

SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NO. W912P519R00010009	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED 18-Dec-2020	PAGE OF PAGES 1 OF 61
IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.				
4. CONTRACT NO. W912P521D0002	5. REQUISITION/PURCHASE REQUEST NO. W38XDD92311091		6. PROJECT NO.	
7. ISSUED BY CODE W912P5 US ARMY CORPS OF ENGINEERS-CELRN-RC-N DIRECTORATE OF CONTRACTING 110 9TH AVENUE SOUTH, RM A405 NASHVILLE TN 37203 TEL: 615-736-7917 FAX: 615-736-7124		8. ADDRESS OFFER TO <i>(If Other Than Item 7)</i> CODE <div style="text-align: center; font-weight: bold; padding: 10px;">See Item 7</div> TEL: FAX:		
9. FOR INFORMATION CALL:	A. NAME ROBERT B HOLDSWORTH		B. TELEPHONE NO. <i>(Include area code) (NO COLLECT CALLS)</i>	
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 <i>(Title, identifying no., date):</i> PROJECT TITLE: Excitation Equipment Replacement Single Award Task Order Contract (SATOC) for Nashville District Power Plants NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM CODE (NAICS): 237130, Power and Communication Line and Related Structures Construction SMALL BUSINESS ADMINISTRATION SIZE STANDARD FOR 237130: \$39.5 M. TYPE OF COMPETITION: This is a Full and Open procurement. In accordance with Federal Acquisition Regulation 19.1307, this project requires the HUBZone 10% price evaluation. ESTIMATED MAGNITUDE OF PROTOTYPE PROJECT: Between \$1,000,000 and \$5,000,000. Proposals received by email or facsimile will not be considered. NOTE: Complete information in Block 11 will be provided on a Task Order basis.				
11. The Contractor shall begin performance within <u>10</u> calendar days and complete it within _____ 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. <i>(See 52.211-10 _____.)</i>				
12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? <i>(If "YES," indicate within how many calendar days after award in Item 12B.)</i> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			12B. CALENDAR DAYS 10	
13. ADDITIONAL SOLICITATION REQUIREMENTS: A. Sealed offers in original and <u>0</u> copies to perform the work required are due at the place specified in Item 8 by <u>10:00 AM</u> <i>(hour)</i> local time <u>02 Sep 2020</u> <i>(date)</i> . 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, and the date and time offers are due. B. An offer guarantee <input checked="" type="checkbox"/> is, <input type="checkbox"/> is not required. C. 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. D. Offers providing less than <u>90</u> calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.				

SOLICITATION, OFFER, AND AWARD (Continued) <i>(Construction, Alteration, or Repair)</i>													
OFFER (Must be fully completed by offeror)													
14. NAME AND ADDRESS OF OFFEROR <i>(Include ZIP Code)</i> CANADIAN COMMERCIAL CORPORATION STEPHEN PEACOCK 350 ALBERT ST SUITE 700 OTTAWA K1A 0S6					15. TELEPHONE NO. <i>(Include area code)</i> 613-995-1588								
CODE 98247					16. REMITTANCE ADDRESS <i>(Include only if different than Item 14)</i> See 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 this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. <i>(Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)</i>													
AMOUNTS		SEE SCHEDULE OF PRICES											
18. The offeror agrees to furnish any required performance and payment bonds.													
19. ACKNOWLEDGMENT OF AMENDMENTS <i>(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)</i>													
AMENDMENT NO.													
DATE													
20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER <i>(Type or print)</i>					20B. SIGNATURE			20C. OFFER DATE					
AWARD (To be completed by Government)													
21. ITEMS ACCEPTED: <div style="font-size: 24pt; font-weight: bold; margin-top: 10px;">SEE SCHEDULE</div>													
22. AMOUNT \$30,000,000.00		23. ACCOUNTING AND APPROPRIATION DATA											
24. SUBMIT INVOICES TO ADDRESS SHOWN IN <i>(4 copies unless otherwise specified)</i>				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. 253(c)								
26. ADMINISTERED BY US ARMY CORPS OF ENGINEERS-CELRN-RC-N DIRECTORATE OF CONTRACTING 110 9TH AVENUE SOUTH, RM A680 NASHVILLE TN 37203				CODE	W912P5	27. PAYMENT WILL BE MADE BY: USACE FINANCE CENTER-NASHVILLE DIST (H3) ATTN: CEFC-AO (H3) 5720 INTEGRITY DRIVE MILLINGTON TN 38054-5005				CODE		W916TX	
CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE													
<input type="checkbox"/> 28. NEGOTIATED AGREEMENT <i>(Contractor is required to sign this document and return _____ copies to issuing office.)</i> Contractor agrees to furnish and deliver all items or perform all work, requisitions 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 or incorporated by reference in or attached to this contract.					<input type="checkbox"/> 29. AWARD <i>(Contractor is not required to sign this document.)</i> Your offer on this solicitation, is hereby accepted as to the items listed. This award commutes the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.								
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN <i>(Type or print)</i>					31A. NAME OF CONTRACTING OFFICER <i>(Type or print)</i> STEPHEN HUTCHENS / Added by UPASS TEL: 615.736.7124 EMAIL: stephen.p.hutchens@usace.army.mil								
30B. SIGNATURE			30C. DATE		31B. UNITED STATES OF AMERICA BY			31C. AWARD DATE 18-Dec-2020					

Section SF 30 - Block 14 Continuation Page (SF 30)

AMENDMENT 0006 Q&A

83. Reference “1.4 GOVERNMENT EQUIPMENT INTERFACE, 1.4.4 Potential and Current Transformers “... One current transformer (CT) for each generator is available for the voltage regulators of the new excitation system ...” Proper operation of the PSS requires a minimum of two CTs. Three CTs, one per each phase, is the recommended arrangement. See – from the PLANS document sent with the Solicitation – pages E611, E612 and E613. For the CTs that the Corps have already shown as planned for use with the AVR, seen in the coordinates G/F by 3/4 on the drawing, there are three CTs that route to the SEL-751A relay and only one that runs to the “DIGITAL EXCITER.” The other two run elsewhere. Would the government permit the secondary leads of these other CTs could be run to the new exciter as well.”

