the grounding electrode system.

### **3.3 GROUND RESISTANCE**

- A. Grounding system resistance to ground shall not exceed 5 ohms. Make any modifications or additions to the grounding electrode system necessary for compliance without additional cost to the Government. Final tests shall ensure that this requirement is met.
- B. Grounding system resistance shall comply with the electric utility company ground resistance requirements.

### **3.4 GROUND ROD INSTALLATION**

- A. For outdoor installations, drive each rod vertically in the earth, until top of rod is 610 mm (24 inches) below final grade.
- B. For indoor installations, leave 100 mm (4 inches) of each rod exposed.
- C. Where buried or permanently concealed ground connections are required, make the connections by the exothermic process, to form solid metal joints. Make accessible ground connections with mechanical pressure-type ground connectors.
- D. Where rock or impenetrable soil prevents the driving of vertical ground rods, install angled ground rods or grounding electrodes in horizontal trenches to achieve the specified ground resistance.

### **3.5 ACCEPTANCE CHECKS AND TESTS**

- A. Resistance of the grounding electrode system shall be measured using a four-terminal fall-of-potential method as defined in IEEE 81. Ground resistance measurements shall be made before the electrical distribution system is energized or connected to the electric utility company ground system, and shall be made in normally dry conditions not fewer than 48 hours after the last rainfall.
- B. Resistance measurements of separate grounding electrode systems shall be made before the systems are bonded together. The combined resistance of separate systems may be used to meet the required resistance, but the specified number of electrodes must still be provided.
- C. Below-grade connections shall be visually inspected by the COR prior to backfilling. The Contractor shall notify the COR 24 hours before the connections are ready for inspection.

**SECTION 26 41 00  
FACILITY LIGHTNING PROTECTION**

**PART 1 – GENERAL**

**1.1 DESCRIPTION**

This section specifies the furnishing and installation of a complete UL master labeled lightning protection system.

**1.2 RELATED WORK**

- A. Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS:  
Requirements that apply to all sections of Division 26.
- B. Section 26 05 26, GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS:  
Requirements for personnel safety and to provide a low impedance path to ground for possible ground faults.
- C. Section 26 42 00 CATHODIC PROTECTION: Requirements for protection of buried ferrous equipment from galvanic corrosion.

**1.3 QUALITY ASSURANCE**

Quality Assurance shall be in accordance with Paragraph, QUALIFICATIONS (PRODUCTS AND SERVICES) in Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS.

**1.4 SUBMITTALS**

- A. Submit in accordance with Paragraph, SUBMITTALS in Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS, and the following requirements:
  - 1. Shop Drawings:
    - a. Submit sufficient information to demonstrate compliance with drawings and specifications.
    - b. Show locations of air terminals, connections to required metal surfaces, down conductors, and grounding means.
    - c. Show the mounting hardware and materials used to attach air terminals and conductors to the structure.
  - 2. Certifications: Two (2) weeks prior to final inspection, submit the following.
    - a. Certification by the manufacturer that the lightning protection system conforms to the requirements of the drawings and specifications.
    - b. Certification by the Contractor that the lightning protection system has been properly installed and inspected.
    - c. Certification that the lightning protection system has been inspected by a UL representative and has been approved by UL without variation.

## 1.5 APPLICABLE PUBLICATIONS

- A. Publications listed below (including amendments, addenda, revisions, supplements, and errata) form a part of this specification to the extent referenced. Publications are referenced in the text by designation only.
- B. National Fire Protection Association (NFPA):
  - 70-17 National Electrical Code (NEC)
  - 780-17 Standard for the Installation of Lightning Protection Systems
- C. Underwriters Laboratories, Inc. (UL):
  - 96-16 Lightning Protection Components
  - 96A-16 Installation Requirements for Lightning Protection Systems
  - 467-13 Standard for Grounding and Bonding Equipment

## PART 2 –

### PRODUCTS

#### 2.1 GENERAL REQUIREMENTS

- A. Lightning protection components shall conform to NFPA 780 and UL 96, for use on Class II structures. Aluminum materials are not allowed.
  - 1. Class II conductors: Copper.
  - 2. Class II air terminals: Solid copper, 460 mm (18 inches)// long, not less than 12.7 mm (1/2 inch) diameter, with sharp bare copper points.
  - 3. Ground rods: Copper-clad steel, 0.75 in (19 mm) diameter by 3 m (10 feet) long.
  - 4. Down conductor guards: Stiff copper or brass.
  - 5. Anchors and fasteners: Bronze bolt and clamp type shall be used for all applications except for membrane roof. Adhesive type are allowed only for attachment to membrane roof materials, using adhesive that is compatible with the membrane material.
  - 6. Connectors: Bronze clamp-type connectors shall be used for roof conductor splices, and the connection of the roof conductor to air terminals and bonding plates. Crimp-type connectors are not allowed.
  - 7. Exothermic welds: Exothermic welds shall be used for splicing the roof conductor to the down conductors, splices of the down conductors, and for connection of the down conductors to ground rods, ground plates, and the ground ring.

## PART 3 –

### EXECUTION

#### 3.1 INSTALLATION

- A. Installation shall be in accordance with the NEC, as shown on the drawings, and manufacturer's instructions.
- B. Coordinate installation with the roofing manufacturer and roofing installer.
- C. Install the conductors as inconspicuously as practical.

- D. Install the down conductors within the concealed cavity of exterior walls where practical. Run the down conductors to the exterior at elevations below the finished grade.
- E. Where down conductors are subject to damage or are accessible near grade, protect with down conductor guards to 2.4 m (8 feet) above grade. Bond down conductor guards to down conductor at both ends.
- F. Make connections of dissimilar metal with bimetallic type fittings to prevent electrolytic action.
- G. Install ground rods and ground plates not less than 600 mm (2 feet) deep and a distance not less than 900 mm (3 feet) nor more than 2.5 m (8 feet) from the nearest point of the structure. Exothermically weld the down conductors to ground rods and ground plates in the presence of the COR.
- H. Bond down conductors to metal main water piping where applicable.
- I. Bond down conductors to building structural steel.
- J. Connect roof conductors to all metallic projections and equipment above the roof.
- K. Connect exterior metal surfaces, located within 900 mm (3 feet) of the conductors, to the conductors to prevent flashovers.
- L. Maintain horizontal or downward coursing of main conductor and insure that all bends have at least an 200 mm (8 inches) radius and do not exceed 90 degrees.
- M. Conductors shall be rigidly fastened every 900 mm (3 feet) along the roof and down to the building to ground.
- N. Air terminals shall be secured against overturning either by attachment to the object to be protected or by means of a substantial tripod or other braces permanently and rigidly attached to the building or structure.
- O. Install air terminal bases, cable holders and other roof-system supporting means without piercing membrane or metal roofs.
- P. Down conductors coursed on or in reinforced concrete columns or on structural steel columns shall be connected to the reinforcing steel or the structural steel member at its upper and lower extremities. In the case of long vertical members an additional connection shall be made at intervals not exceeding 30 M (100 feet).
- Q. A counterpoise or ground ring, where shown, shall be of No. 1/0 copper cable having suitable resistance to corrosion and shall be laid around the perimeter of the structure in a trench not less than 600 mm (2 feet) deep at a distance not less than 900 mm (3 feet) nor more than 2.5 M (8 feet) from the nearest point of the structure.
- R. Use the structural steel framework or reinforcing steel as the down conductor.
  - 1. Weld or bond the non-electrically-continuous sections together and make them electrically continuous.
  - 2. Verify the electrical continuity by measuring the ground resistances to earth at the ground level, at the top of the building or stack, and at intermediate points with a sensitive ohmmeter. Compare the resistance readings.
  - 3. Connect the air terminals together with an exterior conductor connected to the structural steel framework at not more than 18 M (60 feet) intervals.
  - 4. Install ground connections to earth at not more than 18 M (60 feet) intervals around the perimeter of the building.
  - 5. Weld or braze bonding plates to cleaned sections of the steel and connect the conductors to the plates.
  - 6. Do not pierce the structural steel in any manner. Connections to the structural steel shall conform to UL 96A.

### 3.2 ACCEPTANCE CHECKS AND TESTS

- A. Test the ground resistance to earth by standard methods, and conform to the ground resistance requirements specified in Section 26 05 26, GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS.
- B. A UL representative shall inspect the lightning protection system. Obtain and install a UL numbered master label for each of the lightning protection systems at the location directed by the UL representative and the COR.

---END---



**INFORMATION REGARDING BIDDING MATERIAL, BID GUARANTEE AND BONDS**

**INSTRUCTIONS, CONDITIONS AND OTHER STATEMENTS TO BIDDERS/OFFERORS**

**2.1 52.216-1 TYPE OF CONTRACT (APR 1984)**

The Government contemplates award of a Firm-Fixed-Price contract resulting from this solicitation.

(End of Provision)

**2.2 52.222-5 CONSTRUCTION WAGE RATE REQUIREMENTS—SECONDARY SITE OF THE WORK (MAY 2014)**

(a)(1) The offeror shall notify the Government if the offeror intends to perform work at any secondary site of the work, as defined in paragraph (a)(1)(ii) of the FAR clause at 52.222-6, Construction Wage Rate Requirements, of this solicitation.

(2) If the offeror is unsure if a planned work site satisfies the criteria for a secondary site of the work, the offeror shall request a determination from the Contracting Officer.

(b)(1) If the wage determination provided by the Government for work at the primary site of the work is not applicable to the secondary site of the work, the offeror shall request a wage determination from the Contracting Officer.

(2) The due date for receipt of offers will not be extended as a result of an offeror's request for a wage determination for a secondary site of the work.

(End of Provision)

**2.3 52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)**

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

<b>Goals for minority participation for each trade</b>	<b>Goals for female participation for each trade</b>
4.8 %	6.9 %

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific

affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the—

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is

**City of Danville  
County of Vermilion  
State of Illinois**

(End of Provision)

## **2.4 52.225-10 NOTICE OF BUY AMERICAN REQUIREMENT— CONSTRUCTION MATERIALS (MAY 2014) ALTERNATE I (MAY 2014)**

(a) *Definitions.* "Commercially available off-the-shelf (COTS) item," "construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American—Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) *Requests for determinations of inapplicability.* An offeror requesting a determination regarding the inapplicability of the Buy American statute shall submit the request with its offer, including the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9.

(c) Evaluation of offers.

(1) The Government will evaluate an offer requesting exception to the requirements of the Buy American statute, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested—

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of Provision)

## **2.5 52.228-1 BID GUARANTEE (SEP 1996)**

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds—

(1) To unsuccessful bidders as soon as practicable after the opening of bids; and

(2) To the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

(c) The amount of the bid guarantee shall be 20 percent of the bid price or 3,000,000, whichever is less.

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

(End of Provision)

## **2.6 52.233-2 SERVICE OF PROTEST (SEP 2006)**

Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Jeffrey Gerbensky  
Branch Chief

Hand-Carried Address:  
Department of Veteran Affairs  
GLAC - Southern Tier Construction Team  
3001 Green Bay Road  
Building 1, Room 328  
North Chicago IL 60064-3048

Mailing Address:  
Department of Veterans Affairs  
GLAC - Southern Tier Construction Team  
3001 Green Bay Road  
Building 1, Room 328  
North Chicago IL 60064-3048

(b) The copy of any protest shall be received in the office designated above within one (1) day of filing a protest with the GAO.

(End of Provision)

## **2.7 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995) ALTERNATE I (FEB 1995)**

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) An organized site visit has been scheduled for—  
17 January 2018 at 1:00 PM, CST

(c) Participants will meet at—  
1900 East Main St, Danville, IL 61832 Bldg 102, Room 102G

(End of Provision)

## 2.8 52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.acquisition.gov/far/index.html>

<http://www.va.gov/oal/library/vaar/>

<u>FAR Number</u>	<u>Title</u>	<u>Date</u>
52.204-7	SYSTEM FOR AWARD MANAGEMENT	OCT 2016
52.204-16	COMMERCIAL AND GOVERNMENT ENTITY CODE REPORTING	JUL 2016
52.204-22	ALTERNATIVE LINE ITEM PROPOSAL	JAN 2017
52.214-3	AMENDMENTS TO INVITATIONS FOR BIDS	DEC 2016
52.214-4	FALSE STATEMENTS IN BIDS	APR 1984
52.214-5	SUBMISSION OF BIDS	DEC 2016
52.214-6	EXPLANATION TO PROSPECTIVE BIDDERS	APR 1984
52.214-7	LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS	NOV 1999
52.214-18	PREPARATION OF BIDS—CONSTRUCTION	APR 1984
52.214-19	CONTRACT AWARD—SEALED BIDDING—CONSTRUCTION	AUG 1996
52.214-34	SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE	APR 1991
52.214-35	SUBMISSION OF OFFERS IN U.S. CURRENCY	APR 1991
852.214-70	CAUTION TO BIDDERS-BID ENVELOPES	JAN 2008

(End of Provision)

## 2.9 VAAR 852.228-72 ASSISTING SERVICE-DISABLED VETERAN-OWNED AND VETERAN-OWNED SMALL BUSINESSES IN OBTAINING BONDS (DEC 2009)

Prime contractors are encouraged to assist service-disabled veteran-owned and veteran-owned small business potential subcontractors in obtaining bonding, when required. Mentor firms are encouraged to assist protégé firms under VA's Mentor-Protégé Program in obtaining acceptable bid, payment, and performance bonds, when required, as a prime contractor under a solicitation or contract and in obtaining any required bonds under subcontracts.

(End of Clause)

## 2.10 VAAR 852.233-70 PROTEST CONTENT/ALTERNATIVE DISPUTE RESOLUTION (JAN 2008)

(a) Any protest filed by an interested party shall:

- (1) Include the name, address, fax number, and telephone number of the protester;
  - (2) Identify the solicitation and/or contract number;
  - (3) Include an original signed by the protester or the protester's representative and at least one copy;
  - (4) Set forth a detailed statement of the legal and factual grounds of the protest, including a description of resulting prejudice to the protester, and provide copies of relevant documents;
  - (5) Specifically request a ruling of the individual upon whom the protest is served;
  - (6) State the form of relief requested; and
  - (7) Provide all information establishing the timeliness of the protest.
- (b) Failure to comply with the above may result in dismissal of the protest without further consideration.
- (c) Bidders/offerors and contracting officers are encouraged to use alternative dispute resolution (ADR) procedures to resolve protests at any stage in the protest process. If ADR is used, the Department of Veterans Affairs will not furnish any documentation in an ADR proceeding beyond what is allowed by the Federal Acquisition Regulation.

(End of Provision)

## 2.11 VAAR 852.233-71 ALTERNATE PROTEST PROCEDURE (JAN 1998)

As an alternative to filing a protest with the contracting officer, an interested party may file a protest with the Deputy Assistant Secretary for Acquisition and Materiel Management, Acquisition Administration Team, Department of Veterans Affairs, 810 Vermont Avenue, NW., Washington, DC 20420, or for solicitations issued by the Office of Construction and Facilities Management, the Director, Office of Construction and Facilities Management, 810 Vermont Avenue, NW., Washington, DC 20420. The protest will not be considered if the interested party has a protest on the same or similar issues pending with the Contracting Officer.

(End of Provision)

**PLEASE NOTE:** The correct mailing information for filing alternate protests is as follows:

Deputy Assistant Secretary for Acquisition and Logistics,  
Risk Management Team, Department of Veterans Affairs  
810 Vermont Avenue, N.W.  
Washington, DC 20420

Or for solicitations issued by the Office of Construction and Facilities Management:

Director, Office of Construction and Facilities Management  
811 Vermont Avenue, N.W.  
Washington, DC 20420

(End of Provision)

**2.12 VAAR 852.270-1 REPRESENTATIVES OF CONTRACTING OFFICERS  
(JAN 2008)**

The contracting officer reserves the right to designate representatives to act for him/her in furnishing technical guidance and advice or generally monitor the work to be performed under this contract. Such designation will be in writing and will define the scope and limitation of the designee's authority. A copy of the designation shall be furnished to the Contractor.

(End of Provision)

## REPRESENTATIONS AND CERTIFICATIONS

### 3.1 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (NOV 2017)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 236220.

(2) The small business size standard is \$36.5 Million.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in the System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

(i) Paragraph (d) applies.

(ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.

(iii) 52.203-18, Prohibition on Contracting with Entities that Require Certain Internal Confidentiality Agreements or Statements—Representation. This provision applies to all solicitations.

(iv) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.



(v) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—

- (A) Are not set aside for small business concerns;
- (B) Exceed the simplified acquisition threshold; and
- (C) Are for contracts that will be performed in the United States or its outlying areas.

(vi) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations—Representation.

(vii) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(viii) 52.209-11, Representation by Corporations Regarding Delinquent Tax Liability or a Felony Conviction under any Federal Law. This provision applies to all solicitations.

(ix) 52.214-14, Place of Performance—Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(x) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(xi) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(xii) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xiii) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xiv) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xv) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xvi) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xvii) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA-designated items.

(xviii) 52.223-22, Public Disclosure of Greenhouse Gas Emissions and Reduction Goals--Representation. This provision applies to solicitations that include the clause at 52.204-7.)

(xix) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xx) 52.225-4, Buy American—Free Trade Agreements—Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than \$25,000, the basic provision applies.

(B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.

(C) If the acquisition value is \$50,000 or more but is less than \$77,533, the provision with its Alternate II applies.

(D) If the acquisition value is \$77,533 or more but is less than \$100,000, the provision with its Alternate III applies.

(xxi) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xxii) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan—Certification. This provision applies to all solicitations.

(xxiii) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran—Representation and Certifications. This provision applies to all solicitations.

(xxiv) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(A) Solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions; and

(B) For DoD, NASA, and Coast Guard acquisitions, solicitations that contain the clause at 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns.

(2) The following representations or certifications are applicable as indicated by the Contracting Officer:

(i) 52.204-17, Ownership or Control of Offeror.

(ii) 52.204-20, Predecessor of Offeror.

(iii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

(iv) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Certification.

(v) 52.222-52, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services—Certification.

(vi) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

(vii) 52.227-6, Royalty Information.

(A) Basic.

(B) Alternate I.

(viii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The offeror has completed the annual representations and certifications electronically via the SAM Web site accessed through <https://www.acquisition.gov>. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [offeror to insert changes, identifying change by clause number, title, date]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

<b>FAR Clause #</b>	<b>Title</b>	<b>Date</b>	<b>Change</b>

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of Provision)

## GENERAL CONDITIONS

### 4.1 52.204-19 INCORPORATION BY REFERENCE OF REPRESENTATIONS AND CERTIFICATIONS (DEC 2014)

The Contractor's representations and certifications, including those completed electronically via the System for Award Management (SAM), are incorporated by reference into the contract.

(End of Clause)

### 4.2 52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984)

The Contractor shall be required to (a) commence work under this contract within 10 calendar days 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 90 days after receipt of notice to proceed. The time stated for completion shall include final cleanup of the premises.

(End of Clause)

### 4.3 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (JUL 2013)

(a) *Definitions.* As used in this clause—

*Long-term contract* means a contract of more than five years in duration, including options. However, the term does not include contracts that exceed five years in duration because the period of performance has been extended for a cumulative period not to exceed six months under the clause at 52.217-8, Option to Extend Services, or other appropriate authority.

*Small business concern* means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR part 121 and the size standard in paragraph (c) of this clause. Such a concern is "not dominant in its field of operation" when it does not exercise a controlling or major influence on a national basis in a kind of business activity in which a number of business concerns are primarily engaged. In determining whether dominance exists, consideration shall be given to all appropriate factors, including volume of business, number of employees, financial resources, competitive status or position, ownership or control of materials, processes, patents, license agreements, facilities, sales territory, and nature of business activity.