Answer: The referenced CTs are not permitted for use for the excitation system at this time. Offerors that require more than one (1) CT for implementation of a PSS should include consideration of the effort and cost for adding additional CT(s) as necessary for their system in their proposal.

84. Reference “2.4 POWER POTENTIAL TRANSFORMERS, 2.4.4 Enclosure “... The cubicles shall be of the totally enclosed, freestanding, dead-front type built on a suitable framework of structural steel or by an equivalent approved method. ... For a PPT enclosure that is not, in the strictest sense, dead-front type, the protection from incidental contact with live conductors is formed with cabinet openings that are not casually opened, which can offer isolation from the conductors. Would the government review what is desired by “dead-front type” and allow touch safe construction appropriate for powerhouse environment?”

Answer: The described approach of closed cabinet openings offering isolation from conductors and touch safe construction are in line with Government expectations for “dead-front type” enclosure construction. The NEC definition of “dead front” which is stated as “Without live parts exposed to a person on the operating side of the equipment” is the intent.

85. Reference “2.5 EXCITATION SYSTEM REQUIREMENTS, 2.5.1 General, 2.5.1.6 Electronic Equipment Components, All electronic equipment, such as amplifiers and logic circuits, shall be of solid state design using industrial or military grade discrete transistors or integrated circuits bearing JEDEC Solid State Technology Association registered device numbers, where possible. Non-JEDEC parts shall be identified and approved by the Government. The Bidder asks if the Corps will accept other means of identifying circuit boards – without requiring JEDEC labeling on individual solid state devices.”

Answer: As described in the referenced paragraph of the specifications, labeling and bearing registered device numbers “where possible” is required. Other means of identification are allowable where this may not be practically achieved.

86. Reference “2.5.7.6 Painting, “... Exterior surfaces shall then be primed, filled where necessary, and given not less than two coats of finish matching the color of the existing excitation cabinets. ...” The factory can match color, if the customer is able to identify the color to match in a manner that is meaningful to paint suppliers. Can the government furnish a paint chip or a paint number?”

Answer: The existing paint color “Do It Best Alkyd Industrial Enamel” and a paint sample can be provided after contract award upon request.

87. Question, 20 Jul (Basler): “2.5.10 Field Discharge, Surge Suppression, and Surge Withstand “... a path for the field current and to dissipate the stored energy in the field. The circuitry shall incorporate bi-directional thyristors with a field discharge varistor, or similar approved circuitry. ...” Bidder asks for approval for thyristors and field discharge resistors to dissipate the stored energy in the field.”

Answer: The described approach would seem likely to be “similar circuitry” which would be considered for approval. Drawings and details of the proposed system would be provided as part of Submittals for Government approval after contract award.

88. Reference “2.6 EXCITATION SYSTEM CONTROLS, 2.6.12 Power System Stabilizer (PSS) 2.6.12.3 Input Signals “... The power signal shall be derived from an instantaneous watt transducer or equivalent digital algorithm, using three phase voltage and single phase current input signals ...” Proper operation of the PSS requires a minimum of two CTs, as mentioned in 1.4.4 above. Three CTs, one per each phase, is the recommended arrangement.”

Answer: Reference Amendment 0006. See the Government’s response to Question 83.

89. Reference “2.7 EXCITER COMMUNICATION, 2.7.3 Human-Machine Interface (HMI) “... Provide the following minimum display parameters ... (h) Limiter and protective device setpoints ...” Given the CYBERSECURITY REQUIREMENTS, described in SECTION 01 35 70, Paragraph 1.3.9 as “configured using a role-based scheme so that normal operations occur using an Operator level account with minimum privileges required to operate the system. The Contractor shall document the minimum privileges required for the Operator level account. Administration-level (privileged access) accounts shall be required to perform any configuration changes on the system,” the use of the operator’s interface panel, to access limiters setpoints and protective setpoints, contradicts the protections intended. Making changes to limiters and protective functions is not among operations required to operate the system – and accommodating access via the HMI defeats the role-based scheme configured to protect the system from tampering. Changing Auto and Manual operation setpoints is common and those setpoints can be displayed. Limiter and protection setpoints may be accessed via PC with the appropriate level of access. However, limiter and protection setpoint adjustments in the HMI seem to be in conflict with Cybersecurity concerns in Section 01 35 70. The bidder asks the Corps to revise the requirement – to remove the access to the SETPOINTS of the limiters and protections in the digital excitation controller from the HMI panel requirements. The access to these parameters would be more securely accessed via equipment with privileged access and with consideration of the appropriate role in configuring the controller.”

Answer: The referenced paragraphs do not go into specific details regarding the level of access permissions or privileges required for accessing and editing various parameters. Such specifics will be addressed post award through coordination between the contractor and the Government, and subject to Government approval during factory testing and commissioning as well as in submittals such as the “Comprehensive Account List (Encrypted)” submittal item. Manufacturer philosophy and approach towards display and modification of these setpoints and parameters will be compared against specification requirements, and discrepancies will be reviewed and discussed for consideration.

90. Reference “2.7.3 Human-Machine Interface (HMI), “... Provide the following minimum display parameters ... (i) PSS status and setpoint, including active / inactive setpoints ...” PSS function blocks do not have a setpoint. PSS status can be displayed such as Enabled/Disabled, Active/Non-Active, or PSS output. The meaning of “setpoint” for the PSS is unknown.”

Answer: PSS indication desired includes PSS Status (as Enabled/Disabled, Active/Inactive, as described in the question) and an indication of the setpoints for power output levels at which the PSS becomes active/inactive. The second are the desired “setpoints” to be displayed for the PSS. Again, manufacturer typical practice may be considered and the final approach utilized will be addressed post award.

91. Reference “Page 5 of 76. CLIN 0014 is listed here as ‘Refurbish exciter collector ring assembly’ whereas under section 01 22 00, item it is listed as ‘Performance and payment bonds’. Please clarify.”

Answer: Reference Amendment 006. CLIN 0014 was revised to be consistent with the specifications.

92. Reference “Page 53 of 76. FAR 52.211-10. It is noted that the project completion is 540 calendar days after notice to proceed. Are there any outage duration limitations, number of units in outage or restrictions when the outages can be scheduled etc? Please advise.”

Answer: Reference Amendment 0005. See the Government’s response to Question 41.

93. Reference “Is a Primavera schedule required for the proposal or can it be MS project?”

Answer: Reference Amendment 0005. See the Government’s response to Question 9.

94. Reference “Section 48 19 26, Item 2.10: Please provide qty, brand and model number of existing brushes and brush holders. Also can you provide mechanical drawing of collector ring that shows mounting of the brush holders.”

Answer: Reference Amendment 0005. See the Government’s response to Question 27. The brush holders are GE part # 4979813-3 and the brushes are Carbon Products Operations (now Morgan A&T) part #2444711.

95. “Solicitation, Page 18, Volume I – Factor I, 4.1 Past Performance - Submission Requirements. All current evaluation factors under Factor I are installation related. This will ensure good quality and performance of the removal and installation work. However, there is not a single performance evaluation factor related to the Excitation System equipment itself. Hence, an installation contractor that qualifies under the current evaluation factors, could use an excitation system that the government has no previous experience with. The government technical specification for the Excitation System is different compared to other utility customers and there is a great deal more documentation requirements related to the Excitation System. Using an Excitation System manufacturer that has no previous experience with USACE projects, would increase the risk of unsuccessful performance for the project. It is suggested that a past performance factor for the Excitation System equipment is added to both guarantee that the proposed system has a past performance with USACE with a similar scope and that the past performance feedback on such projects are evaluated. Alternatively, a modification can be done of the last paragraph under 4.2 Evaluation Criteria: “Additionally, projects that are “similar in scope” and “similar in magnitude” and demonstrate experience with one or both of the following may will receive additional consideration: • Designing, manufacturing and installing a fully static, digital excitation for a USACE project; and/or • Developing and implementing an asbestos abatement plans associated with power plant excitation system removal and abatement of asbestos in accordance with approved plans and local, state, and federal regulations.” We believe that this modification will ensure that the government receives qualified proposals for both the on-site labor and the supplied excitation equipment.”

Answer: These suggestions are noted. The Government is comfortable with the evaluation factors as they stand, however, and will not be changing them.

96. “Solicitation, Page 407, Section 48 19 26, Paragraph 2.11 Please provide part number information on the existing brushes and holders. Also, please provide estimated number of brushes/holders for the uprated generator.”

Answer: Reference Amendment 0006. See the Government’s response to Question 94.

97. “Solicitation, Page 415, Section 48 19 26, Paragraph 3.3.3.4 Would it be possible to provide a photo of the exciter/PPT location showing the intended footprint in order to see how much of the architectural floor finish that needs to be restored after the existing equipment have been removed. Does the plant have matching tiles for use by the contractor or is aware of it the tiles are readily available?”

Answer: Reference Amendment 0005. See the Government’s Response to Question 28.

98. “Solicitation, Page 425 Section 48 70 01, Paragraph 1.4.3 Please confirm if MOD-027-1 (Governor testing) should be part of this excitation contract.”

Answer: Reference Amendment 0005. See the Government’s response to Question 29.

99. “Contract Drawings, Page 31, E-101, Non-seg DC bus routing, Can more dimensions be provided for E-101 to indicate the estimated length of the DC bus duct on top of the generator floor plates as well as the bus extending from the top of the generator to the new exciter location. Also, a side view of the bus duct run from the generator to the Excitation System with dimensions would be preferable. Could a picture also be provided showing the existing Excitation System, Amplidyne, Rheostat and Actuator cabinet etc.”

Answer: Reference Amendment 0005. See the Government's response to Question 30.

100. "Contract Drawings, Page 33, E-401, Unit Control Board, Please indicate the intended location for the remote HMI panel and if there is sufficient space for mounting an Ethernet switch and 24Vdc power supply in the back of the cabinet."

Answer: Reference Amendment 0005. See the Government's response to Question 31.

101. Reference "01 35 70, 1.3.1 "The Contractor shall provide timely patches for vulnerabilities ... for all IT HW and SW provided by the Contractor within 30 days of notification." Please confirm understanding that patching running systems is not included in the scope of work of this contract. In case of any vulnerability alert or notification after conclusion of the commissioning test: 1. Contractor will timely provide the necessary tested Patches for vulnerabilities for the provided excitation system. 2. Government will decide the real need of the system Patching 3. Government will be responsible to install or contract the installation service for the Patches."

Answer: Prior to commissioning and acceptance by the Government, the contractor is responsible for providing timely patches for vulnerabilities. The Government is not responsible to install the patch if the system has not been turned over to the Government.