(b) If the Contractor represented that it was a small business concern prior to award of this contract, the Contractor shall re-represent its size status according to paragraph (e) of this clause or, if applicable, paragraph (g) of this clause, upon the occurrence of any of the following:

(1) Within 30 days after execution of a novation agreement or within 30 days after modification of the contract to include this clause, if the novation agreement was executed prior to inclusion of this clause in the contract.

(2) Within 30 days after a merger or acquisition that does not require a novation or within 30 days after modification of the contract to include this clause, if the merger or acquisition occurred prior to inclusion of this clause in the contract.

(3) For long-term contracts—

(i) Within 60 to 120 days prior to the end of the fifth year of the contract; and

(ii) Within 60 to 120 days prior to the date specified in the contract for exercising any option thereafter.

(c) The Contractor shall re-represent its size status in accordance with the size standard in effect at the time of this re-representation that corresponds to the North American Industry Classification System (NAICS) code assigned to this contract. The small business size standard corresponding to this NAICS code can be found at <http://www.sba.gov/content/table-small-business-size-standards>.

(d) The small business size standard for a Contractor providing a product which it does not manufacture itself, for a contract other than a construction or service contract, is 500 employees.

(e) Except as provided in paragraph (g) of this clause, the Contractor shall make the representation required by paragraph (b) of this clause by validating or updating all its representations in the Representations and Certifications section of the System for Award Management (SAM) and its other data in SAM, as necessary, to ensure that they reflect the Contractor's current status. The Contractor shall notify the contracting office in writing within the timeframes specified in paragraph (b) of this clause that the data have been validated or updated, and provide the date of the validation or update.

(f) If the Contractor represented that it was other than a small business concern prior to award of this contract, the Contractor may, but is not required to, take the actions required by paragraphs (e) or (g) of this clause.

(g) If the Contractor does not have representations and certifications in SAM, or does not have a representation in SAM for the NAICS code applicable to this contract, the Contractor is required to complete the following re-representation and submit it to the contracting office, along with the contract number and the date on which the re-representation was completed:

The Contractor represents that it [ ] is, [ ] is not a small business concern under **NAICS Code 236220** assigned to contract number \_\_\_\_\_.

\_\_\_\_\_  
[Contractor to sign and date and insert authorized signer's name and title].

(End of Clause)

#### 4.4 52.222-35 EQUAL OPPORTUNITY FOR VETERANS (OCT 2015)

(a) *Definitions.* As used in this clause—

“Active duty wartime or campaign badge veteran,” “Armed Forces service medal veteran,” “disabled veteran,” “protected veteran,” “qualified disabled veteran,” and “recently separated veteran” have the meanings given at FAR 22.1301.

(b) *Equal opportunity clause.* The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) *Subcontracts.* The Contractor shall insert the terms of this clause in subcontracts of \$150,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of Clause)

#### **4.5 52.222-40 NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT (DEC 2010)**

(a) During the term of this contract, the Contractor shall post an employee notice, of such size and in such form, and containing such content as prescribed by the Secretary of Labor, in conspicuous places in and about its plants and offices where employees covered by the National Labor Relations Act engage in activities relating to the performance of the contract, including all places where notices to employees are customarily posted both physically and electronically, in the languages employees speak, in accordance with 29 CFR 471.2(d) and (f).

(1) Physical posting of the employee notice shall be in conspicuous places in and about the Contractor's plants and offices so that the notice is prominent and readily seen by employees who are covered by the National Labor Relations Act and engage in activities related to the performance of the contract.

(2) If the Contractor customarily posts notices to employees electronically, then the Contractor shall also post the required notice electronically by displaying prominently, on any Web site that is maintained by the Contractor and is customarily used for notices to employees about terms and conditions of employment, a link to the Department of Labor's Web site that contains the full text of the poster. The link to the Department's Web site, as referenced in (b)(3) of this section, must read, "Important Notice about Employee Rights to Organize and Bargain Collectively with Their Employers."

(b) This required employee notice, printed by the Department of Labor, may be—

(1) Obtained from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW., Room N-5609, Washington, DC 20210, (202) 693-0123, or from any field office of the Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Provided by the Federal contracting agency if requested;

(3) Downloaded from the Office of Labor-Management Standards Web site at <http://www.dol.gov/olms/regs/compliance/EO13496.htm>; or

(4) Reproduced and used as exact duplicate copies of the Department of Labor's official poster.

(c) The required text of the employee notice referred to in this clause is located at Appendix A, Subpart A, 29 CFR Part 471.

(d) The Contractor shall comply with all provisions of the employee notice and related rules, regulations, and orders of the Secretary of Labor.

(e) In the event that the Contractor does not comply with the requirements set forth in paragraphs (a) through (d) of this clause, this contract may be terminated or suspended in whole or in part, and the Contractor may be suspended or debarred in accordance with 29 CFR 471.14 and subpart 9.4. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 471, which implements Executive Order 13496 or as otherwise provided by law.

(f) Subcontracts.

(1) The Contractor shall include the substance of this clause, including this paragraph (f), in every subcontract that exceeds \$10,000 and will be performed wholly or partially in the United States, unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to section 3 of Executive Order 13496 of January 30, 2009, so that such provisions will be binding upon each subcontractor.

(2) The Contractor shall not procure supplies or services in a way designed to avoid the applicability of Executive Order 13496 or this clause.

(3) The Contractor shall take such action with respect to any such subcontract as may be directed by the Secretary of Labor as a means of enforcing such provisions, including the imposition of sanctions for noncompliance.

(4) However, if the Contractor becomes involved in litigation with a subcontractor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

(End of Clause)

#### **4.6 52.225-9 BUY AMERICAN—CONSTRUCTION MATERIALS (MAY 2014)**

(a) *Definitions.* As used in this clause—

"Commercially available off-the-shelf (COTS) item"—

(1) Means any item of supply (including construction material) that is—

(i) A commercial item (as defined in paragraph (1) of the definition at FAR 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in 46 U.S.C. 40102(4), such as agricultural products and petroleum products.

"Component" means any article, material, or supply incorporated directly into construction material.

"Construction material" means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item

brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

"Cost of components" means—

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

"Domestic construction material" means—

(1) An unmanufactured construction material mined or produced in the United States;

(2) A construction material manufactured in the United States, if—

(i) The cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which non-availability determinations have been made are treated as domestic; or

(ii) The construction material is a COTS item.

"Foreign construction material" means a construction material other than a domestic construction material.

"United States" means the 50 States, the District of Columbia, and outlying areas.

(b) Domestic preference.

(1) This clause implements 41 U.S.C. chapter 83, Buy American, by providing a preference for domestic construction material. In accordance with 41 U.S.C. 1907, the component test of the Buy American statute is waived for construction material that is a COTS item. (See FAR 12.505(a)(2)). The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that—

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American statute is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;

(ii) The application of the restriction of the Buy American statute to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American statute.

(1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including—

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American statute applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American statute applies, use of foreign construction material is noncompliant with the Buy American statute.

(d) *Data*. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

**FOREIGN AND DOMESTIC CONSTRUCTION MATERIALS PRICE COMPARISON**

Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*
Item 1:			
Foreign Construction Material			
Domestic Construction Material			
Item 2:			
Foreign Construction Material			
Domestic Construction Material			

[List name, address, telephone number, and contact for suppliers surveyed Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[\*Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]

(End of Clause)

**4.7 SUPPLEMENTAL INSURANCE REQUIREMENTS**

In accordance with FAR 28.307-2 and FAR 52.228-5, the following minimum coverage shall apply to this contract:

(a) Workers' compensation and employers liability: Contractors are required to comply with applicable Federal and State workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with a Contractor's commercial operations that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 is required, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(b) General Liability: \$500,000.00 per occurrences.

(c) Automobile liability: \$200,000.00 per person; \$500,000.00 per occurrence and \$200,000.00 property damage.

(d) The successful bidder must present to the Contracting Officer, prior to award, evidence of general liability insurance without any exclusionary clauses for asbestos that would void the general liability coverage.

(End of Clause)

#### 4.8 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.acquisition.gov/far/index.html>

<http://www.va.gov/oal/library/vaar/>

<b><u>FAR</u></b> <b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Date</u></b>
52.202-1	DEFINITIONS	NOV 2013
52.203-3	GRATUITIES	APR 1984
52.203-5	COVENANT AGAINST CONTINGENT FEES	MAY 2014
52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT	SEP 2006
52.203-7	ANTI-KICKBACK PROCEDURES	MAY 2014
52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	MAY 2014
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	MAY 2014
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	OCT 2010
52.203-16	PREVENTING PERSONAL CONFLICTS OF INTEREST	DEC 2011
52.203-17	CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS	APR 2014
52.203-19	PROHIBITION ON REQUIRING CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS OR STATEMENTS	JAN 2017
52.204-4	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER	MAY 2011
52.204-10	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS	OCT 2016
52.204-13	SYSTEM FOR AWARD MANAGEMENT MAINTENANCE	OCT 2016
52.204-18	COMMERCIAL AND GOVERNMENT ENTITY CODE MAINTENANCE	JUL 2016
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	OCT 2015
52.209-10	PROHIBITION ON CONTRACTING WITH INVERTED DOMESTIC CORPORATIONS	NOV 2015
52.219-8	UTILIZATION OF SMALL BUSINESS CONCERNS	NOV 2016
52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB 1997
52.222-3	CONVICT LABOR	JUN 2003
52.222-4	CONTRACT WORK HOURS AND SAFETY STANDARDS—OVERTIME COMPENSATION	MAY 2014
52.222-6	CONSTRUCTION WAGE RATE REQUIREMENTS	MAY 2014
52.222-7	WITHHOLDING OF FUNDS	MAY 2014
52.222-8	PAYROLLS AND BASIC RECORDS	MAY 2014
52.222-9	APPRENTICES AND TRAINEES	JUL 2005
52.222-10	COMPLIANCE WITH COPELAND ACT REQUIREMENTS	FEB 1988
52.222-11	SUBCONTRACTS (LABOR STANDARDS)	MAY 2014
52.222-12	CONTRACT TERMINATION—DEBARMENT	MAY 2014
52.222-13	COMPLIANCE WITH CONSTRUCTION WAGE RATE	MAY 2014

	REQUIREMENTS AND RELATED REGULATIONS	
52.222-14	DISPUTES CONCERNING LABOR STANDARDS	FEB 1988
52.222-15	CERTIFICATION OF ELIGIBILITY	MAY 2014
52.222-21	PROHIBITION OF SEGREGATED FACILITIES	APR 2015
52.222-26	EQUAL OPPORTUNITY	SEP 2016
52.222-27	AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION	APR 2015
52.222-36	EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES	JUL 2014
52.222-37	EMPLOYMENT REPORTS ON VETERANS	FEB 2016
52.222-50	COMBATING TRAFFICKING IN PERSONS	MAR 2015
52.222-54	EMPLOYMENT ELIGIBILITY VERIFICATION	OCT 2015
52.222-55	MINIMUM WAGES UNDER EXECUTIVE ORDER 13658	DEC 2015
52.222-62	PAID SICK LEAVE UNDER EXECUTIVE ORDER 13706	JAN 2017
52.223-5	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION	MAY 2011
52.223-6	DRUG-FREE WORKPLACE	MAY 2001
52.223-18	ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING	AUG 2011
52.223-21	FOAMS	JUN 2016
52.225-13	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	JUN 2008
52.227-1	AUTHORIZATION AND CONSENT	DEC 2007
52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	DEC 2007
52.227-4	PATENT INDEMNITY—CONSTRUCTION CONTRACTS	DEC 2007
52.228-2	ADDITIONAL BOND SECURITY	OCT 1997
52.228-5	INSURANCE—WORK ON A GOVERNMENT INSTALLATION	JAN 1997
52.228-11	PLEDGES OF ASSETS	JAN 2012
52.228-12	PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS	MAY 2014
52.228-14	IRREVOCABLE LETTER OF CREDIT	NOV 2014
52.228-15	PERFORMANCE AND PAYMENT BONDS— CONSTRUCTION	OCT 2010
52.229-3	FEDERAL, STATE, AND LOCAL TAXES	FEB 2013
52.232-5	PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS	MAY 2014
52.232-17	INTEREST	MAY 2014
52.232-27	PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS	JAN 2017
52.232-33	PAYMENT BY ELECTRONIC FUNDS TRANSFER—SYSTEM FOR AWARD MANAGEMENT	JUL 2013
52.232-39	UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS	JUN 2013
52.232-40	PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS	DEC 2013
52.233-1	DISPUTES ALTERNATE I (DEC 1991)	MAY 2014
52.233-3	PROTEST AFTER AWARD	AUG 1996
52.233-4	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM	OCT 2004
52.236-2	DIFFERING SITE CONDITIONS	APR 1984
52.236-3	SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK	APR 1984
52.236-5	MATERIAL AND WORKMANSHIP	APR 1984
52.236-6	SUPERINTENDENCE BY THE CONTRACTOR	APR 1984
52.236-7	PERMITS AND RESPONSIBILITIES	NOV 1991
52.236-8	OTHER CONTRACTS	APR 1984
52.236-9	PROTECTION OF EXISTING VEGETATION, STRUCTURES,	APR 1984

	EQUIPMENT, UTILITIES, AND IMPROVEMENTS	
52.236-10	OPERATIONS AND STORAGE AREAS	APR 1984
52.236-11	USE AND POSSESSION PRIOR TO COMPLETION	APR 1984
52.236-12	CLEANING UP	APR 1984
52.236-13	ACCIDENT PREVENTION	NOV 1991
52.236-14	AVAILABILITY AND USE OF UTILITY SERVICES	APR 1984
52.236-15	SCHEDULES FOR CONSTRUCTION CONTRACTS	APR 1984
52.236-17	LAYOUT OF WORK	APR 1984
52.236-21	SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION	FEB 1997
52.236-26	PRECONSTRUCTION CONFERENCE	FEB 1995
52.242-13	BANKRUPTCY	JUL 1995
52.242-14	SUSPENSION OF WORK	APR 1984
52.243-4	CHANGES	JUN 2007
52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS	NOV 2017
52.246-12	INSPECTION OF CONSTRUCTION	AUG 1996
52.246-21	WARRANTY OF CONSTRUCTION	MAR 1994
52.248-3	VALUE ENGINEERING—CONSTRUCTION	OCT 2015
52.249-2	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED PRICE) ALTERNATE I (SEPT 1996)	APR 2012
52.249-10	DEFAULT (FIXED-PRICE CONSTRUCTION)	APR 1984
52.253-1	COMPUTER GENERATED FORMS	JAN 1991

(End of Clause)

#### **4.9 VAAR 852.203-70 COMMERCIAL ADVERTISING (JAN 2008)**

The bidder or offeror agrees that if a contract is awarded to him/her, as a result of this solicitation, he/she will not advertise the award of the contract in his/her commercial advertising in such a manner as to state or imply that the Department of Veterans Affairs endorses a product, project or commercial line of endeavor.

(End of Clause)

#### **4.10 VAAR 852.219-10 VA NOTICE OF TOTAL SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS SET-ASIDE (JUL 2016)(DEVIATION)**

(a) *Definition.* For the Department of Veterans Affairs, “Service-disabled veteran-owned small business concern or SDVSOB”:

(1) Means a small business concern:

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans or eligible surviving spouses (see VAAR 802.201 Surviving Spouse definition);

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans (or eligible surviving spouses) or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran;

(iii) The business meets Federal small business size standards for the applicable North American Industry Classification System (NAICS) code identified in the solicitation document;

(iv) The business has been verified for ownership and control pursuant to 38 CFR 74 and is so listed in the Vendor Information Pages database, (<https://www.vip.vetbiz.gov>); and

(v) The business will comply with subcontracting limitations in 13 CFR 125.6, as applicable

(2) “Service-disabled veteran” means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

(b) *General.*

(1) Offers are solicited only from verified service-disabled veteran-owned small business concerns. Offers received from concerns that are not verified service-disabled veteran-owned small business concerns shall not be considered.

(2) Any award resulting from this solicitation shall be made to a verified service-disabled veteran-owned small business concern.

(c) *Agreement.* A service-disabled veteran-owned small business concern agrees that in the performance of the contract, the concern will comply with the limitation on subcontracting requirements in 13 CFR §125.6.

(d) A joint venture may be considered a service-disabled veteran owned small business concern if the joint venture complies with the requirements in 13 CFR 125.15, provided that any reference therein to SDVO SBC is to be construed to apply to a VA verified SDVOSB as appropriate.

(e) Any service-disabled veteran-owned small business concern (non-manufacturer) must meet the requirements in FAR 19.102(f) of the Federal Acquisition Regulation to receive a benefit under this program.

(End of Clause)

#### **4.11 VAAR 852.228-70 BOND PREMIUM ADJUSTMENT (JAN 2008)**

When net changes in original contract price affect the premium of a Corporate Surety Bond by \$5 or more, the Government, in determining the basis for final settlement, will provide for bond premium adjustment computed at the rate shown in the bond.

(End of Clause)

#### **4.12 VAAR 852.232-72 ELECTRONIC SUBMISSION OF PAYMENT REQUESTS (NOV 2012)**

(a) *Definitions.* As used in this clause—

(1) *Contract financing payment* has the meaning given in FAR 32.001.

(2) *Designated agency office* has the meaning given in 5 CFR 1315.2(m).

(3) *Electronic form* means an automated system transmitting information electronically according to the

Accepted electronic data transmission methods and formats identified in paragraph (c) of this clause. Facsimile, email, and scanned documents are not acceptable electronic forms for submission of payment requests.

(4) *Invoice payment* has the meaning given in FAR 32.001.

(5) *Payment request* means any request for contract financing payment or invoice payment submitted by the contractor under this contract.

(b) *Electronic payment requests.* Except as provided in paragraph (e) of this clause, the contractor shall submit payment requests in electronic form. Purchases paid with a Government-wide commercial purchase card are considered to be an electronic transaction for purposes of this rule, and therefore no additional electronic invoice submission is required.

(c) *Data transmission.* A contractor must ensure that the data transmission method and format are through one of the following:

(1) VA's Electronic Invoice Presentment and Payment System. (See Web site at <http://www.fsc.va.gov/einvoice.asp>.)

(2) Any system that conforms to the X12 electronic data interchange (EDI) formats established by the Accredited Standards Center (ASC) and chartered by the American National Standards Institute (ANSI). The X12 EDI Web site (<http://www.x12.org>) includes additional information on EDI 810 and 811 formats.

(d) *Invoice requirements.* Invoices shall comply with FAR 32.905.

(e) *Exceptions.* If, based on one of the circumstances below, the contracting officer directs that payment requests be made by mail, the Contractor shall submit payment requests by mail through the United States Postal Service to the designated agency office. Submission of payment requests by mail may be required for:

(1) Awards made to foreign vendors for work performed outside the United States;

(2) Classified contracts or purchases when electronic submission and processing of payment requests could compromise the safeguarding of classified or privacy information;

(3) Contracts awarded by Contracting Officers in the conduct of emergency operations, such as responses to national emergencies;

(4) Solicitations or contracts in which the designated agency office is a VA entity other than the VA Financial Services Center in Austin, Texas; or

(5) Solicitations or contracts in which the VA designated agency office does not have electronic invoicing capability as described above.

(End of Clause)

#### **4.13 VAAR 852.236-71 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (JUL 2002)**

The clause entitled "Specifications and Drawings for Construction" in FAR 52.236-21 is supplemented as follows:

- (a) The Contracting Officer's interpretation of the drawings and specifications will be final, subject to the disputes clause.
- (b) Large scale drawings supersede small scale drawings.
- (c) Dimensions govern in all cases. Scaling of drawings may be done only for general location and general size of items.
- (d) Dimensions shown of existing work and all dimensions required for work that is to connect with existing work shall be verified by the contractor by actual measurement of the existing work. Any work at variance with that specified or shown in the drawings shall not be performed by the contractor until approved in writing by the contracting officer.

(End of Clause)

#### **4.14 VAAR 852.236-72 PERFORMANCE OF WORK BY THE CONTRACTOR (JUL 2002) ALTERNATE I**

The clause entitled "Performance of Work by the Contractor" in FAR 52.236-1 is supplemented as follows:

- (a) Contract work accomplished on the site by laborers, mechanics, and foremen/forewomen on the contractor's payroll and under his/her direct supervision shall be included in establishing the percent of work to be performed by the contractor. Cost of material and equipment installed by such labor may be included. The work by the contractor's executive, supervisory and clerical forces shall be excluded in establishing compliance with the requirements of this clause.
- (b) The contractor shall submit, simultaneously with the cost per activity of the construction schedule required by Section 01310 or 01311, NETWORK ANALYSIS SYSTEM, a responsibility code for all activities of the network for which the contractor's forces will perform the work. The cost of these activities will be used in determining the portions of the total contract work to be executed by the contractor's forces for the purpose of this article.
- (c) If, during progress of work hereunder, the contractor requests a change in activities of work to be performed by the contractor's forces and the contracting officer determines it to be in the best interest of the Government, the contracting officer may, at his or her discretion, authorize a change in such activities of said work.
- (d) In the event the Contractor fails or refuses to meet the requirement of the FAR clause at 52.236-1, it is expressly agreed that the contract price will be reduced by 15 percent of the value of that portion of the percentage requirement that is accomplished by others. For the purpose of this clause, it is agreed that 15 percent is an acceptable estimate of the contractor's overhead and profit, or mark-up, on that portion of the work which the contractor fails or refuses to perform, with his/her own forces, in accordance with the FAR clause at 52.236-1.



(End of Clause)

#### **4.15 VAAR 852.236-74 INSPECTION OF CONSTRUCTION (JUL 2002)**

The clause entitled "Inspection of Construction" in FAR 52.246-12 is supplemented as follows:

(a) Inspection of materials and articles furnished under this contract will be made at the site by the resident engineer, unless otherwise provided for in the specifications.

(b) Final inspection will not be made until the contract work is ready for beneficial use or occupancy. The contractor shall notify the contracting officer, through the resident engineer, fifteen (15) days prior to the date on which the work will be ready for final inspection.

(End of Clause)

#### **4.16 VAAR 852.236-76 CORRESPONDENCE (APR 1984)**

All correspondence relative to this contract shall bear Specification Number, Project Number, Department of Veterans Affairs Contract Number, title of project and name of facility.

(End of Clause)

#### **4.17 VAAR 852.236-77 REFERENCE TO "STANDARDS" (JUL 2002)**

Any materials, equipment, or workmanship specified by references to number, symbol, or title of any specific Federal, Industry or Government Agency Standard Specification shall comply with all applicable provisions of such standard specifications, except as limited to type, class or grade, or modified in contract specifications. Reference to "Standards" referred to in the contract specifications, except as modified, shall have full force and effect as though printed in detail in specifications.

(End of Clause)

#### **4.18 VAAR 852.236-78 GOVERNMENT SUPERVISION (APR 1984)**

(a) The work will be under the direction of the Department of Veterans Affairs contracting officer, who may designate another VA employee to act as resident engineer at the construction site.

(b) Except as provided below, the resident engineer's directions will not conflict with or change contract requirements.

(c) Within the limits of any specific authority delegated by the contracting officer, the resident engineer may, by written direction, make changes in the work. The contractor shall be advised of the extent of such authority prior to execution of any work under the contract.

(End of Clause)

#### **4.19 VAAR 852.236-79 DAILY REPORT OF WORKERS AND MATERIAL (APR 1984)**

The contractor shall furnish to the resident engineer each day a consolidated report for the preceding work day in which is shown the number of laborers, mechanics, foremen/forewomen and pieces of heavy equipment used or employed by the contractor and subcontractors. The report shall bear the name of the firm, the branch of work which they perform such as concrete, plastering, masonry, plumbing, sheet metal

work, etc. The report shall give a breakdown of employees by crafts, location where employed, and work performed. The report shall also list materials delivered to the site on the date covered by the report.

(End of Clause)

#### **4.20 VAAR 852.236-80 SUBCONTRACTS AND WORK COORDINATION (APR 1984)**

(a) Nothing contained in this contract shall be construed as creating any contractual relationship between any subcontractor and the Government. Divisions or sections of specifications are not intended to control the contractor in dividing work among subcontractors, or to limit work performed by any trade.

(b) The contractor shall be responsible to the Government for acts and omissions of his/her own employees, and of the subcontractors and their employees. The contractor shall also be responsible for coordination of the work of the trades, subcontractors, and material suppliers.

(c) The Government or its representatives will not undertake to settle any differences between the contractor and subcontractors or between subcontractors.

(d) The Government reserves the right to refuse to permit employment on the work or require dismissal from the work of any subcontractor who, by reason of previous unsatisfactory work on Department of Veterans Affairs projects or for any other reason, is considered by the contracting officer to be incompetent or otherwise objectionable.

(End of Clause)

#### **4.21 VAAR 852.236-83 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (INCLUDING NAS) (JUL 2002)**

The clause entitled "Payments under Fixed-Price Construction Contracts" in FAR 52.232-5 is implemented as follows:

(a) Retainage:

(1) The contracting officer may retain funds:

(i) Where the performance under the contract has been determined to be deficient or the contractor has performed in an unsatisfactory manner in the past; or

(ii) As the contract nears completion, to ensure that deficiencies will be corrected and that completion is timely.

(2) Examples of deficient performance justifying a retention of funds include, but are not restricted to, the following:

(i) Unsatisfactory progress as determined by the contracting officer;

(ii) Failure either to meet schedules in Section Network Analysis System (NAS), or to process the Interim Arrow Diagram/Complete Project Arrow Diagram;

(iii) Failure to present submittals in a timely manner; or

(iv) Failure to comply in good faith with approved subcontracting plans, certifications or contract requirements.

(3) Any level of retention shall not exceed 10 percent either where there is determined to be unsatisfactory performance, or when the retainage is to ensure satisfactory completion. Retained amounts shall be paid promptly upon completion of all contract requirements, but nothing contained in this subparagraph shall be construed as limiting the contracting officer's right to withhold funds under other provisions of the contract or in accordance with the general law and regulations regarding the administration of Government contracts.

(b) The contractor shall submit a schedule of costs in accordance with the requirements of Section Network Analysis System (NAS) to the contracting officer for approval within 90 calendar days after date of receipt of notice to proceed. The approved cost schedule will be one of the bases for determining progress payments to the contractor for work completed.

(1) Costs as shown on this schedule must be true costs and, should the resident engineer so desire, he/she may require the contractor to submit his/her original estimate sheets or other information to substantiate the detailed makeup of the cost schedule.

(2) The total costs of all activities shall equal the contract price.

(3) Insurance and similar items shall be prorated and included in each activity cost of the critical path method (CPM) network.

(4) The CPM network shall include a separate cost loaded activity for adjusting and testing of the systems listed below. The percentages listed below will be used to determine the cost of adjust and test activities and identify, for payment purposes, the value of the work to adjust, correct and test systems after the material has been installed.

(5) Payment for adjust and test activities will be made only after the contractor has demonstrated that each of the systems is substantially complete and operates as required by the contract.

**VALUE OF ADJUSTING, CORRECTING, AND TESTING SYSTEM**

<b>System</b>	<b>Percent</b>
Pneumatic tube system	10
Incinerators (medical waste and trash)	5
Sewage treatment plant equipment	5
Water treatment plant equipment	5
Washers (dish, cage, glass, etc.)	5
Sterilizing equipment	5
Water distilling equipment	5

Prefab temperature rooms (cold, constant temperature)	5
Entire air-conditioning system (Specified under 600 Sections)	5
Entire boiler plant system (Specified under 700 Sections)	5
General supply conveyors	10
Food service conveyors	10
Pneumatic soiled linen and trash system	10
Elevators and dumbwaiters	10
Materials transport system	10
Engine-generator system	5
Primary switchgear	5
Secondary switchgear	5
Fire alarm system	5
Nurse call system	5
Intercom system	5
Radio system	5
TV (entertainment) system	5

(c) In addition to this cost schedule, the contractor shall submit such unit costs as may be specifically requested. The unit costs shall be those used by the contractor in preparing his/her bid and will not be binding as pertaining to any contract changes.

(d) The contracting officer will consider for monthly progress payments material and/or equipment procured by the contractor and stored on the construction site as space is available, or at a local approved location off the site, under such terms and conditions as such officer approves, including but not limited to the following:

(1) The material or equipment is in accordance with the contract requirements and/or approved samples and shop drawings.

(2) Only those materials and/or equipment as are approved by the resident engineer for storage will be included.

(3) Such materials and/or equipment will be protected against weather, theft and other hazards and will not be subjected to deterioration.

(5) All of the other terms, provisions, conditions and covenants contained in the contract shall be and remain in full force and effect as therein provided.

(6) A supplemental agreement will be executed between the Government and the contractor with the consent of the contractor's surety for off-site storage.

(e) The Contractor, prior to receiving a progress or final payment under this contract, shall submit to the contracting officer a certification that the Contractor has made payment from proceeds of prior payments, or that timely payment will be made from the proceeds of the progress or final payment then due, to subcontractors and suppliers in accordance with the contractual arrangements with them.

(f) The Government reserves the right to withhold payment until samples, shop drawings, engineer's certificates, additional bonds, payrolls, weekly statements of compliance, proof of title, nondiscrimination compliance reports, or any other things required by this contract, have been submitted to the satisfaction of the contracting officer.

(End of Clause)

#### **4.22 VAAR 852.236-85 SUPPLEMENTARY LABOR STANDARDS PROVISIONS (APR 1984)**

(a) The Wage Determination decision of the Secretary of Labor is set forth in section GR, General Requirements, of this contract. It is the result of a study of wage conditions in the locality and establishes the minimum hourly rates of wages and fringe benefits for the described classes of labor in accordance with applicable law. No increase in the contract price will be allowed or authorized because of payment of wage rates in excess of those listed.

(b) The Contractor shall submit the required copies of payrolls to the contracting officer through the resident engineer or engineer officer, when acting in that capacity. Department of Labor Form WH- 347, Payroll, available from the Superintendent of Documents, Government Printing Office, Washington, DC 20402, may be used for this purpose. If, however, the Contractor or subcontractor elects to use an individually composed payroll form, it shall contain the same information shown on Form WH-347, and in addition be accompanied by Department of Labor Form WH-348, Statement of Compliance, or any other form containing the exact wording of this form.

(End of Clause)

#### **4.23 VAAR 852.236-86 WORKER'S COMPENSATION (JAN 2008)**

Public Law 107-217 (40 U.S.C. 3172) authorizes the constituted authority of States to apply their workers compensation laws to all lands and premises owned or held by the United States.

(End of Clause)

#### **4.24 VAAR 852.236-87 ACCIDENT PREVENTION (SEP 1993)**

The Resident Engineer on all assigned construction projects, or other Department of Veterans Affairs employee if designated in writing by the Contracting Officer, shall serve as Safety Officer and as such has

authority, on behalf of the Contracting Officer, to monitor and enforce Contractor compliance with FAR 52.236-13, Accident Prevention. However, only the Contracting Officer may issue an order to stop all or part of the work while requiring satisfactory or corrective action to be taken by the Contractor.

(End of Clause)

#### **4.25 VAAR 852.236-88 CONTRACT CHANGES--SUPPLEMENT (JUL 2002)**

The clauses entitled “Changes” in FAR 52.243-4 and “Differing Site Conditions” in FAR 52.236-2 are supplemented as follows:

(a) Paragraphs (a)(1) through (a)(4) apply to proposed contract changes costing over \$500,000.

(1) When requested by the Contracting Officer, the Contractor shall submit proposals for changes in work to the resident engineer. Proposals, to be submitted as expeditiously as possible but within thirty (30) calendar days after receipt of request, shall be in legible form, original and two (2) copies, with an itemized breakdown that will include material, quantities, unit prices, labor costs (separated into trades), construction equipment, etc. (Labor costs are to be identified with specific material placed or operation performed.) The Contractor must obtain and furnish with a proposal an itemized breakdown as described above, signed by each subcontractor participating in the change regardless of tier. When certified cost or pricing data are required under FAR Subpart 15.403, the cost or pricing data shall be submitted in accordance with FAR 15.403-5.

(2) When the necessity to proceed with a change does not allow sufficient time to negotiate a modification or because of failure to reach an agreement, the contracting officer may issue a change order instructing the contractor to proceed on the basis of a tentative price based on the best estimate available at the time, with the firm price to be determined later. Furthermore, when the change order is issued, the contractor shall submit a proposal, which includes the information required by paragraph (a)(1), for cost of changes in work within thirty (30) calendar days.

(3) The Contracting Officer will consider issuing a settlement by determination to the contract if the Contractor's proposal required by paragraphs (a)(1) or (a)(2) of this clause is not received within thirty (30) calendar days or if agreement has not been reached.

(4) Bond premium adjustment, consequent upon changes ordered, will be made as elsewhere specified at the time of final settlement under the contract and will not be included in the individual change.

(b) Paragraphs (b)(1) through (b)(11) apply to proposed contract changes costing \$500,000 or less:

(1) When requested by the Contracting Officer, the Contractor shall submit proposals for changes in work to the COR. Proposals, to be submitted as expeditiously as possible but within thirty (30) calendar days after receipt of request, shall be in legible form, original and two copies, with an itemized breakdown that will include material, quantities, unit prices, labor costs (separated into trades), construction equipment, etc. (Labor costs are to be identified with specific material placed or operation performed.) The Contractor must obtain and furnish with a proposal an itemized breakdown as described above, signed by each subcontractor participating in the change regardless of tier. When certified cost or pricing data or information other than cost or pricing data are required under FAR 15.403, the data shall be submitted in accordance with FAR 15.403-5. No itemized breakdown will be required for proposals amounting to less than \$1,000.

(2) When the necessity to proceed with a change does not allow sufficient time to negotiate a modification or because of failure to reach an agreement, the Contracting Officer may issue a change order instructing the contractor to proceed on the basis of a tentative price based on the best estimate available at the time, with the firm price to be determined later. Furthermore, when the change order is issued, the contractor shall submit within thirty (30) calendar days, a proposal that includes the information required by paragraph (b)(1) for the cost of the changes in work.

(3) The Contracting Officer will consider issuing a settlement by determination to the contract if the contractor's proposal required by paragraphs (b)(1) or (b)(2) of this clause is not received within thirty (30) calendar days, or if agreement has not been reached.

(4) Allowances not to exceed 10 percent each for overhead and profit for the party performing the work will be based on the value of labor, material, and use of construction equipment required to accomplish the change. As the value of the change increases, a declining scale will be used in negotiating the percentage of overhead and profit. Allowable percentages on changes will not exceed the following: 10 percent overhead and 10 percent profit on the first \$20,000; 7-1/2 percent overhead and 7-1/2 percent profit on the next \$30,000; 5 percent overhead and 5 percent profit on balance over \$50,000. Profit shall be computed by multiplying the profit percentage by the sum of the direct costs and computed overhead costs.

(5) The prime contractor's or upper-tier subcontractor's fee on work performed by lower-tier subcontractors will be based on the net increased cost to the prime contractor or upper-tier subcontractor, as applicable. Allowable fee on changes will not exceed the following: 10 percent fee on the first \$20,000; 7-1/2 percent fee on the next \$30,000; and 5 percent fee on balance over \$50,000.

(6) Not more than four percentages, none of which exceed the percentages shown above, will be allowed regardless of the number of tiers of subcontractors.

(7) Where the Contractor's or subcontractor's portion of a change involves credit items, such items must be deducted prior to adding overhead and profit for the party performing the work. The Contractor's fee is limited to the net increase to contractor of subcontractors' portions cost computed in accordance herewith.

(8) Where a change involves credit items only, a proper measure of the amount of downward adjustment in the contract price is the reasonable cost to the contractor if he/she had performed the deleted work. A reasonable allowance for overhead and profit are properly includable as part of the downward adjustment for a deductive change. The amount of such allowance is subject to negotiation.

(9) Cost of Federal Old Age Benefit (Social Security) tax and of Worker's Compensation and Public Liability insurance appertaining to changes are allowable. While no percentage will be allowed thereon for overhead or profit, prime contractor's fee will be allowed on such items in subcontractors' proposals.

(10) Overhead and Contractor's fee percentages shall be considered to include insurance other than mentioned herein, field and office supervisors and assistants, security police, use of small tools, incidental job burdens, and general home office expenses and no separate allowance will be made therefore. Assistants to office supervisors include all clerical, stenographic and general office help. Incidental job burdens include, but are not necessarily limited to, office equipment and supplies, temporary toilets, telephone and conformance to OSHA requirements. Items such as, but not necessarily limited to, review and coordination, estimating and expediting relative to contract changes are associated with field and office supervision and are considered to be included in the contractor's overhead and/or fee percentage.

(11) Bond premium adjustment, consequent upon changes ordered, will be made as elsewhere specified at the time of final settlement under the contract and will not be included in the individual change.

(End of Clause)

#### **4.26 VAAR 852.236-89 BUY AMERICAN ACT (JAN 2008)**

(a) Reference is made to the clause entitled "Buy American Act--Construction Materials," FAR 52.225-9.

(b) Notwithstanding a bidder's right to offer identifiable foreign construction material in its bid pursuant to FAR 52.225-9, VA does not anticipate accepting an offer that includes foreign construction material.

(c) If a bidder chooses to submit a bid that includes foreign construction material, that bidder must provide a listing of the specific foreign construction material he/she intends to use and a price for said material. Bidders must include bid prices for comparable domestic construction material. If VA determines not to accept foreign construction material and no comparable domestic construction material is provided, the entire bid will be rejected.

(d) Any foreign construction material proposed after award will be rejected unless the bidder proves to VA's satisfaction: (1) it was impossible to request the exemption prior to award, and (2) said domestic construction material is no longer available, or (3) where the price has escalated so dramatically after the contract has been awarded that it would be unconscionable to require performance at that price. The determinations required by (1), (2), and (3) of this paragraph shall be made in accordance with Subpart 825.2 and FAR 25.2.

(e) By signing this bid, the bidder declares that all articles, materials and supplies for use on the project shall be domestic unless specifically set forth on the Bid Form or addendum thereto.

(End of Clause)

#### **4.27 VAAR 852.236-91 SPECIAL NOTES (JUL 2002)**

(a) Signing of the bid shall be deemed to be a representation by the bidder that:

(1) Bidder is a construction contractor who owns, operates, or maintains a place of business, regularly engaged in construction, alteration, or repair of buildings, structures, and communications facilities, or other engineering projects, including furnishing and installing of necessary equipment; or

(2) If newly entering into a construction activity, bidder has made all necessary arrangements for personnel, construction equipment, and required licenses to perform construction work; and

(3) Upon request, prior to award, bidder will promptly furnish to the Government a statement of facts in detail as to bidder's previous experience (including recent and current contracts), organization (including company officers), technical qualifications, financial resources and facilities available to perform the contemplated work.

(b) Unless otherwise provided in this contract, where the use of optional materials or construction is permitted, the same standard of workmanship, fabrication and installation shall be required irrespective of which option is selected. The contractor shall make any change or adjustment in connecting work or



otherwise necessitated by the use of such optional material or construction, without additional cost to the Government.

(c) When approval is given for a system component having functional or physical characteristics different from those indicated or specified, it is the responsibility of the contractor to furnish and install related components with characteristics and capacities compatible with the approved substitute component as required for systems to function as noted on drawings and specifications. There shall be no additional cost to the Government.

(d) In some instances it may have been impracticable to detail all items in specifications or on drawings because of variances in manufacturers' methods of achieving specified results. In such instances the contractor will be required to furnish all labor, materials, drawings, services and connections necessary to produce systems or equipment which are completely installed, functional, and ready for operation by facility personnel in accordance with their intended use.