102. Reference "01 35 70, 1.3.1 Please confirm if application of whitelisting technologies for the maintenance notebook will be accepted as an alternative."

Answer: Whitelisting is not an accepted alternative. The contract must patch the maintenance notebook if there are known patches. If a patch is known to have a negative impact to the system, then it does not have to be installed but it must be documented. Reference Specification Section 01 35 70 paragraph 1.3.1.

103. Reference "01 35 70, 1.3.12 Please confirm if this requirement is also applicable to the maintenance notebook."

Answer: The requirement is applicable to any notebook or computer that will be used for system start-up or testing.

104. Reference "01 35 70, 1.3.12 Please confirm if Microsoft Defender is also a DoD antivirus approved software."

Answer: Confirmed. Microsoft Defender is a DoD antivirus approved software.

105. "According to the 'Buy American Requirement' notice and by request of inapplicability determination, how much of the content of the construction materials should originate in the United States to avoid disqualification? (if applicable)."

Answer: Reference Amendment 0005. See the Government's response to Question 54.

106. "What is the expected installation date / overall term of the prototype project?"

Answer: Reference Amendment 0005. See the Government's response to Question 74.

107. "What are the expected progress payment schedules?"

Answer: Please reference FAR 52.232-5 Payments under Fixed-Price Construction Contracts, which is incorporated in the Solicitation.

108. "Would we have to provide personnel to operate the crane on site?"

Answer: Reference Amendment 0005. See the Government's response to Question 42.

109. “Would we have to provide our own scaffolding to access 13.8kV tap points and to install additional cable trays? Or would it be supported by the plant personnel?”

Answer: Contractor is responsible for providing scaffolding.

110. “Would we have to provide forklift operators to assist in the removal of old equipment and the installation of new equipment?”

Answer: Contractor is responsible for providing a forklift operator.

111. “What safety training is required to work on site and other activities?”

Answer: Reference Specification Section 01 35 26, GOVERNMENTAL SAFETY REQUIREMENTS. EM385-1-1 will be enforced. Additionally, there is site specific Lock out/Tag out training facilitated by the Cordell Hull project staff that all contractor personnel must complete.

112. “Do all team members need to be OSHA certified to work on site and other activities for this project?”

Answer: No. However, the SSHO and Alternate SSHO must meet requirements of Specification Section 01 35 26, GOVERNMENTAL SAFETY REQUIREMENTS.

113. “About how much concrete work would be required?”

Answer: The anticipated concrete work includes the concrete penetrations to supply AC to the PPT, as well as demo of existing housekeeping pads for Amplidyne. However, the Contractors shall use the provided drawings and reference drawings to determine all inclusive concrete requirements. Refer to specification section 03 60 00 for additional information.

114. “Note: the drawing looks like there are 3 output dents at the AVR, What are the dimensions of the exit dents at the AVR?”

Answer: Assuming that “output dents” and “dimensions of exit dents” refer to the penetrations below the existing exciter cabinets, those dimensions can be found in the password protected pdf of the PowerPoint slides from the virtual site visit that were sent via email to all registered and approved attendees of the virtual site visit.

115. “Could you please provide the image (photos) and specifications of the generator and exciter nameplates?”

Answer: Reference Amendment 0005. See the Government’s response to Question 72.

116. “Is it possible to obtain the characteristic curves of the generator?”

Answer: Reference Amendment 0006. See document “COR U2 Characteristic Curves” published with the Amendment.

117. “What is the full load excitation current (IE)?”

Answer: Reference Amendment 0005 for the relevant name plates. Reference Amendment 0006 for generator information, including characteristic curves. The exciter sizing must meet requirements as laid out in Specification Section 48 19 26.

118. “What is the FSNL excitation current at no-load (IE)?”

Answer: Reference the Government’s response to Question 116.

119. "Will the parts attached to the rotor be removed or reused (retained)?"

Answer: The parts attached to the rotor will be retained, as shown in contract drawing ED-101.

120. "What are the dimensions of the existing slip rings?"

Answer: The dimensions of the existing slip rings are 2" high and approximately 40" in diameter.

121. "How many excitation brushes should be removed (if applicable)?"

Answer: Reference Specification Section 48 19 26 Paragraph 3.3.6. All excitation brushes should be removed and replaced under this contract.

122. "Is it necessary to replace the existing high voltage wiring? And/or wiring from PT and CT?"

Answer: All the wiring that is required to be replaced is designated in the contract drawings ED600 through E-801.

123. "What type/model of synchronization device is currently in operation?"

Answer: Manual synchronization.

124. "Is it required (or optional) to upgrade the existing synchronization device as part of this proposal?"

Answer: No, upgrading the existing synchronization is outside the scope of the contract.

125. "Are the existing cables from the existing AVR to the synchronization device in good condition?"

Answer: Reference the Government's response to Question No. 122.

126. "What are the specifications of the battery charger source?"

Answer: The 125 VDC battery chargers are (2) 100 amp chargers. They are fed from 3 phase 480 AC. Normal station DC load is around 65 amps.

127. "Please confirm that the battery charger source voltage is 125VDC?"

Answer: It is unclear what is meant by "battery charger source voltage". However, the Government can confirm the control power is 125 VDC. Refer to reference drawings for more information.

128. "Is there a 24VDC power supply?"

Answer: No.

129. "Are there other sources that come from batteries?"

Answer: Normal station DC loads are fed from the battery. Preferred AC inverter is fed from the battery. Normal DC load is around 65 amps.