(e) Claims by the contractor for delay attributed to unusually severe weather must be supported by climatological data covering the period and the same period for the 10 preceding years. When the weather in question exceeds in intensity or frequency the 10-year average, the excess experienced shall be considered "unusually severe." Comparison shall be on a monthly basis. Whether or not unusually severe weather in fact delays the work will depend upon the effect of weather on the branches of work being performed during the time under consideration.

(End of Clause)

#### **4.28 VAAR 852.246-74 SPECIAL WARRANTIES (JAN 2008)**

The clause entitled "Warranty of Construction" in FAR 52.246-21 is supplemented as follows:

Any special warranties that may be required under the contract shall be subject to the elections set forth in the FAR clause at 52.246-21, Warranty of Construction, unless otherwise provided for in such special warranties.

(End of Clause)

#### **4.29 LIMITATIONS ON SUBCONTRACTING-- MONITORING AND COMPLIANCE (JUN 2011)**

This solicitation includes VAAR 852.219-10 VA Notice of Total Service- Disabled Veteran-Owned Small Business Set-Aside. Accordingly, any contract resulting from this solicitation will include this clause. The Contractor is advised in performing contract administration functions, the CO may use the services of a support contractor(s) retained by VA to assist in assessing the Contractor's compliance with the limitations on subcontracting or percentage of work performance requirements specified in the clause. To that end, the support contractor(s) may require access to contractor's offices where the contractor's business records or other proprietary data are retained and to review such business records regarding the contractor's compliance with this requirement. All support contractors conducting this review on behalf of VA will be required to sign an "Information Protection and Non-Disclosure and Disclosure of Conflicts of Interest Agreement" to ensure the contractor's business records or other proprietary data reviewed or obtained in the course of assisting the CO in assessing the contractor for compliance are protected to ensure information or data is not improperly disclosed or other impropriety occurs. Furthermore, if VA determines any services the support contractor(s) will perform in assessing compliance are advisory and

assistance services as defined in FAR 2.101, Definitions, the support contractor(s) must also enter into an agreement with the contractor to protect proprietary information as required by FAR 9.505-4, obtaining access to proprietary information, paragraph (b). The contractor is required to cooperate fully and make available any records as may be required to enable the CO to assess the contractor's compliance with the limitations on subcontracting or percentage of work performance requirement.

(End of Clause)

**See attached document:** Drawings.

### 4.30 SUBMISSION CHECKLIST

#### OFFEROR AT A MINIMUM MUST SUBMIT THE FOLLOWING WITH ITS INITIAL OFFER/PROPOSAL:

This checklist will help you submit all the documents required for this solicitation requirement. It is recommended that you print a copy of this checklist for reference while completing your package.

- |     |  |     |
|-----|--|-----|
| 1.  | Executed SF 1442 or 1449 signature page  | [ ] |
| 2.  | Acknowledgement of Amendments (if applicable)  | [ ] |
| 3.  | Completed Price/Cost Schedule Page   | [ ] |
| 4.  | Bid Bond (if applicable)   | [ ] |
| 5.  | Completed Contract Administration Page   | [ ] |
| 6.  | Contractor Signature Page  | [ ] |
| 7.  | Completed FAR 52.204-8 Prohibition on Contracting With Entities That Require Certain Internal Confidentiality Agreements-Representation (Deviation) (FEB 2015)       | [ ] |
| 8.  | Completed FAR 52.209-5 Representation by Corporations Regarding An Unpaid Tax Liability or a Felony Conviction Under any Federal Law (Deviation)(Mar 2013) provision | [ ] |
| 9.  | Completed FAR 52.209-7 Information Regarding Responsibility Matters (Jul 2013) provision   | [ ] |
| 10. | Completed Experience Modification Form   | [ ] |
| 11. | Completed FAR 52.219-28 Post-Award Small Business Program Representation (JUL 2013)  | [ ] |
| 12. | Completed Past Performance Form (if applicable)  | [ ] |
| 13. | Completed Submission Checklist   | [ ] |

**Need help registering in SAM, navigating through the sites or responding to solicitations?? Contact the following for free help:** Procurement Technical Assistance Center near you: <http://www.aptac-us.org/new/> or your local Small Business Administration Office.

### 4.31 PAST PERFORMANCE

Complete the following information for five (5) recent Department of Veterans Affairs (VA) customers. Information submitted should be for five (5) different VA Medical Centers that has acquired your Service in the past three (3) years. If your company has not provided any Service to at least five (5) VA's, include as many VAs that are applicable and provide information on other customers to complete the listing for a maximum of five (5). First, list any VA's, then list other federal agencies (Department of Defense, Public Health, Bureau of Prisons, etc.), lastly list any commercial customers. A minimum of three (3) references must be provided. The Department of Veterans Affairs may contact the offeror's customers to ask whether or not they believe (1) that the offeror was capable, efficient, and effective; (2) that the offeror's performance conformed to the terms and conditions of its contract; (3) that the offeror was reasonable and cooperative during performance; and (4) that the offeror was committed to customer satisfaction.

1. Customer Name: \_\_\_\_\_  
 Point of Contact \_\_\_\_\_  
 (Program Manager, Project Officer, or COR): \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 e-Mail Address: \_\_\_\_\_  
 Contract Number: \_\_\_\_\_  
 Project Title: \_\_\_\_\_  
 Project Description: \_\_\_\_\_  
 Total Contract Value: \_\_\_\_\_  
 Period of Performance: \_\_\_\_\_
  
2. Customer Name: \_\_\_\_\_  
 Point of Contact \_\_\_\_\_  
 (Program Manager, Project Officer, or COR): \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 e-Mail Address: \_\_\_\_\_  
 Contract Number: \_\_\_\_\_  
 Project Title: \_\_\_\_\_  
 Project Description: \_\_\_\_\_  
 Total Contract Value: \_\_\_\_\_  
 Period of Performance: \_\_\_\_\_
  
3. Customer Name: \_\_\_\_\_  
 Point of Contact \_\_\_\_\_  
 (Program Manager, Project Officer, or COR): \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 e-Mail Address: \_\_\_\_\_  
 Contract Number: \_\_\_\_\_  
 Project Title: \_\_\_\_\_  
 Project Description: \_\_\_\_\_  
 Total Contract Value: \_\_\_\_\_  
 Period of Performance: \_\_\_\_\_

4. Customer Name: \_\_\_\_\_  
Point of Contact \_\_\_\_\_  
(Program Manager, Project Officer, or COR): \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
e-Mail Address: \_\_\_\_\_  
Contract Number: \_\_\_\_\_  
Project Title: \_\_\_\_\_  
Project Description: \_\_\_\_\_  
Total Contract Value: \_\_\_\_\_  
Period of Performance: \_\_\_\_\_

5. Customer Name: \_\_\_\_\_  
Point of Contact \_\_\_\_\_  
(Program Manager, Project Officer, or COR): \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
e-Mail Address: \_\_\_\_\_  
Contract Number: \_\_\_\_\_  
Project Title: \_\_\_\_\_  
Project Description: \_\_\_\_\_  
Total Contract Value: \_\_\_\_\_  
Period of Performance: \_\_\_\_\_

Note that each above listed Past Performance referenced project will be reviewed for:

- a. Quality Performance,
- b. Contract Timeliness,
- c. Cost Control, and
- d. Business Relations

as they are listed in the Contractor Review Performance System (CPARS).

**Note** that a Request for Past Performance Questionnaires may be sent to the listed firms/point of contact, and a review of Government’s CPARS Performance Reports will also be used to evaluate Past Performance.

### 4.32 CALCULATION WORKSHEET FOR SELF-PERFORMED AND SUBCONTRACTED WORKSHEET

A Service-Disabled Veteran-Owned Small Business (SDVOSB) concern agrees that in the performance of the contract, the concern will comply with the limitation on subcontracting requirements in 13 CFR §125.6, as applicable. Offerors for General Construction (NAICS code 236220) must not pay more than **eighty-five percent (85%)** of the amount paid by the Government to it to firms that are not similarly situated. Any work that a similarly situated subcontractor further subcontracts will count towards the **eighty-five percent (85%)** subcontract amount that cannot be exceeded. Cost of materials are excluded and not considered to be subcontracted). Provide a breakdown of material and personnel costs, by specification division listed for the project. Home Office overhead, profit/fee and bond costs shall be added after a subtotal of personnel and material/equipment cost has been calculated. Clearly identify the personnel costs you will be performing, and the personnel costs of other eligible SDVOSB concerns.

Below is a suggested format:

Specification Section	SDVOSB Vendor (Y/N)	Personnel Cost	Material/Equipment Costs
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
		\$	\$
<b>Column Totals:</b>		\$	\$
<b>Sub-total (Personnel Cost, Material/Equipment Costs):</b>			\$
<b>Profit:</b>			\$
<b>Home Office Overhead:</b>			\$
<b>Bond(s):</b>			\$
<b>Grand Total:</b>			\$

Calculation of self-performed personnel costs:

1. Total personnel costs both prime-contractor and all sub-contractors: \$ \_\_\_\_\_
2. Subtract all sub-contractor personnel cost that are not SDVOSB  
Firms that will perform work on the resulting contract: \$ \_\_\_\_\_
3. Remainder is -  
'Total amount of work to be self-performed Under the contract': \$ \_\_\_\_\_
4. Self-performed work = Line 3 / Line 1 x 100 = \_\_\_\_\_%  
(include project manager, job superintendent, administrative, estimators, etc.,)

I (Contractor) certify that the above information/representations are true and correct to the best of my knowledge.

\_\_\_\_\_  
(Typed name of authorized representative)

\_\_\_\_\_  
(Signature of authorized representative)

\_\_\_\_\_  
(Title of authorized representative)

\_\_\_\_\_  
(Date)

### 4.33 CONTRACTOR SAFETY AND ENVIRONMENTAL RECORD EVALUATION FORM

Information provided below is current and applicable to Solicitation 36C25218B0017.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_

Contact: \_\_\_\_\_

1. Utilizing your OSHA 300 Forms, please complete the following information:

Category	2013	2014	2015	2016
Number of man hours (jobsite and office).				
Number of cases involving days away from work, restricted activity, or both (Column H and I of OSHA 300).				
Days away, restricted, or transferred rate (# of days away, restricted, or transferred cases x 200,000/# of man hours) (DART Rate).				
Number of serious, willful, or repeat violations from OSHA within the last 3 years. Please attach explanation for any violations.				

**Please attach copies of the following documents: OSHA 300 and 300a Forms.** These forms can be accessed through the OSHA publications search page:

<http://www.osha.gov/pls/publications/publication.html>.

2. Provide six-digit North American Industrial Classification System (NAICS) Code for this acquisition: \_\_\_\_\_

3. Who administers your company's Safety and Health Program?

\_\_\_\_\_

4. Company's Insurance Experience Modification Rate (EMR):

\_\_\_\_\_

## 4.34 CERTIFICATE OF CURRENT COST OR PRICING DATA

### 15.406-2 Certificate of Current Cost or Pricing Data.

(a) When certified cost or pricing data are required, the Contracting Officer shall require the contractor to execute a Certificate of Current Cost or Pricing Data, using the format in this paragraph, and must include the executed certificate in the contract file.

#### CERTIFICATE OF CURRENT COST OR PRICING DATA

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in section [2.101](#) of the Federal Acquisition Regulation (FAR) and required under FAR subsection [15.403-4](#)) submitted, either actually or by specific identification in writing, to the Contracting Officer or to the Contracting Officer's representative in support of \_\_\_\_\_\* are accurate, complete, and current as of \_\_\_\_\_\*\*. This certification includes the cost or pricing data supporting any advance agreements and forward pricing rate agreements between the offeror and the Government that are part of the proposal.

Firm \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Date of execution\*\*\* \_\_\_\_\_

\* Identify the proposal, request for price adjustment, or other submission involved, giving the appropriate identifying number (e.g., RFP No.).

\*\* Insert the day, month, and year when price negotiations were concluded and price agreement was reached or, if applicable, an earlier date agreed upon between the parties that is as close as practicable to the date of agreement on price.

\*\*\* Insert the day, month, and year of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price was agreed to.

(END OF CERTIFICATE)



(b) The certificate does not constitute a representation as to the accuracy of the contractor's judgment on the estimate of future costs or projections. It applies to the data upon which the judgment or estimate was based. This distinction between fact and judgment should be clearly understood. If the contractor had information reasonably available at the time of agreement showing that the negotiated price was not based on accurate, complete, and current data, the contractor's responsibility is not limited by any lack of personal knowledge of the information on the part of its negotiators.

(c) The Contracting Officer and contractor are encouraged to reach a prior agreement on criteria for establishing closing or cutoff dates when appropriate in order to minimize delays associated with proposal updates. Closing or cutoff dates should be included as part of the data submitted with the proposal and, before agreement on price, data should be updated by the contractor to the latest closing or cutoff dates for which the data are available. Use of cutoff dates coinciding with reports is acceptable, as certain data may not be reasonably available before normal periodic closing dates (e.g., actual indirect costs). Data within the contractor's or a subcontractor's organization on matters significant to contractor management and to the Government will be treated as reasonably available. What is significant depends upon the circumstances of each acquisition.

(d) Possession of a Certificate of Current Cost or Pricing Data is not a substitute for examining and analyzing the contractor's proposal.

(e) If certified cost or pricing data are requested by the Government and submitted by an offeror, but an exception is later found to apply, the data shall not be considered certified cost or pricing data and shall not be certified in accordance with this subsection.

#### **4.35 DAVIS –BACON ACT WAGE DETERMINATIONS**

This requirement is subject to the provisions of the Davis Bacon Act. Contractors must comply with the U.S. Department of Labor (USDOL) Wage Rate Requirements (Construction) General Decision Number:IL170002, dated 11/03/2017 , Superseded General Decision Number: IL20160002 identified in the table below by reference only, with the same force and effect as if they were incorporated into the solicitation in full text. If this contract includes option year(s) and/or an extension, the Contractor shall be notified if the referenced numbers are revised by the Department of Labor. Davis-Bacon Act Wage Determinations can be found at <http://www.wdol.gov>.

The Contractor is required to post a notice of the compensation required in a prominent and accessible location at the worksite where it may be seen by all employees performing on the contract. The poster “Notice to Employees Working on Government Contracts” (WH Publication 1313) is available at: <http://www.dol.gov/whd/regs/compliance/posters/sca.htm>.

Notes:

1. FAR clause 52.222-6 Construction Wage Rate Requirements is incorporated into this contract by reference.
2. In accordance with 52.222-6 Construction Wage Rate Requirements, each employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.
3. This solicitation incorporates the wage determinations identified in this table by reference, with the same force and effect as if they were incorporated into the solicitation in full text.
4. The wage determinations that are applicable to the solicitation’s location (i.e., Danville, Illinois, Vermilion County) will be incorporated by reference into any resultant contract, with the same force and effect as if they were incorporated into the contract in full text.
5. The full text of any wage determination identified in this table may be accessed electronically at the following website: <http://www.wdol.gov/>;
6. The Department of Labor has held that Contractors must pay their employees the Davis-Bacon Act Wage Determinations wages while they are driving both to and from destinations for the VA.
7. Upon written request, the Contracting Officer will provide a full text copy of any wage determination(s) identified in this table.

**General Decision Number: IL170002 11/03/2017 IL2**

**Superseded General Decision Number: IL20160002**

**State: Illinois**

**Construction Type: Building**

**Counties:** Alexander, Champaign, Christian, Clark, Clay, Coles, Crawford, Cumberland, De Witt, Douglas, Edgar, Edwards, Effingham, Fayette, Ford, Franklin, Gallatin, Hamilton, Hardin, Iroquois, Jackson, Jasper, Jefferson, Johnson, Lawrence, Marion, Massac, Moultrie, Perry, Piatt, Pope, Pulaski, Richland, Saline, Shelby, Union, Vermilion, Wabash, Wayne, White and Williamson Counties in Illinois.

**BUILDING CONSTRUCTION PROJECTS** (does not include residential construction consisting of single family homes and apartments up to and including 4 stories).

**Note:** Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/06/2017
1	01/13/2017
2	01/20/2017
3	01/27/2017
4	02/10/2017
5	02/17/2017
6	02/24/2017
7	03/17/2017
8	03/24/2017
9	04/07/2017
10	04/14/2017
11	04/28/2017
12	05/05/2017
13	05/19/2017
14	06/02/2017
15	06/09/2017
16	06/16/2017
17	06/23/2017
18	06/30/2017
19	07/07/2017
20	07/14/2017
21	07/21/2017
22	07/28/2017
23	08/04/2017
24	08/11/2017
25	08/18/2017
26	08/25/2017

27 09/01/2017  
 28 09/08/2017  
 29 09/15/2017  
 30 09/22/2017  
 31 10/06/2017  
 32 10/13/2017  
 33 11/03/2017

ASBE0001-004 10/05/2015

ALEXANDER, CHRISTIAN, DE WITT, FAYETTE, JACKSON, JEFFERSON,  
 MARION, MOULTRIE, PERRY, PIATT, SHELBY, AND UNION COUNTIES

	Rates	Fringes
Asbestos Workers/Insulator		
Includes the application, installation, and cleanup of all insulating materials, protective coverings, coatings, and finishings to all types of mechanical systems		

-----  
 ASBE0017-001 06/01/2017

	Rates	Fringes
ASBESTOS WORKER/INSULATOR		
Includes the application of all insulating materials, protective coverings, coatings, and finishes to all types of mechanical systems.....	\$ 50.50	25.80
Fire Stop Technician.....	\$ 40.40	24.54
HAZARDOUS MATERIAL HANDLER		
includes preparation, wetting, stripping removal scrapping, vacuuming, bagging and disposal of all insulation materials, whether they contain asbestos or not, from mechanical systems.....	\$ 37.80	24.54

-----  
 ASBE0017-006 06/01/2017

FORD AND IROQUOIS COUNTIES

	Rates	Fringes
ASBESTOS WORKER/INSULATOR		
includes the application of all insulating materials; protective coverings, coatings, and finishings to all types of mechanical systems.....	\$ 50.50	25.80
Fire Stop Technician.....	\$ 40.40	24.54
HAZARDOUS MATERIAL HANDLER		
includes preparation,		

wetting, stripping removal  
 scrapping, vacuuming,  
 bagging and disposal of  
 all insulation materials,  
 whether they contain  
 asbestos or not, from  
 mechanical systems.....\$ 37.80                      24.54

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 ASBE0018-002 06/01/2017

CHAMPAIGN, CLARK, DOUGLAS, EDGAR, AND VERMILION COUNTIES

Rates                      Fringes

ASBESTOS WORKER/HEAT & FROST  
 INSULATOR

Includes application of  
 all insulating materials  
 protective coverings,  
 coatings and finishings to  
 all types of mechanical  
 systems.....\$ 31.24                      19.44

-----  
 ASBE0037-003 04/01/2017

CLAY, COLES, CRAWFORD, CUMBERLAND, EDWARDS, EFFINGHAM,  
 FRANKLIN, GALLATIN, HAMILTON, HARDIN, JASPER, JOHNSON,  
 LAWRENCE, MASSAC, POPE, PULASKI, RICHLAND, SALINE, WABASH,  
 WAYNE, WHITE, AND WILLIAMSON COUNTIES

Rates                      Fringes

Asbestos Workers/Insulator

Includes the application  
 of all insulating  
 materials; protective  
 coverings, coatings, and  
 finishings to all types of  
 mechanical systems.....\$ 30.87                      18.01

-----  
 BOIL0060-003 01/01/2017

CHAMPAIGN, DE WITT, FORD, IROQUOIS, and VERMILION COUNTIES

Rates                      Fringes

BOILERMAKER.....\$ 39.50                      20.74

-----  
 BOIL0363-002 01/01/2017

ALEXANDER, CHRISTIAN, CLARK, CLAY, COLES, CRAWFORD, CUMBERLAND,  
 DOUGLAS, EDGAR, EDWARDS, EFFINGHAM, FAYETTE, FRANKLIN,  
 GALLATIN, HAMILTON, HARDIN, JACKSON, JASPER, JEFFERSON,  
 JOHNSON, LAWRENCE, MARION, MASSAC, MOULTRIE, PERRY, PIATT,  
 POPE, PULASKI, RICHLAND, SALINE, SHELBY, UNION, WABASH, WAYNE,  
 WHITE, AND WILLIAMSON COUNTIES

Rates                      Fringes

BOILERMAKER.....\$ 36.50 29.89

-----  
BRIL0006-007 06/01/2016

DE WITT COUNTY

Rates Fringes  
Bricklayer, Caulker, Cleaner,  
Pointer & Stonemason.....\$ 30.59 23.19

-----  
BRIL0006-011 06/01/2017

DE WITT COUNTY

Rates Fringes  
Base Machine Men.....\$ 31.13 21.09  
Marble, Tile & Terrazzo  
Finisher.....\$ 31.13 21.09  
Marble, Tile & Terrazzo  
Workers.....\$ 32.87 21.09

-----  
BRIL0006-015 06/01/2017

FORD (North of Roberts), AND IROQUOIS COUNTIES

Rates Fringes  
BRICKLAYER.....\$ 42.98 21.79

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BRIL0006-021 06/01/2017

FORD (North of Roberts) & IROQUOIS COUNTIES

Rates Fringes  
MARBLE SETTER.....\$ 42.98 21.79

-----  
BRIL0008-001 05/01/2016

ALEXANDER, CLAY, EDWARDS, FRANKLIN, GALLATIN, HAMILTON, HARDIN,  
JACKSON, JEFFERSON, JOHNSON, LAWRENCE, MASSAC, PERRY, POPE,  
PULASKI, RICHLAND, SALINE, UNION, WABASH, WAYNE, WHITE, and  
WILLIAMSON COUNTIES

Rates Fringes  
Bricklayer, Caulker, Cleaner,  
Pointer & Stonemason.....\$ 30.40 18.09

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BRIL0008-003 05/01/2017

CHAMPAIGN, CLARK, COLES, CRAWFORD, CUMBERLAND, DOUGLAS, EDGAR,  
EFFINGHAM, FORD, JASPER, PIATT, and VERMILION COUNTIES

Rates Fringes

Marble Setter, Terrazzo Worker & Tile Setter.....	\$ 31.98	18.51
Marble, terrazzo and tile finisher.....	\$ 30.48	18.51

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BRIL0008-004 05/01/2017

CHRISTIAN COUNTY

	Rates	Fringes
Marble & Tile Setter and Terrazzo Worker.....	\$ 32.20	18.51
Marble, terrazzo and tile finisher.....	\$ 30.70	18.51

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BRIL0008-005 08/01/2017

FAYETTE AND MARION COUNTIES

	Rates	Fringes
BRICKLAYER Bricklayer, Stonemason, Marble Mason, Tile Layer, Pointer, Cleaner, and Caulker.....	\$ 33.13	22.05

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BRIL0008-015 05/01/2017

CHAMPAIGN, COLES, DOUGLAS, EDGAR, FORD(South of Roberts), PIATT  
& VERMILION COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 31.50	22.38

---

BRIL0008-017 05/01/2017

MOULTRIE and SHELBY COUNTIES

	Rates	Fringes
BRICKLAYER Caulkers, Cement Block Layers, Cleaners, Marble Setters, Pointers, Terrazzo Workers, and Tile Setters.....	\$ 31.00	22.88

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BRIL0008-020 05/01/2017

CHRISTIAN COUNTY

	Rates	Fringes
Bricklayer, Caulker, Cleaner, Pointer & Stonemason.....	\$ 31.00	22.88

-----  
BRIL0008-031 05/01/2017

CLARK, CRAWFORD, CUMBERLAND, EFFINGHAM & JASPER COUNTIES

	Rates	Fringes
BRICKLAYER.....	\$ 30.00	19.92

-----  
CARP0237-017 05/01/2017

DE WITT AND FORD (Northern Portion) COUNTIES

	Rates	Fringes
Carpenter/Lather.....	\$ 32.01	26.09
Piledriver.....	\$ 33.01	26.09

-----  
CARP0237-022 05/01/2017

FORD COUNTY (Southern Portion)

	Rates	Fringes
Carpenter/Lather.....	\$ 32.01	26.09
Piledriver.....	\$ 33.01	26.09

-----  
CARP0243-002 05/01/2017

CHAMPAIGN, EDGAR AND VERMILION COUNTIES

	Rates	Fringes
Carpenter/Lather.....	\$ 36.04	21.34
Piledriver.....	\$ 37.04	21.34

-----  
CARP0243-005 05/01/2017

COLES, CUMBERLAND, DOUGLAS, EFFINGHAM, JASPER, MOULTRIE, AND SHELBY COUNTIES

	Rates	Fringes
Carpenter/Lather.....	\$ 32.14	25.24
Piledriver.....	\$ 33.14	25.24

-----  
CARP0243-013 05/01/2017

CLARK COUNTY

	Rates	Fringes
Carpenter/Lather.....	\$ 36.04	21.34
Piledriver.....	\$ 37.04	21.34

-----  
CARP0270-003 05/01/2017

CHRISTIAN COUNTY



	Rates	Fringes
Carpenter/Lather.....	\$ 31.64	25.74
Piledriver.....	\$ 32.64	25.74

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CARP0270-017 05/01/2017

PIATT COUNTY

	Rates	Fringes
Carpenter/Lather.....	\$ 31.39	25.99
Piledriver.....	\$ 32.39	25.99

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CARP0501-001 05/01/2017

CRAWFORD COUNTY

	Rates	Fringes
CARPENTER.....	\$ 32.14	25.24

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CARP0555-014 06/01/2017

IROQUOIS COUNTY

	Rates	Fringes
CARPENTER Carpenter, Drywaller, Millwright, Piledriver, and Soft Floor Layer.....	\$ 37.50	33.57

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CARP0634-001 05/29/2017

CLAY, EDWARDS, FAYETTE, HAMILTON, JEFFERSON, LAWRENCE, MARION,  
RICHLAND, WABASH, WAYNE, and WHITE COUNTIES

	Rates	Fringes
CARPENTER (Lather, Piledriver, and Millwright).....	\$ 34.61	16.85
Carpet Installer (Carpet, Linoluem, Hardwood, and Tile Layer).....	\$ 32.33	16.77

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CARP0640-001 05/29/2017

ALEXANDER, FRANKLIN, HARDIN, MASSAC, JACKSON, PERRY, POPE,  
JOHNSON, GALLATIN, PULASKI, SALINE, UNION, and WILLIAMSON  
COUNTIES

	Rates	Fringes
CARPENTER (Lather, Piledriver, and Millwright).....	\$ 34.61	16.85
Carpet Insttaller (Carpet, Linoleum, Hardwood, and Tile		

Layer).....\$ 32.33 16.77

DIVERS (Receive 1 1/2 times Carpenter's rate plus fringe benefits and \$25.00 per day for equipment)

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CARP1051-004 05/01/2017

CHAMPAIGN, CHRISTIAN, CLARK, COLES, CRAWFORD, CUMBERLAND, DOUGLAS, EDGAR, EFFINGHAM, JASPER, MOULTRIE, PIATT, SHELBY AND VERMILION COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 31.74	26.10

-----  
CARP1051-008 05/01/2017

DE WITT AND FORD COUNTIES

	Rates	Fringes
MILLWRIGHT.....	\$ 31.74	26.78

-----  
ELEC0016-002 04/01/2017

WABASH COUNTY

	Rates	Fringes
ELECTRICIAN.....	\$ 36.25	15.83

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ELEC0146-001 06/01/2016

CHRISTIAN, COLES, CUMBERLAND, DE WITT (Excluding Rutledge, Santa Anna, Waynesville, and Wilson TWPS), DOUGLAS (Southern Half), EFFINGHAM (Banner, Bishop, Douglas, Liberty, Lucas, Moccasin, St. Francis, Summit and Teulopolis TWPS), FAYETTE (Hurricane, S. Hurricane, Ramsey, Bowling Green, Carson, and Loudon TWPS), MACON, MOULTRIE, PIATT (Excluding Blue Ridge, Sangamon and Monticello TWPS), AND SHELBY COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 36.27	16.36

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ELEC0176-009 06/01/2017

FORD (North of Lyman TWP), AND IROQUOIS (Excluding Artesia, Fountain Crrek, Loda, Lovejoy, Pegeon Grove, and Prairie TWPS) COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 40.95	37.56

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ELEC0176-016 06/01/2017

FORD and IROQUOIS COUNTIES

	Rates	Fringes
CATV Installer.....	\$ 33.50	28.00
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ELEC0197-004 06/01/2017		

DE WITT COUNTY (Waynesville, Wilson, and Rutledge)

	Rates	Fringes
ELECTRICIAN.....	\$ 36.00	18.85
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ELEC0197-007 09/01/2017		

BUILDING

DEWITT (Northside), WESTERN (Northside), MCLEAN (Southside),  
and WOODFORD (Southside) COUNTIES

	Rates	Fringes
ELECTRICAL LOW VOLTAGE WIRING INSTALLER Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.....	\$ 31.87	16.16
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ELEC0538-003 06/01/2017		

IROQUOIS (Fountain Creek, Lovejoy & Prairie Twps), VERMILION,  
and WABASH COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 33.29	19.90
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ELEC0538-007 06/01/2017

BUILDING

IROQUOIS (Southeastern side), and VERMILION COUNTIES

Rates Fringes

ELECTRICAL LOW VOLTAGE WIRING  
INSTALLER

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.....\$ 30.83

16.12

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ELEC0601-001 06/01/2017

CHAMPAIGN, DE WITT (Santa Anna Twp), DOUGLAS (Northern Half), FORD (South of Benton Twp), IROQUOIS (Artesia, Pigeon Grove & Loda Twps), and PIATT (Blue Ridge, Sangamon, & Monticello Twps) COUNTIES

Rates Fringes

ELECTRICIAN.....\$ 39.09

16.59

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ELEC0601-010 09/01/2017

BUILDING

CHAMPAIGN, DEWITT (Northeast side), DOUGLAS (Northeast side), FORD (Southside), IROQUOIS (Southwest side), LASALLE (Southside), LIVINGSTON, MARSHALL (Eastside), PIATT (Northeast side), PUTNAM (Southeast side), and WOODFORD (Northeast side) COUNTIES

Rates Fringes

ELECTRICAL LOW VOLTAGE WIRING  
INSTALLER.....\$ 31.41

16.59

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

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 ELEC0702-001 06/01/2017

ALEXANDER, CLAY, EDWARDS, EFFINGHAM (Excluding Banner, Bishop, Douglas, Liberty, Lucas, Moccasin, St. Francis, Summit and Teulopolis TWPS), FAYETTE (Excluding Hurricane, S. Hurricane, Ramsey, Bowling Green, Carson and Loudon TWPS), FRANKLIN, GALLATIN, HAMILTON, HARDIN, JACKSON, JEFFERSON, JOHNSON, MARION, MASSAC, PERRY, POPE, PULASKI, SALINE, UNION, WAYNE, WHITE, AND WILLIAMSON COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 42.73	21.08

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 ELEC0702-016 09/01/2017

BUILDING

ALEXANDER, BOND (Eastside), CLAY, CLINTON (Eastside), EDWARDS, EFFINGHAM (Southwestern side), FAYETTE (Southside), FRANKLIN, GALLATIN, HAMILTON, HARDIN, JACKSON, JEFFERSON, JOHNSON, MARION, MASSAC, PULASKI, PERRY, POPE, RANDOLPH (Southeastern side), SALINE, UNION, WASHINGTON (Southeastern side), WAYNE, WHITE, and WILLIAMSON COUNTIES

	Rates	Fringes
ELECTRICAL LOW VOLTAGE WIRING INSTALLER.....	\$ 34.67	13.24

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

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 ELEC0725-005 03/01/2017

CLARK, CRAWFORD, EDGAR, JASPER, LAWRENCE, AND RICHLAND COUNTIES

	Rates	Fringes
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ELECTRICIAN.....\$ 35.70 18.37

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ELEV0003-003 01/01/2017

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 47.07	31.585+a+b

FOOTNOTES:

a) Employer contributes 8% of regular basic hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for less than 5 years of service

b) Eight paid holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day Friday after Thanksgiving Day, Veterans' Day and Christmas Day.

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ELEV0034-004 01/01/2017

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 45.10	31.585+a+b

FOOTNOTES:

a) Employer contributes 8% of regular basic hourly rate as vacation pay credit fore employees with more than 5 years of service; and 6% for 6 months to 5 years of service

b) Paid Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; the Friday after Thanksgiving Day; Veterans' Day and Christmas Day

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ELEV0055-002 01/01/2017

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 43.43	31.585+a+b

FOOTNOTES:

A. Employer contributes 8% of regular basic hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for under 5 years of service.

B. Paid Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; Day after Thanksgiving; Veterans' Day & Christmas Day

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ENGI0318-001 04/01/2017

ALEXANDER, FRANKLIN, GALLATIN, HAMILTON, HARDIN, JACKSON, JOHNSON, MASSAC, POPE, PULASKI, SALINE, UNION, WHITE, AND WILLIAMSON COUNTIES

	Rates	Fringes
OPERATOR: Power Equipment		
Class A.....	\$ 34.90	24.10+a
Class B.....	\$ 33.00	24.10+a
Class C.....	\$ 25.60	24.10+a
River		
Class 1.....	\$ 35.00	24.10+a
Class 2.....	\$ 31.55	24.10+a

Class A: All Off Road Material Hauling Equipment, All Terrain Crane, Articulated Dump, Asphalt Machine Spreader, Asphalt Plant Assistant Operator, Asphalt Plant Operator, Asphalt Widener, Assistant Operator on Rotomills, Autograder, Automatic Slipform Pavers, Backend Man on Asphalt Machine, Backhoes, Barrel Grappler Devices (All), Blacksmith, Blade Operators (All), Boat Operators (all) Bridges, Boat Pilots requiring certification and/or licensing, Dams & Waterways, Boilers, Boom or Winch Cat, Boom or Winch Type Trucks, Boring Machines-Horizontal, Clamshell, Orange Peel Operator, Concrete Breaker, Concrete Groover, Concrete Grinder, Concrete Curb Machine, Concrete Finish Machine or Spreader Operator, Concrete Mixer Paver, Concrete Pump Truck, Concrete Plant Operator, Concrete Wheel Saw Operators, Cranes(All) Truck/Track/Rubber, Crane (Overhead) Operator, Derrick Guy or Derrick Trucks, Ditching Machines (All), Dozer Operators, Dragline or Shovel Operators, Dredge Booster Pump, Dredge Engineman, Dredge Operator/Leverman, Drill Cat w/Compressor Mounted, Drilling or Boring Machine Rotary-Self-Propelled, Endloaders (All) Track/Rubber Elevating Grader, Flexplane, Forklifts/Tele-Handlers (All), Geothermal Well Drilling, GPS on machines already under the jurisdiction of Local 318, Gradall; Greasers, Heavy Equipment Robotics Operator, Hi-Lift, Hoists, Hosting Engine, Horizontal Directional Drill Operator, Incinerators (Haz-Mat only), Laser Screed, Locomotive/Operator, Master Mechanic, Mixers 21 cu. ft. or over, Motor Patrol, Pile driver operator, Pulls & Scrapers, Power Pac & Controls (Pile Driving), Pug mill, Pulverizer or Tillers, Push Cats, Quad Trac, Rotomills, Rotating Cab Forklifts, Rubber Tired Farm Tractor with Attachments over 1/2 yd., Self-Propelled Chip Spreader, Self-Propelled Roller w/Attachments, Shot Blaster/Bridge Deck, Shuttle Buggy, Side booms, Skid loader (Skid steers), Skimmer Scoop, Spyder Crane, Stationary Rock Slinger, Trackhoe and all attachments, Trench Machine Opeator, Tuggers, Ultra High Pressure Water Jet Cutting Machine, Vacuum, Vacuum Blasting Machine Operator, Vac Jet, Welders, Well or Caisson Drills, Well Point Pumps-2 or more, Wood Chipper w/Tractor.

Class B: Oilers classified as Assistant Operators, Air Track Drill/Compressor, All Machines used to Sweep, Clean, Broom or remove debris or snow, Any type tractor pulling Roller or Disc, Automatic Bins or Scales w/Compressor or Generator, Bulk Cement Plant w/Separate Compressor, Concrete Curb Machine requiring Electronics, Concrete Plant Assistant Operators, Concrete or Pump crete Pumps, Deck Hand on Boats, Dredge Assistant Operator/Mate, Power Broom,

Self-Propelled Roller/Compactor, Straw Mulcher Blower, Stump Cutter Machine, Two Air Compressors (220 CFM or over), Two Air Track Drills. Air Compressor w/valve driving piling, Assistant operator (where required refer to article vii section 9), Elevator Operator, Form Grader, Man Lift (scissor lift) when lifting materials, Pildriver activating air or hydraulic valve regardless of location, Rubber-tired farm type tractor w/Blade/Bulldozer/Auger/Hi-lift of 1/2 yard or less, Self-propelled concrete saw, Self-propelled robotics roller in use two continuous hours or more shall be manned by an operating engineer, Self-propelled vibrator, Truck crane assistant operator, Two Conveyors.

Class C: Air Compressor (220 CFM or over) one, Air Track Drill one, Automatic Bin, Belt Drag Machine, Bulk Cement Plant w/built-in compressor running off same motor or electric motor, fireman or switchman, Mechanic in permanent shops without separate signed Collective Bargaining Agreements (Nov. 1 through March 31), Mechanical plasterer applicator, Pipe Tract Jack, Power Broom, Self-propelled from tamper, Trac-Air, Mixers - less than 21 cu.ft., Mortar Mixer w/ski or pump, Mud Jacks, one well point pump, Wood Chipper.

One Operating Engineer may operate or maintain any combination of the following pieces of equipment, not to exceed four (4), which shall be within reasonable distance; such combination may include the equipment in this classification: Air Compressor (under 220 CFM) Four, Light Plants, Generators, Pumps, Conveyors, Motor Driven Heaters (2), Welding Machines, Ulmac or Equal Spreader

River Class 1: All Off Road Material Hauling Equipment, All Terrain Crane, All Power Boat Operators, Articulated Dump, Asphalt Machine Spreader, Asphalt Plant Operator, Asphalt Widener, Autograder, Automatic Slipform Pavers, Backhoes, Barrel Grapppler Devices (All), Blacksmith, Blade Operators (All), Boat Pilots requiring certification and or licensing, Boat Operators (all) Bridges, Dams & Waterways, Boilers, Boom or Winch Cat, Boom or Winch Type Trucks, Boring Machines-Horizontal, Clamshell, Orange Peel Operator, Concrete Breaker, Concrete Curb Machine, Concrete Finish Machine or Spreader Operator, Concrete Mixer Paver, Concrete Pump Truck, Concrete Plant Operator, Concrete Wheel Saw Operators, Cranes(All) Truck/Track/Rubber, Crane (Overhead) Operator, Derrick Guy or Derrick Trucks, Ditching Machines (All), Dozer Operators, Dragline or Shovel Operators, Dredge Booster Pump, Dredge Engineman, Dredge Operator/Leverman, Drill Cat w/Compressor Mounted, Drilling or Boring Machine Rotary-Self-Propelled, Endloaders (All) Track/Rubber Elevating Grader, Flexplane, Forklifts/Tele-Handlers (All), Geothermal Well Drilling, GPS on machines already under the jurisdiction of Local 318, Gradall; Greasers, Heavy Equipment Robotics Operator, Hi-Lift, Hoists, Hosting Engine, Horizontal Directional Drill Operator, Incinerators (Haz-Mat only), Laser Screed, Locomotive/Operator, Master Mechanic, Mixers 21 cu. ft. or over, Motor Patrol, Piledriver operator, Pulls & Scrapers, Power Pac & Controls (PileDriving), Pug mill, Pulverizer or Tillers, Push Cats, Quad Trac, Rotating Cab Forklifts, Rotomills, Rubber Tired Farm Tractor with Attachments over



1/2 yd., Self-Propelled Chip Spreader, Self-Propelled Roller w/Attachments, Shuttle Buggie, Side booms, Skid loader (Skidsteers), Skimmer Scoop, Spyder Cranes, Trackhoe and all attachments, Trench Machine Opeator, Tuggers, Ultra High Pressure Water Jet Cutting Machine, Vacuum, Vacuum Blasting Machine Operator, Vac Jet, Welders, Well or Caisson Drills, Well Point Pumps-2 or more, Wood Chipper w/Tractor.