130. "Can you please provide generator protection settings? a. Device used for generator protection (is it SEL300G?) b. Is an 86 Lockout Relay being used to send trip signal to Field Breaker? c. 40 – Loss of Protection d. 27 – Undervoltage e. 59 – Overvoltage f. 24 – V/Hz g. 81 – Under/Over Frequency"

Answer: SEL300G is used for generator protection. Generator protection settings can be provided after award.

131. "Has any SERC/NERC testing been performed?"

Answer: The Government has not done any testing to date. As equipment is replaced, testing will be required per Specification Section 48 70 01.

132. "Do you have the reports (if applicable)? a. PRC 19, PRC 25 b. MOD 25, MOD 26"

Answer: There are no reports.

133. "Can you please confirm the PT & CT inputs? a. One 3-phase PT voltage input to AVR b. One 1-phase CT current input to AVR"

Answer: Confirm. Those are generator quantities.

134. "Is 37MVA (from drawing) or 46.4MVAR (from spec) required to activate the PSS?"

Answer: The intent of this question is unclear. The PSS would be enabled at a MW loading far lower than either of these referenced values. Tuning and equipment settings will be determined in greater detail after award.

135. "What is the magnitude of the MW oscillation ranges (rough zones) where there is substantial hydrodynamic instability due to water vortices or turbulent flow?"

Answer: The hydraulic rough zones for the units are around 18 MW to 26 MW. This information should be confirmed during commissioning by the Contractor for their intended purpose.

136. "At what load is the nominal operating output power (typical in MW and MVAR)?"

Answer: Reference Specification Section 48 19 26 Paragraph 1.1.2. Nominal operating output power can be found in.

137. "What is the typical operating voltage of the generator?"

Answer: Nominal (nameplate) voltage for generator is 13.8 KV. The typical voltage is 13.2 KV.

138. "Is the generator operating voltage mostly constant at 13.8kV? Or does it has significant voltage fluctuation?"

Answer: See the Government's Response to Question 137.

139. "What is the proposed location to place the Excitation Transformer (PPT)?"

Answer: Proposed location for the Excitation Transformer can be found in the contract drawing E-201.

140. Would the PPT be installed on the same deck and adjacent to the AVR cabinets? Or will it be placed underneath or above ground near the 13.8kV bus?"

Answer: Proposed location can be found on the contract drawing E-201. It is on the same deck and adjacent to the AVR cabinets.

141. "Are the instrument boards the only required/ source allowable source for the control room to view the AVR status? HTS can provide an additional touchscreen linked to the AVR that can provide the following: • Excitation ON/OFF • Voltage Raise/Lower Commands (for AVR & Manual Sync) • Excitation Local/Remote Indications • PSS Status • Limiter Control / Activation & Deactivation (o V/Hz Limiter o PQ, Under Excitation Limiter o FCL, Field Current Limiter o Minimum Field Current Limiter o Stator Current Limiter) • Additional Protection Functions

(3rd tier of protection in case limiters and 300G fails to operate) (o Overvoltage Protection o Field Overcurrent Protection o Loss of Voltage Balance Protection) • Ability to view more specific AVR alarms in addition to what is provided to HMI alarm/event lists”

Answer: Reference contract drawings, especially ED401 and E-401, for details on instrument boards and indication. A remote HMI is also required which is connected to each AVR as described in Section 48 19 26, paragraph 2.7.7

142. “Which switching functions the current AVR has available? - HTS recommends having accessible by a Touchscreen to switch between: a. AVR Voltage Regulation (Auto Mode) b. VAR, Q Regulation c. Power Factor, Cos Phi Regulation d. Field Current Regulation (Manual Mode)”

Answer: The current AVR has AVR Voltage Regulation (Auto Mode) and Field Current Regulation (Manual Mode). The new ones also need to have AVR Voltage Regulation (Auto Mode) and Field Current Regulation (Manual Mode). VAR, Q Regulation and Power Factor, COS Phi Regulation must not be in place.

143. “Would it be attractive to have a physical excitation dashboard (for manual operation and non-electronic visual display)?”

Answer: The contract drawings and specification lay out required features. Any additional or differing features must be approved by the Government.

144. “Would a multi-function AVR touch screen be preferred in the control room?”

Answer: The contract drawings and specification lay out required features. A remote HMI is required which is connected to each AVR as described in Section 48 19 26, paragraph 2.7.7

145. “For man-machine interaction, would it be necessary to transfer AVR signals to integrate into the DCS Human Machine Interface (HMI) stations, or rather have a dedicated HMI monitor?”

Answer: The contract drawings and specification lay out required features. The meaning of this question is unclear. Specifics on implementation can be discussed and submitted for approval by the Government after award.

146. “What type/model of Distributed Control System (DCS) is being used?”

Answer: The current excitation system does not use SCADA or DCS.

147. “What type/model of DCS Human Machine Interface (HMI) is being used?”

Answer: The current excitation system does not use SCADA or DCS HMI.

AMENDMENT 0005 Q&A

Questions and Answers W912P519R0001 LRN Excitation SATOC Amendment 0005

1. “Regarding the Small Business goal of 25% of contract value, it’s unrealistic as the majority of work can be self-performed by the prime contractor. We highly recommend the government to change to 5% of contract value or 35% of the sub-contracted value.”

Answer: Per Section 00 21 00, paragraph 7.2, Evaluation Criteria, of the solicitation, the Small Business Participation goal is 25% of the contract value. The solicitation is amended to add, “Offerors unable to

meet the minimum overall small business goal of 25% shall provide an explanation of why this target cannot be met with their proposal.”

2. “In Section 02 82 13, Asbestos Abatement, Paragraph 1.1 it states that a survey is being conducted and will be provided to the contractor upon completion. Is this survey available?”