River Class 2: Assistant Operators required on All terrain cherry picker w/over 40 ton lifting capacity, Crane, Deckhand on all rivers, lakes, and tributaries, Dinky or standard locomotive, Ditching machine (80 h.p. and over), Dragline, Dredge, Gradall, Guy Derrick, Assitant operators or firman on crane, Piledriver, Shovel, Trenching Machine, Truck Crane.

Footnote A - Hazardous Waste Premium: Level (A)-receive \$3.00 above rate; Level (B)-receive \$2.00 above rate; Level (C)-receive \$1.50 above rate; Level (D)-receive \$1.00 above rate.

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 ENGI0520-011 08/01/2017

FAYETTE, JEFFERSON, MARION, and PERRY COUNTIES

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 01.....	\$ 36.20	31.35
Group 02.....	\$ 35.07	31.35
Group 03.....	\$ 30.59	31.35
Group 04.....	\$ 30.65	31.35
Group 05.....	\$ 30.32	31.35
Group 06.....	\$ 38.75	31.35
Group 07.....	\$ 39.05	31.35
Group 08.....	\$ 39.33	31.35
Group 09.....	\$ 37.20	31.35
Group 10.....	\$ 38.20	31.35
Group 11.....	\$ 38.20	31.35
Group 12.....	\$ 39.20	31.35

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Cranes, Draglines, Shovels, Skimmer Scoops, Clamshells or Derrick Boats, Pile Drivers, Crane-Type Backhoes, Asphalt Plant Operators, Concrete Plant Operators, Dredges, Asphalt Spreading Machines, Screws on Asphalt Spreading Machines, All Locomotives, Cable Ways or Tower Machines, Hoists, Hydraulic Backhoes, Ditching Machines, or Backfiller, Cherrypickers, overhead Cranes, Roller, Steam or Gas, Concrete Pavers, Excavator Concrete Breakers, Concrete Pumps, Bulk Cement Plants, Cement Pumps, DerrickType Drills, Boat Operators, Motor Graders or Pushcats, Scoops or Toumapulls, Bulldozers, Endloaders or Fork Lifts, Power Blade or Elevating Graders, Winch Cats, Boom or Winch Trucks or Boom Tractors, Pipe Wrapping or Painting Machines, Asphalt Plant Engineer, Journeyman Lubricating Engineer, Drills (other than derrick type), Mud

Jacks, or Well Drilling Machines, Boring Machines or Track Jacks, Mixers, Conveyors (two), Air Compressors (two) Water Pumps, regardless of size (two), Welding Machines (two), Siphons or Jets (two), Winch Head or Apparatuses (two), Light Plants (two), Waterblasters (two), all Tractors, regardless of size (straight tractor only), Fireman on Stationary Boilers, Automatic Elevators, Form Grading Machines, Finishing Machines, Power Sub-Grader or Ribbon Machines, Longitudinal Floats, Distributor Operators on Trucks, Winch Heads or Apparatuses (one), Mobil Track air and heaters (two to five), Heavy Equipment Greaser, Relief Operator, Assistant Master Mechanic and Heavy Duty Mechanic, concrete saws of all types and sizes with their attachments, gobhoppers, excavators all sizes, the repair, greasing, and fueling of all diesel hammers, the operation, set-up and cleaning of bidwells, concrete placement booms, the alterations, repair of all barges, water blasters of all sizes and their clutches, mobile lifts, hydraulic jacks where used for hoisting, diesel or gas powered flashing sings used for traffic control, micro pavers, log skiders, iceolators used on and off of pipeline, condor cranes, drill rigs of all sizes, bow boats, survey boats, ross carriers, bob-cats and all their attachments, skid steer loaders and all their attachments, creter crane, direct drive electric motors the bolting and unbolting the adjusting and shimming, (dewatering jobs, whirley crane, conveyor belts) etc., batch plants (all sizes), roto mills, conveyors systems of any size and any configuration, hydroseeders and strawblowers all sizes, operation, repair, service of all vibratory hammers, all power pacs and their controls regardless of location, curtains or brush burning machines, stump cutter machines, grout machines regardless of size, Nail launchers when mounted on a machine or self-propelled, con-cover machines, Goldhofer and similar S.P.M.T. (self-propelled modular transpmiers) heavy transport units and all Operators (except those listed below).

Group 2: Assistant Operators

GROUP 3: Air Compressor One; Water Pump regardless of size One; Welding Machine One; 1-Bag Mixer One; Conveyor One; Siphon or Jet; Light Plant One; Heater One; Immobile Track Air One

GROUP 4: Firemen on Whirlies and Asphalt Spreader Oiler; Heavy Equipment Oilers; Truck Cranes; Monigans; Large over 65 tons capacity; Concrete Plant Oiler and Black Top Plant Oiler

GROUP 5: Oilers

GROUP 6: Operators on equipment with Booms, including Jibs, 100 ft and over, but less than 150 ft

GROUP 7: Operators on equipment with Booms, including Jibs, 150 ft and over, but less than 200 ft

GROUP 8: Operators on equipment with Boomns, including Jibs, 200 ft and over; Tower Cranes, and Whirley Cranes

GROUP 9: Certified crane Operators, Below 17.5 tons, when requested by the Contractor or required by the Owner.

GROUP 10: Certified crane Operators 17.5 tons and above, when requested by the Contractor or required by the Owner.

GROUP 11: Master Mechanic

GROUP 12: Licensed Boat Pilot

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ENGI0841-005 04/01/2015

CHAMPAIGN, CLARK, COLES, CUMBERLAND, DOUGLAS, EDGAR, MOULTRIE,  
and VERMILION COUNTIES

	Rates	Fringes
OPERATOR: Power Equipment		
GROUP 1.....	\$ 38.60	18.35
GROUP 2.....	\$ 24.75	18.35

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Power Cranes, Draglines, Derricks, Shovels, Gradalls, Mechanics, Tractor Highlift, Tournadozer, Concrete Mixers with Skip, Tournamixer, Two-Drum Machine, One-Drum Hoist with Tower or Boom, Cableways, Tower Machines, Motor Patrol, Boom Tractor, Boom or Winch Truck, Winch or Hydraulic Boom Truck, Truck Crane, Tournapull, Tractor Operating Scoops, Bulldozer, Push Tractor, Asphalt Planer, Finishing Machine on Asphalt, Large Rollers on Earth, Rollers on Asphalt Mix, Ross Carrier or Similar Machine, Gravel Processing Machine, Asphalt Plant Engineer, Paver Operator, Farm Tractor with Half Yard Bucket and/or Backhoe Attachments, Dredge Engineer, or Dredge Operator, Central Mix Plant Engineer, CMI or Similar Type Machine, Truck or Skid Mounted Concrete Pump, Tower Crane, Engine or Rock Crusher Plant, Concrete Plant Engineer, Ditching Machine with Dual Attachment, Tractor Mounted Loaders, Cherry Picker, Hydro Crane, Standard or Dinney Locomotives, Scoopmobiles, Euclid Loader, Soil Cement Machine, Back Filler, Elevating Machine, Power Blade, Drilling Machines Including Well Testing, Caissons, Shaft or Any Similar Type Drilling Machines, Motor Driven Paint Machine, Pipe Cleaning Machine, Pipe Wrapping Machine, Pipe Bending Machine, Apsco Paver, Boring Machine, (Head Equipment Greased), Barber- Greene Loaders, Formless Paver, (Well Point System), Concrete Spreader, Hydra Ax, Span Saw and Similar Types, Marine Scoops, Brush Mulcher, Brush Burner, Mesh Placer, Tree Mover, Helicopter Crew (3), Piledriver - Skid or Crawler, Stump Remover, Root Rake, Tug Boat Operator, Refrigerating Machine, Freezing Operator, Chair Cart-Self Propelled, Hydra Seeder, Straw Blower, Power Sub Grader, Bull Float, Finishing Machine, Self-Propelled Pavement Breaker (Backhoe Attached), Lull (or Similar Type Machine), Two Air Compressors, Compressors Hooked in Manifold, Overhead Crane, Chip Spreader, Mud Cat, Sull-Air

Fork Lifts (Except When Used For Landscaping Work), Soil Stabilizer (Seaman Tiller, Bo Mag, Rago Gator and Similar Types or Equipment), Tube Float, Spray Machine, Curing Machine, Concrete or Asphalt Mil

GROUP 2: Concrete Mixers Without Skips, Rock Crusher, Ditching Machine Under 6', Curbing Machine, one Drum Machines without Tower or Boom, Air Tugger, Self-Propelled Concrete Saw, Machine- Mounted Post Hole Digger, Two to Four Generators, Water Pumps, or Welding Machines, within 400ft., Air Compressor 600 cu. ft. and Under, Rollers on Aggregate and Seal Coat Surfaces, Fork Lifts (When Used For Landscaping Work, Concrete and Blacktop Curb Machine, Farm Tractor with less than Half Yard Bucket, One Water Pump, Oilers, Air Valves or Steam Valves, One Welding Machine, Truck Jack, Mud Jack, Gunnite Machine, House Elevators when used for Hoisting Material, Engine Tenders, Wagon Drill, Flex Plane, Conveyor, Siphons and Pulsometer, Switchman, Fireman on Paint Pots, Fireman on Asphalt Plants, Distributor Operators on Trucks, Tampers, Self-Propelled Power Broom, Striping Machine (Motor Driven), Form Tamper, Bulk Cement Plant Equipment Greaser, Deck Hands, Truck Crane Oiler-Driver, Cement Blimps, Form Grader, Temporary Heat, Throttle Valve, Farm Tractor, Super Sucker (and Similar Type of Equipment)

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 ENGI0841-006 04/01/2015

CLAY, CRAWFORD, EDWARDS, EFFINGHAM, JASPER, LAWRENCE, RICHLAND, WABASH, and WAYNE COUNTIES

	Rates	Fringes
OPERATOR: Power Equipment		
GROUP 1.....	\$ 38.60	18.35
GROUP 2.....	\$ 24.75	18.35

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Power Cranes, Draglines, Derricks, Shovels, Gradalls, Mechanics, Tractor Highlift, Tournadozer, Concrete Mixers with Skip, Tournamixer, Two-Drum Machine, One-Drum Hoist with Tower or Boom, Cableways, Tower Machines, Motor Patrol, Boom Tractor, Boom or Winch truck, Winch or Hydraulic Boom Truck, Truck Crane, Tournapull, Tractor Operating Scoops, Bulldozer, Push Tractor, Asphalt Planer, Finishing Machine on Asphalt, Large Rollers on Earth, Rollers on Asphalt Mix, Ross Carrier or Similar Machine, Gravel Processing Machine, Asphalt Plant Engineer, Paver Operator, Farm Tractor with Half Yard Bucket and/or Backhoe Attachments, Dredge Engineer, or Dredge Operator, Central Mix Plant Engineer, CMI or Similar Type Machine, Truck or Skid Mounted Concrete Pump, Tower Crane, Engine or Rock Crusher Plant, Concrete Plant Engineer, Ditching Machine with Dual Attachment, Tractor Mounted Loaders, Cherry Picker, Hydro Crane, Standard or Dinkey Locomotives, Scoopmobiles, Euclid Loader, Soil Cement Machine, Back Filler, Elevating Machine, Power Blade, Drilling Machines

Including Well Testing, Caissons, Shaft or Any Similar Type Drilling Machines, Motor Driven Paint Machine, Pipe Cleaning Machine, Pipe Wrapping Machine, Pipe Bending Machine, Apsco Paver, Boring Machine, (Equipment Greased), Barber- Greene Loaders, Formless Paver, (Well Point System), Concrete Spreader, Hydra Ax, Span Saw and Similar Types, Marine Scoops, Brush Mulcher, Brush Burner, Mesh Placer, Tree Mover, Helicopter Crew (3), Piledriver - Skid or Crawler, Stump Remover, Root Rake, Tug Boat Operator, Refrigerating Machine, Freezing Operator, Chair Cart-Self Propelled, Hydra Seeder, Straw Blower, Power Sub Grader, Bull Float, Finishing Machine, Self-Propelled Pavement Breaker (Backhoe Attached), Lull (or Similar Type Machine), Two Air Compressors, Compressors Hooked in Manifold, Overhead Crane, Chip Spreader, Mud Cat, Sull-Air Fork Lifts (Except When Used For Landscaping Work), Soil Stabilizer (Seaman Tiller, Bo Mag, Rago Gator and Similar Types or Equipment), Tube Float, Spray Machine, Curing Machine, Concrete or Asphalt Milling Machine, Snooper Truck Operator.

GROUP 2: Concrete Mixers Without Skips, Rock Crusher, Ditching Machine Under 6', Curbing Machine, one Drum Machines without Tower or Boom, Air Tugger, Self-Propelled Concrete Saw, Machine- Mounted Post Hole Digger, Two to Four Generators, Water Pumps, or Welding Machines, within 400ft., Air Compressor 600 cu. ft. and Under, Rollers on Aggregate and Seal Coat Surfaces, Fork Lifts (When Used For Landscaping Work, Concrete and Blacktop Curb Machine, Farm Tractor with less than Half Yard Bucket, One Water Pump, Oilers, Air Valves or Steam Valves, One Welding Machine, Truck Jack, Mud Jack, Gunnite Machine, House Elevators when used for Hoisting Material, Engine Tenders, Wagon Drill, Flex Plane, Conveyor, Siphons and Pulsometer, Switchman, Fireman on Paint Pots, Fireman on Asphalt Plants, Distributor Operators on Trucks, Tampers, Self- Propelled Power Broom, Striping Machine (Motor Driven), Form Tamper, Bulk Cement Plant Equipment Greaser, Deck Hands, Truck Crane Oiler\_Driver, Cement Blimps, Form Grader, Temporary Heat, Throttle Valve, Farm Tractor, Super Sucker (and Similar Type of Equipment)

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 ENGI0965-005 05/01/2017

CHRISTIAN, DE WITT, PIATT, and SHELBY COUNTIES

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 36.35	22.90
Group 2.....	\$ 33.94	22.90
Group 3.....	\$ 30.25	22.90
Group 4.....	\$ 37.89	22.90

PREMIUM PAY-

CRANES WITH BOOMS - 120-200 ft. 1.00 per hour; 150 ft. .02 Per Foot For Each Foot Above 200; MULTIPLE UNIT MACHINES- 1.00 per hour; UNDERGROUND WORK-.50 per hour; UNDER AIR PRESSURE- .50 per hour; LONG BOOMS ON STATIONARY CRANES -

1.00 per hour. Above Long Boom Scale.

HAZARDOUS WASTE/ASBESTOS REMOVAL WORKERS:

Level A: (highest level of respiratory, skin, and eye protection) receives \$2.00 per hour above journeyman.

Level B: (same as level A, but a lower level of skin protection) receives \$1.50 per hour above journeyman.

Level C: (same as level B, but a lower level of respiratory protection) receives \$1.00 per hour above journeyman.

OPERATING ENGINEER CLASSIFICATIONS:

GROUP 1: Asphalt Plant Engineer; Asphalt screed man; Apsco concrete spreader; Asphalt paver; Asphalt roller on bituminous concrete; Athey loaders; Cableways; Cherry Picker; ClamShell; C.M.I. & Similar Type Autograde Formless Paver, Autograde Placer & Finisher; Concrete Breaker; Concrete plant Oper; Concrete Pumps; Cranes; Derricks; Derrick boats; Draglines; Earth auger boring machine, Elevating Graders; Engineers on dredge; Gravel processing machines; Head equipment greaser; High lift or fork lift; Hoist with two drums or 2 or more loadlines; Locomotive; Mechanics; Motor graders or auto patrols; Operators or levelman on dredges; Power boat oper; Pug mill oper; (Asphalt plat); Orange peels; Overhead cranes; Paving mixer; Piledrivers; Pipe wrapper & Painting machines; Push dozers, or Push cats; Rock crusher; Ross carrier or similar machine; Scoops; Skimmers 2 cu yd capacity & Under; Sheep foot roller (self propelled); Shovels; Skimmer; Scoops; Test hole drilling machines; Tower machine; Tower mixer; Track Tupe & Loaders; Track type forklifts or high lifts; Track jacks & Tampers; Trackors; Sideboom; Trenching machine; Ditching machine; Tunnel lugger; Wheel type end loader; Winch cat; Scoops (Allor tournapull)

GROUP 2: Asphalt booster & Heater; Asphalt distributor; Asphalt plant fireman; Building Elevator; Bull float or flexplane; Concrete finishing machine; Concrete saw, self propelled; Concrete spreader machine; Gravel or stone spreader, Power operated; Hoist automatic; Hoist with one drum & one load line; Oiler on 2 paving mixers when used in tandem boom or winch truck; Ost hole diggers; Mechanical; Road or street sweeper, Self-propelled; Scissors hoist; Seaman tiller; Straw machine; Vibratory compactor; Well drill machine; & Mud jacks.

GROUP 3: Air compressor, Track or self-propelled; Bulk cement batching- plants; Conveyors; Concrete miers (Except Plant, Paver, Tower) Firement, Generators; Greasers; Light plants; Mechanical theater; Oilers; Power from graders; Power sub-grader; Pug mill, When used other than asphalt operation; Roolers (Except bituminous); Tractors w/o Power attachments regardless of size or type; Truck crane oiler; & driver ( one man ); Vibratory hammer; Water pump; Welding machine ( one 300 amp or over) Combinations of five of any air compressors; Conveyors, Welding Machines, Water pumps; Light plants or Generators shall be in batteries or within

300 ft.