Answer: The final Asbestos and LBP Report of Findings can be found under Section 01 95 00 Attachment #7.

3. “In reference the solicitation #W912P519R0001 - Excitation Rehabilitation Single Award Task Order Contract (SATOC) for Nashville District Power Plants, the requested Factor 1 requirements for the Offeror’s past or current construction projects complete or substantially completed (75% or more) within the last six (6) years (from issuance of the solicitation) presents a potential restriction that would eliminate/ put in disadvantage Offeror’s that have proven experience with excitation system modernization with similar scope, complexity and magnitude of this SATOC (e.g. single construction contracts with several units/power plants will not meet this requirement and cannot be used as reference even with one or more units already in operation). We respectfully ask the USACE to review this requirement to “construction projects complete or where the construction is at least 50% complete within the last ten (10) years from issuance of the solicitation”. This will allow USACE Nashville District to receive more offers from qualified vendors with proven past experience replacing exciter systems for hydroelectric power plants to evaluate, supporting the Government best interest selecting the best offer for the Excitation Rehabilitation Single Award Task Order Contract (SATOC) for Nashville District Power Plants project.”

Answer: After considering the request, the Factor I, Performance Confidence remains unchanged. Pursuant to Section 00 21 00, Paragraph 4.0, Volume I – Factor I – Performance Confidence, to be considered, projects must be complete or substantially completed (75% or more) within six (6) years of the issuance of the solicitation.

4. Solicitation “Page 1, Form 1442, Box 10 It is stated that email and facsimile proposals will not be considered. This is in contradiction to other information provided in the RFP. Please confirm that proposals shall be submitted by email.”

Answer: The only authorized transmission method for proposals is electronically via SAFE online submission using the following link: <https://safe.apps.mil>. NO OTHER TRANSMISSION METHODS (EMAIL, FACSIMILE, REGULAR MAIL, HAND CARRIED, ETC.) WILL BE ACCEPTED. Reference SECTION 00 21 00 INSTRUCTIONS, CONDITIONS & NOTICES TO OFFERORS, Paragraph 6.0 (WHERE TO SUBMIT & SUBMITTAL DEADLINE).

5. Solicitation “Page 5, Price Schedule, CLIN 0014 Refurbish existing collect ring assem..

The scope of the collector ring refurbishment can range from stoning in place at site to removing the collector rings to an off-site machine shop in case the grooving is determined to be more severe. It is difficult to determine this scope without a collector ring inspection being performed. Would the government consider having the awardee price this option after a collector ring inspection has been performed or alternatively, should CLIN 0014 be based on stoning in place (most typical retrofit scope).”

Answer: Offerors should assume that all collector ring refurbishment activity will be done in place. Reference Section 48 19 26 Paragraph 3.3.7, which states: “Refurbishment work shall be performed in place only, and shall include all work required to correct any runout, pitting damage, or wear, and to clean the helical groove.”

6. Solicitation “Page 11, 2.0 Bonds and Insurance, 2.1 Bid Guarantee Please clarify how the bid security will be submitted considering that the proposal will be emailed.”

Answer: Like proposals, bid guarantees must be submitted electronically via SAFE (<https://safe.apps.mil>). Note, in accordance with FAR 28.002 Policy (Deviation 2020-00016), electronic signatures and electronic,

mechanically applied, or printed dates are acceptable on bid guarantees. Similarly, corporate seals and notaries are not required for bid guarantees.

7. Solicitation “Page 15 3 Proposal Information ... 3.5 Section C – Section B, Price Proposal Please clarify if ‘Not Rated’ shall be changed to ‘Rated’”

Answer: Price proposals are not rated. Instead, as explained in Section 00 21 00, Paragraph 8.6, “Price proposals will be evaluated by a cost engineer (separate from the SSEB) for fairness, reasonableness, price realism and for material unbalancing through the use of price analysis in accordance with FAR 15.404-1.”

8. Technical Specifications “Page 9 Section 01 00 00 Page 5 Paragraph 3.1 Availability and use of Utilities Please confirm if it is the Contractor’s responsibility to supply temporary facilities for bathrooms, lunch room, drinking water and internet service etc.”

Answer: Reference Amendment 0005. Per revised Specification 01 00 00, Paragraph 3.1.1c, the contractor is responsible for providing potable water for its employees and subcontractors. Per revised Specification 01 00 00, Paragraph 3.1.1.a, the Government will provide guest wifi services, designated restrooms, and an area in the erection bay to serve as lunchroom/break area. Note, however, the contractor will be responsible for furnishing such break area.

9. Technical Specifications “Page 24 Section 01 32 01 Page 4 Paragraph 2.1.1 Government Default Software Based on the defined requirements of the Project Schedule, we understand that MS Project does not meet the requirements and only Primavera P6 fulfils all requirements. Primavera P6 is a very complete scheduling software, but also very time consuming to use vs MS Project, which has been used for government projects in other districts. Please clarify if the defined requirement for the Project Scheduling software will remain.”

Answer: Contactors must comply with Section 01 32 01 Paragraph 2.1.1, which requires use of Primavera P6, Version 8.4.

10. Technical Specifications “Page 67 Section 01 35 26 Page 11 Paragraph 1.6.1.1.1 SSHO Requirements It is stated that the SSHO may not also be the CQC person. It also states that the SSHO person may not be the Site Superintendent. Section 01 45 00 Page 6 also states that the CQC person shall not have any other duties. Previous USACE excitation contracts have required 1 or 2 people to share the CQC/SSHO/Site Superintendent. Please confirm if there shall be three (3) separate people for these functions available at all times while there are ongoing site activities.”