Group 4: Lattice Boom crawler crane, Lattice Boom truck crane, Telescopic truck mounted crane, Tower crane

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IRON0022-005 06/01/2017

CLARK, CLAY, COLES, CRAWFORD, CUMBERLAND, EDGAR, EFFINGHAM, IROQUOIS, JASPER, LAWRENCE, AND RICHLAND COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 30.64	22.05

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IRON0103-005 08/01/2017

CLAY (Louisville & South thereof), EDWARDS, FRANKLIN (Northeast corner), GALLATIN, HAMILTON, JEFFERSON (East of Mt. Vernon), LAWRENCE (Southern Half including Lawrenceville), MARION (Southeast), RICHLAND (Southern Half), SALINE (Northeastern 1/3), WABASH, WAYNE, and WHITE COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 28.64	21.385

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IRON0380-001 05/01/2017

CHAMPAIGN, DE WITT (Eastern Half), DOUGLAS, EDGAR, FORD, IROQUOIS, MOULTRIE, PIATT, and VERMILION COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 32.61	23.21

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IRON0392-005 08/01/2017

CLAY (Remainder), FAYETTE (Excludes St. Elmo and area North thereof), FRANKLIN (Northwest corner), JACKSON (Ana & Elkville TWPS), JEFFERSON (Mount Vernon & area West thereof), MARION (Remainder), and PERRY COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 32.25	26.38

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IRON0782-004 08/01/2017

ALEXANDER, FRANKLIN, HARDIN, JACKSON (Excludes Ava and Elkville TWPS), JOHNSON, MASSAC, POPE, PULASKI, SALINE (Excludes vicinity of El Dorado and are NE thereof), UNION, and WILLIAMSON COUNTIES

	Rates	Fringes
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IRONWORKER.....\$ 30.90 23.57

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LABO0159-001 05/01/2017

CLARK, COLES, CUMBERLAND, DOUGLAS, EDGAR, MOULTRIE (North), AND  
SHELBY COUNTIES

	Rates	Fringes
LABORER		
Asbestos Abatement Worker...\$	30.59	22.78
General Laborer.....\$	28.09	22.68

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LABO0159-007 05/01/2017

MOULTRIE COUNTY (South)

	Rates	Fringes
LABORER		
Asbestos Abatement Worker...\$	30.89	22.78
General Laborer.....\$	28.39	22.68

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LABO0477-008 05/01/2017

CHRISTIAN COUNTY

	Rates	Fringes
LABORER		
Asbestos Abatement Worker...\$	30.47	23.20
General Laborer.....\$	27.97	23.10

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LABO0703-001 05/01/2017

CHAMPAIGN, DE WITT, and PIATT COUNTIES

	Rates	Fringes
LABORER		
Asbestos Abatement Worker...\$	31.56	22.90
General Laborer.....\$	29.06	22.80

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LABO0703-007 05/01/2017

VERMILION COUNTY

	Rates	Fringes
LABORERS		
Asbestos Abatement Worker...\$	30.54	22.90
General Laborer.....\$	28.04	22.80

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LABO0751-001 06/01/2017

FORD and IROQUOIS COUNTIES

Rates Fringes



LABORER

GROUP 1.....	\$ 35.25	27.02
GROUP 2.....	\$ 36.25	27.52

LABORER CLASSIFICATIONS

GROUP 1: General Laborer and Skilled Laborer - Handling of materials treated with oil, creosote, asphalt and/or foreign material harmful to skin or clothing; Track Laborers; Cement Handlers; Chloride Handlers; Unloading and Laborers with Steel Workers and Re-bars; Concrete Workers (wet); Batch Dumpers; Mason Tenders; Kettle and Tar Men; Tank Cleaners; Plastic Installers; Scaffold Workers; Motorized buggies or motorized unit used for wet concrete or handling of building materials; Laborers with de-watering systems; Sewer workers plus depth; Vibrator Operators; Motor Mixer Operators; Cement Silica, clay, fly ash, lime and plasters, handlers (bulk or bag); Cofferdam Workers plus depth; Concrete paving, placing, cutting and tying of reinforcing; Deck hand, dredge hand and shore laborers; Bankmen on floating plant; Asphalt Workers with machine and layers; Grade checker; Power Tools; Driving all stakes, stringlines for all machinery; Setting and building of manholes and catch basins; Stripping of all concrete forms except paving forms; All concrete paving and slope walls, placing, cutting and tying of reinforcing (re-bars and wire mesh); Caisson Workers plus depth; Gunnite Nozzle Men; Lead Man on Sewer Work; Welders, Cutters, Burners, & Torchmen; Chain Saw Operators; Paving Breaker, Jackhammer & Drill Operators; Layout Man and/or Tile Layer; Steel Form Setters (Street & Hwy); Air Tamping hammerman; Signalman on Crane; Concrete Saw Operator; Screenman on Asphalt Pavers; Front End Man on Chip Spreader; Laborers Tending Masons with hot materials or where foreign materials are used; Multiple Concrete duct-leadman; Luteman; Asphalt Raker; Curb Asphalt Machine Operator; Ready mix scalemen, permanent, portable or temporary plant; Laborers Handling Masterplate or similar materials; Laser Beam Operator; Coring Machine Operator; Plasterer Tenders; Underpinning and Shoring of Building; Material selector when working with firebrick or castable materials; Fire Watch; Signaling of all power equipment; Tree Topper or Trimmer; Tunnel Helpers in free air; Rod and Chainmen with Lead Surveyors, Surveyors, and Technical Engineers; Concrete Burning Machine Operator

GROUP 2: Asbestos Abatement Worker and Hazardous Waste Worker; Dynamite man; Lead Base Paint Abatement Worker

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LAB00773-003 04/01/2017

ALEXANDER, FRANKLIN, GALLATIN, HARDIN, JACKSON, JOHNSON, MASSAC, PERRY, POPE, PULASKI, SALINE, UNION, AND WILLIAMSON COUNTIES

Rates Fringes

LABORER

Asbestos Abatement Worker...	\$ 27.83	22.11
General Laborer.....	\$ 26.83	22.11

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LABO1197-002 04/01/2017

CLAY, CRAWFORD, EDWARDS, EFFINGHAM, FAYETTE, HAMILTON. JASPER,  
JEFFERSON, LAWRENCE, MARION, RICHLAND, WABASH, WAYNE, AND WHITE  
COUNTIES

Rates Fringes

LABORER

Asbestos Abatement Worker...	\$ 27.83	22.11
General Laborer.....	\$ 26.83	22.11

-----  
MARB0054-001 05/01/2010

CLAY, EDWARDS, LAWRENCE, RICHLAND, WABASH, AND WAYNE COUNTIES

Rates Fringes

Marble, Tile & Terrazzo

Workers.....	\$ 29.60	13.33
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PAIN0030-010 07/01/2017

BUREAU, FORD, HANCOCK, LA SALLE, LIVINGSTON, MCDONOUGH, MCLEAN,  
PUTNAM AND STARK COUNTIES

Rates Fringes

PAINTER

Brush, Roller, Pressure Roller, Spray, Airless Spray, Sandblasting, Taper, Drywall Taper/Finisher, Structural Steel, and Bridges.....	\$ 36.10	20.10
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PAIN0032-004 05/01/2017

ALEXANDER, FRANKLIN, GALLATIN, HARDIN, JACKSON, JOHNSON, PERRY,  
POPE, PULASKI, SALINE, UNION, and WILLIAMSON COUNTIES

Rates Fringes

PAINTER.....	\$ 29.26	16.23
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Epoxy or Toxic-Lead-Based Paint Work-\$1.00 Premium

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PAIN0058-004 05/01/2017

FAYETTE COUNTY

Rates Fringes

PAINTER.....\$ 31.25 17.12

Epoxy or Toxic-Lead-Based Paint Work-\$1.00 Premium

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PAIN0090-001 05/01/2017

CHRISTIAN COUNTY

Rates Fringes

PAINTER.....\$ 31.13 17.18

Epoxy or Toxic-Lead-Based Paint Work-\$1.00 Premium

All work over 40 ft. above floor or ground level - \$1.00 Premium

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PAIN0124-001 05/01/2017

CLAY, HAMILTON, JEFFERSON, MARION, and WAYNE COUNTIES

Rates Fringes

PAINTER

Journeyman.....\$ 25.00 16.01  
Taping (All Kinds).....\$ 25.80 16.01

Epoxy or Toxic-Lead-Based Paint Work-\$1.00 Premium

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PAIN0156-007 04/01/2017

EDWARDS, WABASH, AND WHITE COUNTIES

Rates Fringes

PAINTER

Brush & Roller of Mastics,  
Creosotes Kwinch Koate,  
and Coal Tar Epoxy.....\$ 27.45 \$14.05+A  
Brush, Roller, and  
Paperhanger.....\$ 26.45 \$14.05+A  
Drywall Finishers and  
Plasterers.....\$ 26.70 \$14.05+A  
Spray for Mastics,  
Creosotes, Kwinch Koate,  
and Coal Tar Epoxy.....\$ 28.45 \$14.05+A  
Spray, Sandblast, Power  
Tools, Waterblast, and  
Steam Cleaning.....\$ 27.45 \$14.05+A

FOOTNOTE A:

All Structures over 40' \$0.75/ hour above base wage  
All Structures over 75' \$1.501 hour above base wage  
All Structures over 100' \$2.50/ hour above base wage

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PAIN0157-009 05/01/2017

FORD AND IROQUIOS COUNTIES

	Rates	Fringes
GLAZIER.....	\$ 34.87	20.45

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PAIN0288-001 05/01/2017

DE WITT, MOULTRIE, PIATT, and SHELBY COUNTIES

	Rates	Fringes
PAINTER		
Brush and Rolle, Paperhanger and Drywall		
Taping.....	\$ 29.00	19.30
Paperhanger and Drywall		
Taping.....	\$ 28.75	18.50
Spray and Sandblasting.....	\$ 29.75	19.30

Epoxy or Toxic-Lead-Based Paint Work-\$1.00 Premium

Work over 50 ft. above ground or floor level - \$1.00 Premium

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PAIN0363-001 05/01/2017

CHAMPAIGN, COLES, CUMBERLAND, DOUGLAS, and VERMILION COUNTIES

	Rates	Fringes
PAINTER.....	\$ 35.29	14.50

Epoxy or Toxic-Lead-Based Paint Work-\$1.00 Premium

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PAIN0467-002 07/01/2017

IROQUOIS AND KANKAKEE COUNTIES

	Rates	Fringes
PAINTER		
Brush, Roller, Taper (Hand), Paperhanger, Swing Stage, Scaffold Over 30ft., Epoxy, Toxic Material, Sandblast, Spray, Machine Taping, and Residential Work Not to Exceed Two Families Per Structure.....	\$ 36.10	20.10

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PAIN0500-003 06/01/2017

MASSAC COUNTY

	Rates	Fringes
PAINTER.....	\$ 21.50	12.85

Spray, sandblasting and water blast units with 3500 PSI

receive \$.50 per hour premium. All work forty feet and above receive \$1.00 per hour premium.

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PAIN0513-003 11/01/2016

BOND, CALHOUN, CLINTON, GREENE, JACKSON, JERSEY, MACOUPIN (Southside), MADISON, MARION, MONROE, PERRY, RANDOLPH, ST. CLAIR, AND WASHINGTON COUNTIES

	Rates	Fringes
GLAZIER.....	\$ 33.40	24.80

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PAIN1165-001 07/01/2017

CLARK, EDGAR, and VERMILION COUNTIES

	Rates	Fringes
GLAZIER.....	\$ 26.26	15.77

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PAIN1165-020 07/01/2017

ALEXANDER, CLAY, CRAWFORD, EDWARDS, FRANKLIN, GALLATIN, HAMILTON, HARDIN, JASPER, JEFFERSON, JOHNSON, LAWRENCE, MASSAC, POPE, PULASKI, RICHLAND, SALINE, UNION, WABASH, WAYNE, WHITE, and WILLIAMSON COUNTIES

	Rates	Fringes
GLAZIER.....	\$ 28.18	14.72

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PAIN1168-004 05/01/2017

CHAMPAIGN, CHRISTIAN, COLES, CUMBERLAND, DE WITT, DOUGLAS, EFFINGHAM, FAYETTE, MOULTRIE, PIATT, AND SHELBY COUNTIES

	Rates	Fringes
GLAZIER.....	\$ 35.91	16.09

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PAIN1705-001 05/01/2017

CLARK, CRAWFORD, EDGAR, EFFINGHAM, JASPER, LAWRENCE, and RICHLAND COUNTIES

	Rates	Fringes
PAINTER		
Blasting, Spraying & Pressure Washing.....	\$ 28.30	20.07
Brush & Roller and Wall Covering Drywall Preparing..	\$ 27.30	20.07

Epoxy or Toxic-Lead-Based Paint Work-\$1.00 Premium

Brush & Roller work over 30' above ground or floor level -  
\$0.80 Premium

Brush & Roller work over 100' above ground or floor level -  
\$1.80 Premium

Blasting, Spraying & Pressure work over 30' above ground  
level - \$2.30 Premium

Blasting, Spraying & Pressure work over 100' above ground  
level - \$3.30 Premium

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PLAS0018-001 05/01/2017

CHRISTIAN COUNTY (Southern Half)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 28.51	21.93
PLASTERER.....	\$ 28.50	19.12

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PLAS0018-022 05/01/2017

DE WITT COUNTY (Northern Half)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 30.69	23.29

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PLAS0103-001 05/01/2002

CHRISTIAN (North Part, South to a line running East and West established North of Humphrey including Stonington), DE WITT (Southern Half including Clinton), PIATT (Southern Part), and SHELBY (Excludes the towns of Cowden, Herrick, Lakewood, Moweaqua, Oconee, Shelbyville, Tower Hill, and Westervelt) COUNTY

	Rates	Fringes
Cement Mason/Plasterer.....	\$ 22.50	9.75

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PLAS0143-001 05/01/2016

CHAMPAIGN, CLARK, CRAWFORD, DOUGLAS (Northern Part including Tuscola and Newman), EDGAR, EFFINGHAM, FORD, LAWRENCE, MOULTRIE, PIATT (Northern Half), VERMILION, AND WABASH COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 32.26	18.00

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PLAS0143-002 05/01/2014

CHAMPAIGN, CLARK, CRAWFORD, DOUGLAS (Northern part including Tuscola and Newman), EDGAR, EFFINGHAM, FORD, LAWRENCE, PIATT

(Northern Half), VERMILION, AND WABASH COUNTIES

	Rates	Fringes
PLASTERER.....	\$ 31.00	17.97

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PLAS0143-013 04/01/2015

Alexander, Clay, Edwards, Fayette, Franklin, Gallatin,  
Hamilton, Hardin, Jackson, Jasper, Jefferson, Johnson, Marion,  
Massac, Perry, Pope, Pulaski, Richland, Saline, Union, Wayne,  
White, and Williamson Counties

	Rates	Fringes
Cement Masons & Plasterers.....	\$ 29.50	14.73

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PLAS0143-019 05/01/2016

COLES, CUMBERLAND, AND DOUGLAS (Southern Half excluding Tuscola  
& Newman) COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 32.26	18.00

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PLUM0065-001 06/15/2013

CHRISTIAN (Assumption, Pana, & Radford), DE WITT, MACON,  
MOULTRIE, PIATT (Western Half), and SHELBY COUNTIES

	Rates	Fringes
Plumber and Steamfitter.....	\$ 36.55	15.87

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PLUM0130-003 06/01/2017

IROQUOIS COUNTY

	Rates	Fringes
PLUMBER.....	\$ 46.96	28.97

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PLUM0136-001 10/01/2017

EDWARDS, LAWRENCE, WABASH, and WHITE COUNTIES

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 34.72	18.71

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PLUM0137-001 04/01/2017

CHRISTIAN COUNTY (West of a North and South line Running from  
the Western edge of Maion County including the town of Ohlman)

	Rates	Fringes
Pipefitter/steamfitter.....	\$ 41.84	17.07
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PLUM0149-001 06/01/2017		
CHAMPAIGN, COLES, CUMBERLAND, EFFINGHAM, FORD, JASPER, AND PIATT (east half) COUNTIES		

	Rates	Fringes
Plumber and Steamfitter.....	\$ 41.54	20.14
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PLUM0157-003 07/01/2017		
Clark, Crawford, Douglas, Edgar, Richland, and Vermilion Counties		

	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER.....	\$ 36.93	16.28
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PLUM0160-001 01/01/2017		
ALEXANDER, HARDIN, JACKSON, JOHNSON, MASSAC, PERRY, POPE PULLASKI, UNION, AND WILLIAMSON (Southern Half) COUNTIES		

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 44.10	18.70
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PLUM0551-001 01/01/2017		
FRANKLIN, GALLATIN, HAMILTION, JEFFERSON, SALINE, WAYNE, AND WILLIAMSON (Northern Half) COUNTIES		

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 40.50	21.80
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PLUM0597-005 06/01/2017		
IROQUOIS COUNTY		

	Rates	Fringes
PIPEFITTER.....	\$ 47.50	30.02
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* PLUM0653-001 09/01/2017		
CLAY, FAYETTE, and MARION COUNTIES		

	Rates	Fringes
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Plumber, Pipefitter,  
 Steamfitter.....\$ 37.50 17.37

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 ROOF0002-006 06/01/2017

ALEXANDER, FRANKLIN, HAMILTON, JACKSON, JEFFERSON, JOHNSON,  
 MARION, PERRY, POPE, PULASKI, SALINE, UNION, WAYNE, and  
 WILLIAMSON COUNTIES

	Rates	Fringes
ROOFER.....	\$ 27.20	12.93

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 ROOF0092-001 06/01/2017

CHRISTIAN (Eastern Half), CLAY, DE WITT (Southern Half),  
 EFFINGHAM, FAYETTE, JASPER, MOULTRIE, PIATT (Western Half),  
 RICHLAND, AND SHELBY COUNTIES

	Rates	Fringes
ROOFER.....	\$ 28.37	19.51

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 ROOF0097-001 06/01/2017

CHAMPAIGN, CLARK, COLES, CUMBERLAND, DOUGLAS, EDGAR, FORD  
 (South of Piper City), PIATT (EAST SECTION OF PIATT, WEST OF &  
 EXCLUDING THE CITIES OF MONTICELLO & LODGE), and VERMILION  
 COUNTIES

	Rates	Fringes
ROOFER.....	\$ 31.05	17.92

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 ROOF0106-004 04/01/2017

MASSAC COUNTY

	Rates	Fringes
ROOFER		
Composition Roofer.....	\$ 29.50	15.52
Slate, Tile, Concrete, Slab, and Gypsum Plank.....	\$ 29.50	15.52

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 ROOF0106-005 04/01/2017

EDWARDS, GALLATIN, HARDIN, WHITE AND WABASH COUNTIES

	Rates	Fringes
ROOFER		
Composition Roofer.....	\$ 29.50	15.52
Slate, Tile, Concrete, Slab, and Gypsum Plank.....	\$ 29.50	15.52

ROOF0112-003 07/01/2016

CHRISTIAN COUNTY (Bolivia, Breckenridge, Buckhart, Bulpitt, Callaway, Clarksville, Edinburgh, Grove City, Harvel, Hewittsville, Humphrey, Jeisyville, Kincaid, Langlyville, Morrisonville, Palmer, Roby, Sharpsbury, Taylorville, Tovey, Vanderville, and Zenobia)

	Rates	Fringes
ROOFER.....	\$ 29.60	18.83

ROOF0150-001 07/01/2017

CRAWFORD and LAWRENCE COUNTIES

	Rates	Fringes
ROOFER.....	\$ 27.00	14.43

SHEE0020-005 07/03/2017

CLARK, CRAWFORD, EDGAR & LAWRENCE COUNTIES

	Rates	Fringes
Sheet metal worker.....	\$ 33.50	20.45

SHEE0218-004 06/01/2017

CHAMPAIGN, COLES, CUMBERLAND, DOUGLAS, FORD, MOULTRIE, PIATT, SHELBY & VERMILION COUNTIES

	Rates	Fringes
SHEET METAL WORKER.....	\$ 36.10	26.55

SHEE0265-002 06/01/2017

IROQUOIS COUNTY

	Rates	Fringes
SHEET METAL WORKER.....	\$ 46.77	29.27

SHEE0268-003 07/01/2017

ALEXANDER, CLAY, EDWARDS, EFFINGHAM, FAYETTE, FRANKLIN, GALLATIN, HAMILTON, HARDIN, JACKSON, JASPER, JEFFERSON, JOHNSON, MARION, MASSAC, PERRY, POPE, PULASKI, RICHLAND, SALINE, UNION, WABASH, WAYNE, WHITE, and WILLIAMSON COUNTIES

	Rates	Fringes
Sheet metal worker.....	\$ 34.27	20.20

TEAM0026-002 05/01/2017

CHAMPAIGN, COLES, CUMBERLAND, DEWITT, DOUGLAS, EFFINGHAM, FORD (Southern Section - Elliot, Gibson City, Harpster, Melvin, Paxton, Roberts & Sibley), IROQUOIS (Fountain Creek, Lovejoy, Milford, Pigeon Grove, Prairie Green & Stockland), JASPER, MOULTRIE (East of a line from the Northeast corner of the county extending Southeast in the direction of Findlay (Shelby County) to a point that intersects the Shelby County line), PIATT (East of a line from where the DeWitt County line intersects Route 10 in a Southeast direction towards the Southeast corner of the county), SHELBY (East of an imaginary line beginning at the Northeast border with Moultrie County extending Southwest in the direction of Findlay and continuing to an imaginary point 2.5 miles South of Middlesworth that parallels the Cumberland County line), AND VERMILION COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 36.15	18.30
Group 2.....	\$ 36.67	18.30
Group 3.....	\$ 36.91	18.30
Group 4.....	\$ 37.25	18.30
Group 5.....	\$ 38.23	18.30

CLASSIFICATIONS:

GROUP 1: Drivers on 2 axles hauling less than 9 tons; air compressor & welding machines and brooms, including those pulled by separate units; Truck Driver Helper, warehouse employees; Mechanic Helpers; greasers and tiremen; pick-up trucks when hauling material, tools, or workers to and from and on the job site; and forklifts up to 6,000 lb capacity.