Answer: Reference Amendment 0005. Per revised Specification Section 01 35 26 Paragraph 1.6.1.1.1 and revised Specification Section 01 45 00 Paragraph 3.4.2, provided the SSHO meets the stated qualifications, the SSHO can also serve as the CQC Manager.

11. Technical Specifications “Page 308 Section 03 60 00 Page 8 Paragraph 3.4.8 Concrete Imaging Please confirm if the required concrete imaging pertains to all core drilling as well as for anchor bolts for equipment (Excitation System, PPT, Non-segregated bus steel supports and hangers etc.)”

Answer: Confirmed. Reference Amendment 0005. Revised specification Section 03 60 00 Paragraph 3.4.8. Concrete imaging is required for core drilling as well as anchor bolts for equipment into concrete.

12. Technical Specifications “Page 333 Section 26 05 00 Page 13 Paragraph 2.9 Spare Parts Please clarify if these spare parts relates to equipment other than what is being provided in the Excitation System and PPT, for instance the Control room as there is a specific Spare Parts section in 48 19 26 for the Excitation System and PPT.”

Answer: Correct. This is intended to cover spare parts that are for miscellaneous electrical equipment not included within the excitation system or PPT, or otherwise covered by the spare parts section within 48 19 26.

13. Technical Specifications “Page 373 Section 26 25 00 Page 5 Paragraph 2.1 Non-Segregated Phase Bus Please specify the voltage class (2,000V etc.) of the Non-Segregated phase bus.”

Answer: Reference Amendment 0005. Per revised Specification Section 26 25 00 Paragraph 2.2.1, the Contractor is to properly size the voltage class of the non-segregated phase bus based on their design and submit for approval.

14. Technical Specifications “Page 374 Section 26 25 00 Page 6 Paragraph 2.1.4.3 Housing Please clarify if the enclosure can be either steel or aluminum.”

Answer: Reference Amendment 0005. Per revised Specification Section 26 25 00 Paragraph 2.1.4.3, either material is allowable for the housing. Material selection should be in accordance with bus manufacturer recommendations, as applicable.

15. Technical Specifications “Page 382 Section 48 19 26 Paragraph 1.1.5 Warranty Please clarify if the five (5) year warranty starts after successful commissioning of each unit or if the warranty starts after the commissioning of the last unit.”

Answer: Warranty starts after the successful commissioning of each unit.

16. Technical Specifications “Page 386 Section 48 19 26 Paragraph 1.4.3 Source for Field Flashing Please provide the ampacity rating of the available 480Vac source. We assume that a new 480Vac cable shall be furnished. Please confirm.”

Answer: Confirmed. Contractors should assume that a new 480Vac cable shall be furnished. The 480Vac breaker should be a 100Aac frame with a 70Aac trip.

17. Technical Specifications “Page 386 Section 48 19 26 Paragraph 1.4.4 Potential and Current Transformers We understand that there is only one (1) Current Transformer available for the new Excitation System. Some manufacturers may require three (3) Current Transformers for the Excitation System to function as per the specifications. Please confirm that the cost to procure and to install additional Current Transformers is the responsibility of the Contractor.”

Answer: Correct. If more than one (1) current transformer is required, the contractor is responsible for the cost of procuring and installing such additional equipment.

18. Technical Specifications “Page 388 Section 48 19 26 Paragraph 2.4.1 Power Potential Transformers Please confirm if the 110kV BIL level will be maintained. For some other USACE exciter projects, the BIL level has been reduced to 95kV BIL for the PPT and fuse cabinet in order to reduce the size of the equipment.”

Answer: Confirmed. The 110kV BIL level is to be maintained.

19. Technical Specifications “Page 389 Section 48 19 26 Paragraph 2.5.1 Excitation System Requirements The specification mention a ceiling current for 10 seconds and then also that it shall be able to supply 150% rated excitation for 30 seconds. Please clarify if the short-term overload current (ceiling current) shall be for 30 seconds or 10 seconds. Also, we assume that the ceiling current factor of 150% shall apply on the 1,100 Adc filed current rating. Please confirm.”

Answer: Reference Amendment 0005. Revised Specification 48 19 26 Paragraph 2.5.1 clarifies this requirement. Specifically, the short term overload current is for 30 seconds, and is clarified to be 1,650 Adc (the continuous current requirement is 1,100 Adc).

20. Technical Specifications “Page 389 Section 48 19 26 Paragraph 2.5.1.1 System Characteristics The specification requires +375Vdc and -350Vdc at 75% source voltage. Hence, +500Vdc and -467Vdc at 100% source voltage. The negative ceiling voltage is normally around 85% of the positive ceiling voltage, while the specification specifies a

negative ceiling voltage that is 93% compared to the positive ceiling voltages. Please confirm if the negative ceiling voltage shall remain as is, in which case the positive ceiling voltage needs to increase since the specified ratio is not compatible with min and max firing angle of a six pulse rectifier bridge.”

Answer: Reference Amendment 0005. Revised Specification 48 19 26 paragraph 2.5.1.1 clarifies this requirement. The no-load positive ceiling voltage is required to be +375Vdc with a 75% source voltage. Negative field forcing requirement is as stated in the amended language: “Full negative field forcing, with allowance for thyristor firing margins as approved

21. Technical Specifications “Page 391 Section 48 19 26 Paragraph 2.5.2 Bus The specification stipulates that all connections shall be silver-plated. Does this mean that not only the outgoing AC and DC stubs shall be silver plated, but also all internal bus-to-bus connections as well as any cable lugs attaching to an AC or DC bus, such as, cables for field ground, field flashing, fan transformer, ac filter, bridge synch transformer etc. Would fully tin-plated copper bus be acceptable in lieu of silver plated connections?”