GROUP 2: 2 or 3 axles hauling more than 9 tons but hauling less than 16 tons; A-frame winch trucks; hydrolift trucks; Vector Trucks or similar equipment when used for transportation purposes; Forklift over 6,000 lb.capacity; winch trucks; and four axle combination units.

GROUP 3: 2, 3 or 4 Axles hauling 16 tons or more; 5-Axles or more combination units; drivers on water pulls; articulated dump trucks; mechanics and working forepersons.

GROUP 4: Low Boy and Oil Distributors.

GROUP 5: Drivers who require special protective clothing while employed on hazardous waste work.

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 TEAM0050-002 05/01/2017

ALEXANDER, CLAY, FAYETTE, FRANKLIN, HAMILTON, HARDIC, JACKSON, JEFFERSON, JOHNSON, MARION, MASSAC, PERRY, POPE, PULASKI, SALINE, UNION, WAYNE, WHITE, WILLIAMSON COUNTIES

Rates                      Fringes

TRUCK DRIVER

Group 1.....	\$ 36.26	18.51
Group 2.....	\$ 36.77	18.51
Group 3.....	\$ 37.05	18.51
Group 4.....	\$ 37.36	18.51
Group 5.....	\$ 38.35	18.51

CLASSIFICATIONS:

GROUP 1: Drivers on 2 axles hauling less than 9 tons; air compressor & welding machines and brooms, including those pulled by separate units; Truck Driver Helper, warehouse employees; Mechanic Helpers; greasers and tiremen; pick-up trucks when hauling material, tools, or workers to and from and on the job site; and forklifts up to 6,000 lb capacity.

GROUP 2: 2 or 3 axles hauling more than 9 tons but hauling less than 16 tons; A-frame winch trucks; hydrolift trucks; Vector Trucks or similar equipment when used for transportation purposes; Forklift over 6,000 lb.capacity; winch trucks; and four axle combination units.

GROUP 3: 2, 3 or 4 Axles hauling 16 tons or more; 5-Axles or more combination units; drivers on water pulls; articulated dump trucks; mechanics and working forepersons.

GROUP 4: Low Boy and Oil Distributors.

GROUP 5: Drivers who require special protective clothing while employed on hazardous waste work.

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TEAM0135-007 05/01/2017

CLARK, CRAWFORD, EDGAR, EDWARDS, LAWRENCE, RICHLAND, and WABASH COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 33.95	11.16+A
Group 2.....	\$ 34.35	11.16+A
Group 3.....	\$ 34.55	11.16+A
Group 4.....	\$ 34.80	11.16+A
Group 5.....	\$ 35.05	11.16+A

FOOTNOTE: A. \$33.50 per day

CLASSIFICATIONS:

Group 1 - Drivers on 2 axle truckshauling less than 9 ton; Air compressor and welding machines and brooms, including those pulled by separate units; Truck Driver Helpers; Warehouse employees; Mechanic helpers; Greasers and tiremen; fork lifts up to 6,000 pounds capacity

Group 2 - 2 or 3 axle trucks hauling more than 9 ton but hauling less than 16 ton; A-frame winch trucks; Hydrolift trucks; Vector trucks or similar equipment when used for

transportation purposes; Fork lifts over 6,000 pound capacity; Winch trucks; 4 axle combination units; In the event the Employer desires to use ticket writers that classification shall come under Group II

Group 3 - 2, 3, or 4 axle trucks hauling 16 ton or more; Drivers on water pulls; Articulated Dump Trucks; Mechanics and working forepersons; 5 axle or more combination units

Group 4 - Low Boy; Oil Distributors

Group 5 - Drivers who require special protective clothing while employed on hazardous waste work.

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 \* TEAM0179-010 06/01/2017

IROQUOIS COUNTY (All except the townships of Milford, Stockland, Loda, Pigeon Grove, Fountain Creek, Lovejoy, and Prairie Green)

	Rates	Fringes
TRUCK DRIVER		
2 or 3 axles.....	\$ 37.68	0.15+a
4 axles.....	\$ 37.83	0.15+a
5 axles.....	\$ 38.03	0.15+a
6 axles.....	\$ 38.23	0.15+a

FOOTNOTES:

- a. \$733.20 per week.
- b. Lowboy rate based on number of axles

An additional \$.20 per axle shall be paid for all vehicles with more than six (6) axles.

CLASSIFICATIONS:

Group 1 - Frame Truck when used for transportation purposes; Air Compressor and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Articulated Dumps; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry Alls; Forl Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors, two-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Pothole Repair Trucks; Power Mower Tractors; Quick Change Barrier; Self-Propelled Chip Spreader; Shipping and Receiving Clerks and Checkers; Skipman; Slurry Trucks, two-man operation; Slurry Trucks, Conveyor Operated - 2 or 3 man operation; Teamsters; Unskilled Dumpmen; Warehousemen and Dockmen; Truck Drivers hauling warning lights, barricades, and portable toilets on the job site

Group 2 - Dispatcher; Dump Crets and Adgetators under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-Mix Plant Hopper Operator; Winch Trucks, 2 Axles

Group 3 - Dump Crets and Adgetators, 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, one-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry Trucks, one-man operation; Winch Trucks, 3 axles or more; Mechanic - \*Truck Welder and \*Truck Painter\*These classifications shall only apply in areas where and when it has been a past area practice; Asphalt Plant Operators in areas where it has been past practice

Group 4 - Dual-purpose vehicels, such as mounted crane tucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front

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 \* TEAM0179-013 06/01/2017

FORD COUNTY (North section the of the County North of a line from the Southeastern corner of Livingston County straight East to the Ford-Irquois County Line)

	Rates	Fringes
TRUCK DRIVER		
2 or 3 Axle Trucks.....	\$ 37.68	0.15+a
4 Axle Trucks.....	\$ 37.83	0.15+a
5 Axle Trucks.....	\$ 38.03	0.15+a
6 Axle Trucks.....	\$ 38.23	0.15+a

FOOTNOTES:

- a. \$733.20 per week.
- b. Lowboy rate based on number of axles

An additional \$.20 per axle shall be paid for all vehicles with more than six (6) axles.

CLASSIFICATIONS:

Group 1 - Frame Truck when used for transportation purposes; Air Compressor and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Articulated Dumps; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry Alls; Forl Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors, two-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Pothole Repair Trucks; Power Mower Tractors; Quick Change Barrier; Self-Propelled Chip Spreader; Shipping and Receiving Clerks and Checkers; Skipman; Slurry Trucks, two-man operation; Slurry Trucks, Conveyor Operated - 2 or 3 man operation; Teamsters; Unskilled Dumpmen; Warehousemen and Dockmen; Truck Drivers hauling warning lights, barricades, and portable toilets on the job site

Group 2 - Dispatcher; Dump Crets and Adgetators under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-Mix Plant Hopper Operator; Winch Trucks, 2 Axles

Group 3 - Dump Crets and Adgetators, 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, one-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry Trucks, one-man operation; Winch Trucks, 3 axles or more; Mechanic - \*Truck Welder and \*Truck Painter\*These classifications shall only apply in areas where and when it has been a past area practice; Asphalt Plant Operators in areas where it has been past practice

Group 4 - Dual-purpose vehicels, such as mounted crane tucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front

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TEAM0279-002 05/01/2017

CHRISTIAN, MOULTRIE (West of a line from the NE Corner, extending straight SE in the direction of Findlay (Shelby County) to a point that intersects the Shelby county line), PIATT (West of a line from where the DeWitt County line intersects Route 10, in a SE direction toward the SE border of the county), SHELBY (West of an imaginary line beginning at the NE border with Moultrie County, extending SW in the direction of Findlay, and continuing to the same point (2.5 miles) South of Middlesworth, then towards the NE cordner of Fayette County) COUNTIES

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 34.65	19.91
Group 2.....	\$ 35.17	19.91
Group 3.....	\$ 35.43	19.91
Group 4.....	\$ 35.77	19.91
Group 5.....	\$ 36.73	19.91

CLASSIFICATIONS:

GROUP 1: Drivers on 2 axles hauling less than 9 tons; air compressor & welding machines and brooms, including those pulled by separate units; Truck Driver Helper, warehouse employees; Mechanic Helpers; greasers and tiremen; pick-up trucks when hauling material, tools, or workers to and from and on the job site; and forklifts up to 6,000 lb capacity.

GROUP 2: 2 or 3 axles hauling more than 9 tons but hauling less than 16 tons; A-frame winch trucks; hydrolift trucks; Vector Trucks or similar equipment when used for transportation purposes; Forklift over 6,000 lb.capacity; winch trucks; and four axle combination units.

GROUP 3: 2, 3 or 4 Axles hauling 16 tons or more; 5-Axles or more combination units; drivers on water pulls; articulated dump trucks; mechanics and working forepersons.

GROUP 4: Low Boy and Oil Distributors.

GROUP 5: Drivers who require special protective clothing while employed on hazardous waste work.

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TEAM0347-001 05/01/2017

GALLATIN COUNTY

	Rates	Fringes
TRUCK DRIVER		
Group 1.....	\$ 34.65	19.91
Group 2.....	\$ 35.17	19.91
Group 3.....	\$ 35.43	19.91
Group 4.....	\$ 35.77	19.91
Group 5.....	\$ 36.73	19.91

CLASSIFICATIONS:

GROUP 1: Drivers on 2 axles hauling less than 9 tons; air compressor & welding machines and brooms, including those pulled by separate units; Truck Driver Helper, warehouse employees; Mechanic Helpers; greasers and tiremen; pick-up trucks when hauling material, tools, or workers to and from and on the job site; and forklifts up to 6,000 lb capacity.

GROUP 2: 2 or 3 axles hauling more than 9 tons but hauling less than 16 tons; A-frame winch trucks; hydrolift trucks; Vector Trucks or similar equipment when used for transportation purposes; Forklift over 6,000 lb.capacity; winch trucks; and four axle combination units.

GROUP 3: 2, 3 or 4 Axles hauling 16 tons or more; 5-Axles or more combination units; drivers on water pulls; articulated dump trucks; mechanics and working forepersons.

GROUP 4: Low Boy and Oil Distributors.

GROUP 5: Drivers who require special protective clothing while employed on hazardous waste work.

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.



Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that

no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

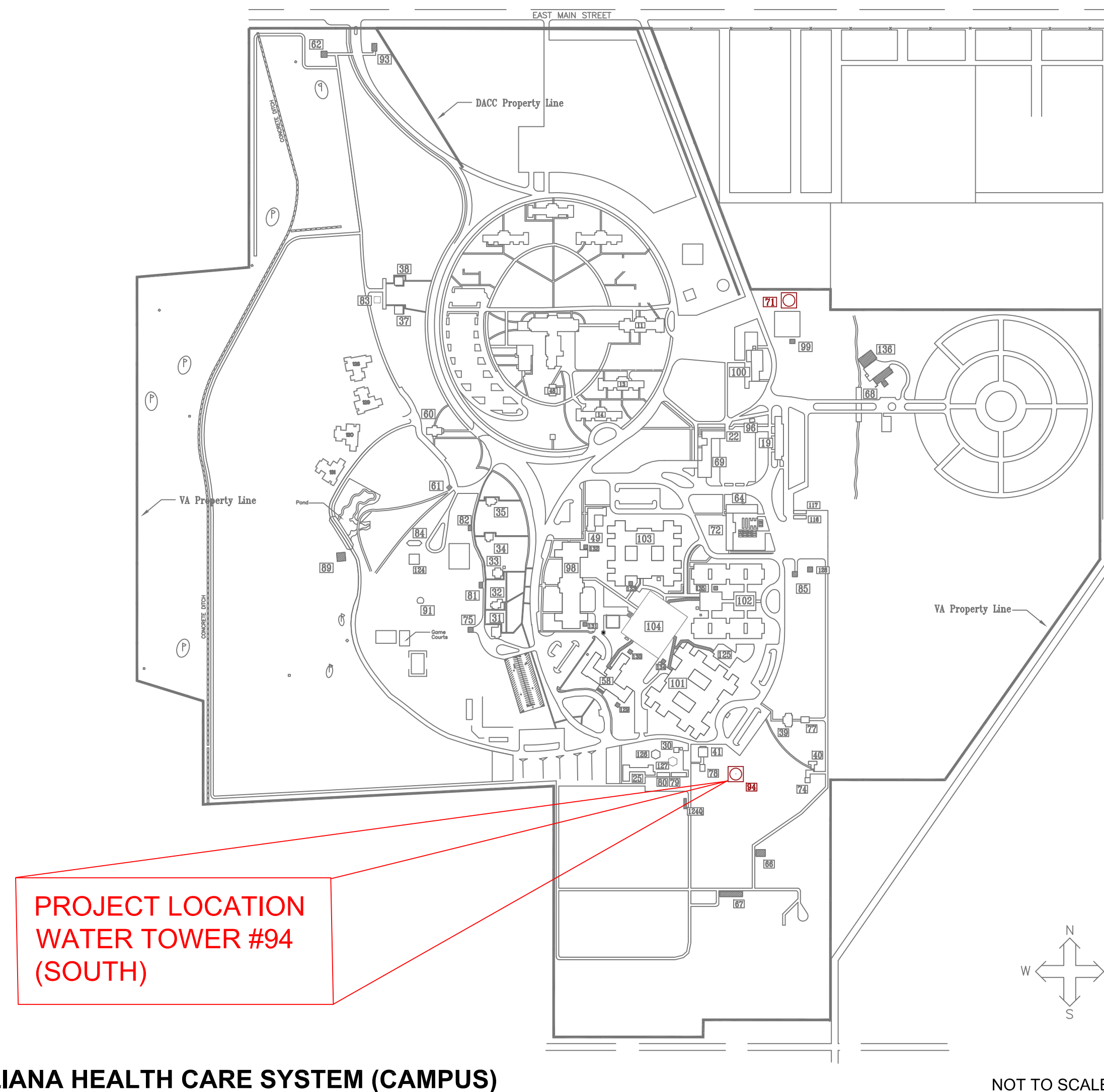
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Number of Characters: 416,175 (approx.)

# VA ILLIANA HEALTH CARE SYSTEM EMERGENCY REPAIR TO WATER TOWER #94 (SOUTH)

1900 EAST MAIN STREET  
DANVILLE, ILLINOIS 61832

CONSTRUCTION DOCUMENTS  
AUGUST 13, 2017

DRAWING INDEX		
SHEET No.	DWG No.	SHEET TITLE
1	G-001	COVER SHEET
2	G-002	SITE STAGING PLAN
3	G-003	SCOPE OF WORK



Revisions:	Date

CONSULTANTS:

ARCHITECT/ENGINEERS:  
VA ILLIANA Health Care System

Engineer: Troy Martinson, PE, DBIA  
Designer:

Drawing Title:  
**COVER SHEET**

Approved (Chief, FMS):  
**Troy Martinson, PE, DBIA**

Approved (Superintendent/Projects Chief):  
**Carl Wise/Mark Shoviak**

Project Title:  
**Emergency Repair to  
Water Tower #94 (South)**

Location:  
**VA Illiana HCS, Danville, IL**

Date:  
**8-13-2017**

Checked:  
**CW**

Drawn:  
**TJM**

Project Number:  
**550-18-101**

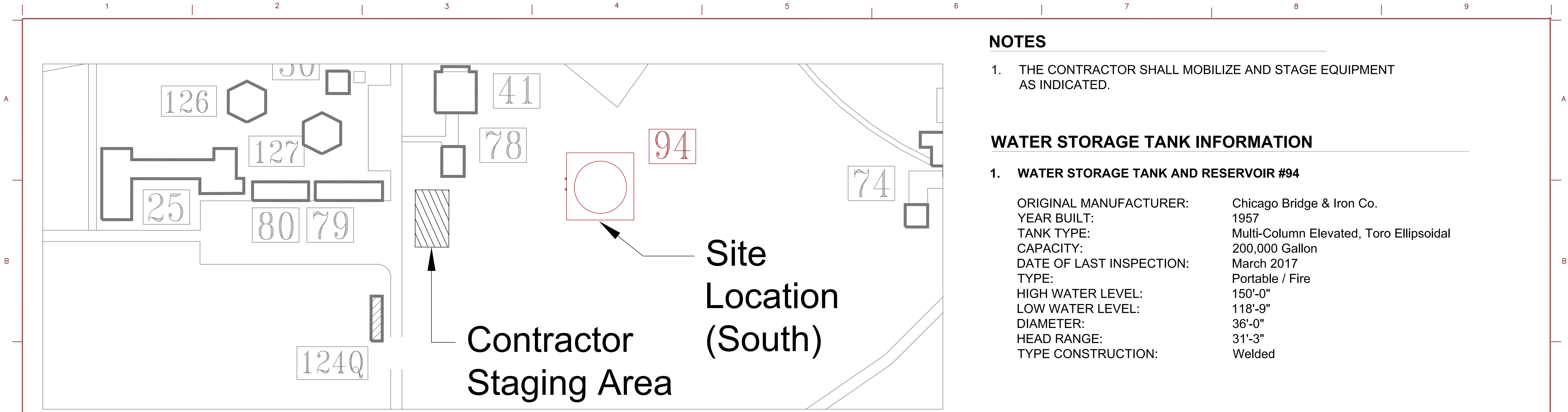
Building Number:

Drawing Number:  
**G-001**  
Dwg. 1 of 3

**BID DOCUMENTS**

Facility Management Service (FMS)  
VAIHCS

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1 Site Plan (Tank Facility #94)  
Scale: 1/32" = 1'-0"

**NOTES**

1. THE CONTRACTOR SHALL MOBILIZE AND STAGE EQUIPMENT AS INDICATED.

**WATER STORAGE TANK INFORMATION**

**1. WATER STORAGE TANK AND RESERVOIR #94**

ORIGINAL MANUFACTURER:	Chicago Bridge & Iron Co.
YEAR BUILT:	1957
TANK TYPE:	Multi-Column Elevated, Toro Ellipsoidal
CAPACITY:	200,000 Gallon
DATE OF LAST INSPECTION:	March 2017
TYPE:	Portable / Fire
HIGH WATER LEVEL:	150'-0"
LOW WATER LEVEL:	118'-9"
DIAMETER:	36'-0"
HEAD RANGE:	31'-3"
TYPE CONSTRUCTION:	Welded

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**BID DOCUMENTS**

Revisions: <table border="1"> <tr><th>Date</th><th> </th></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	Date										<b>CONSULTANTS:</b>  	<b>ARCHITECT/ENGINEERS:</b> VA ILLIANA Health Care System  Engineer: Troy Martinson, PE, DBIA Designer:	Drawing Title: <b>SITE STAGING PLAN</b>	Project Title: <b>Emergency Repair to Water Tower #94 (South)</b>	Project Number: 550-18-101	<b>Facility Management Service (FMS) VAIHCS</b>  
	Date															
Approved (Chief, FMS): <b>Troy Martinson, PE, DBIA</b>	Location: VA Illiana HCS, Danville, IL	Building Number:	Drawing Number: <b>G-002</b>													
Approved (Superintendent/Projects Chief): <b>Carl Wise/Mark Shoviak</b>	Date: 8-13-2017	Checked: CW	Drawn: TJM													
Dwg. 2 of 3																