Answer: Silver plated connections are required for continuously conducting connections (such as AC and DC main connections) but not for auxiliary connections (such as “field ground, field flashing, fan transformer, ac filter, bridge synch transformer etc.”). Fully tin-plated copper bus will not be allowed as an alternative. Either silver-plated connections as described, or completely silver plated copper bus, shall be supplied.

22. Technical Specifications “Page 394 Section 48 19 26 Paragraph 2.5.9.2 Rectifier Assembly Cooling We understand that each six-pulse rectifier bridge shall have it’s own redundant set of fans, completely separate from the other six-pulse rectifier bridge. Please confirm.”

Answer: Confirmed. Each bridge shall have its own set of redundant fans, separate from the other bridge.

23. Technical Specifications “Page 397 Section 48 19 26 Paragraph 2.5.17 Reversible bus links Please confirm if the reversible bus links also should have silver plated connections.”

Answer: Confirmed. Reversible bus links shall also have silver-plated connections.

24. Technical Specifications “Page 397 Section 48 19 26 Paragraph 2.6.1 Please confirm if each of the redundant control channels shall be able to operate with either thyristor bridge. In the case this is not required, a failure in the control channel would also make the dedicated bridge inoperable. In a bridge independent system, a failure in one control channel will not reduce the bridge redundancy as the redundant control channel will still be able to operate any of the thyristor bridges.”

Answer: No preference or requirement in the specifications is stated. Any features which an Offeror would like to have considered for more favorable evaluation may be clearly defined in their proposal for “Factor 2 – Technical Design”.

25. Technical Specifications “Page 399 Section 48 19 26 Paragraph 2.6.6.3 Should thyristor bridges also be switched when a transfer occurs from the active control channel to the stand-by control channel? Or alternatively, should the same thyristor bridge keep operating during a control channel transfer and there should be a separate control to switch from the active thyristor bridge to the inactive thyristor bridge? Should control channel and thyristor bridge selection be accessible from the HMI an/or Modbus interface ?”

Answer: No preference or requirement in the specifications is stated. Contractor best-practices or recommendations may be offered for such decisions, for Government consideration. Any features or control approaches which an Offeror would like to have considered for more favorable evaluation may be clearly defined in their proposal for “Factor 2 – Technical Design.”

26. Technical Specifications “Page 405 Section 48 19 26 Paragraph 2.7.10 Please confirm that each Excitation System shall have a dedicated Ethernet cable to the control room and that a “daisy chained unit-to-unit approach is not permitted” as a unit outage would affect the communication of other units.”

Answer: Confirmed. Reference Amendment 0005. Revised Specification 48 19 26 Paragraph 2.7.7 clarifies the connection from each exciter to the control room must be dedicated.

27. Technical Specifications “Page 407 Section 48 19 26 Paragraph 2.11 Please provide part number information on the existing brushes and holders. Also, please provide estimated number of brushes/holders for the uprated generator.”

Answer: Currently, there are 20 brushes per slip ring. However, per Paragraph 2.11, the Contractor is responsible for determining the number of brushes to be installed based upon the required ampacity and the brush type recommended by the Contractor.

28. Technical Specifications “Page 415 Section 48 19 26 Paragraph 3.3.3.4 Would it be possible to provide a photo of the exciter/PPT location showing the intended footprint in order to see how much of the architectural floor finish that needs to be restored after the existing equipment have been removed. Does the plant have matching tiles for use by the contractor or is aware of it the tiles are readily available?”

Answer: Reference Amendment 0005, which adds PowerPoint slides and video presentation from the virtual site visit. Matching tiles are not available for use by the contractor.

Note: A password protected pdf of the PowerPoint slides was sent via email to all registered and approved attendees at the virtual site visit. A link was sent to those same email addresses with directions on how to view the secure video on YouTube. To view the video, you must create a YouTube account using the email address that received the link.

Note: If you did not register for the virtual site visit and would like to view these items, complete one of the Site Visit Request Forms attached to Notice ID W912P519R0001 Excitation Rehabilitation Single Award Task Order Contract (SATOC) for Nashville District Power Plants in Beta.sam.gov and email the completed form to Rob Holdsworth at Robert.B.Holdsworth@usace.army.mil to be vetted through security and sent the links. Please note security approval of foreign nationals may take up to 2 weeks.

29. Technical Specifications “Page 425 Section 48 70 01 Paragraph 1.4.3 Please confirm if MOD-027-1 (Governor testing) should be part of this excitation contract.”

Answer: Reference Amendment 0005. Revised Specification Section 48 70 01 Paragraph 1.4. removes the MOD-27-1 requirement.

30. Contract Drawings “Page 31 E-101 Non-seg DC bus routing Can more dimensions be provided for E-101 to indicate the estimated length of the DC bus duct on top of the generator floor plates as well as the bus extending from the top of the generator to the new exciter location. Also, a side view of the bus duct run from the generator to the Excitation System with dimensions would be preferable. Could a picture also be provided showing the existing Excitation System, Amplidyne, Rheostat and Actuator cabinet etc.”

Answer: See the Government’s Response to Question No. 28. An overview of the intended routing and the equipment arrangement was provided in the PowerPoint presentation and video from the virtual site visit. Also, refer to reference drawings Q16-79/110.2, Q16-79/110.2, and Q16-79/110.2 to estimate the length of DC bus duct required.

31. Contract Drawings “Page 33 E-401 Unit Control Board Please indicate the intended location for the remote HMI panel and if there is sufficient space for mounting an Ethernet switch and 24Vdc power supply in the back of the cabinet.”

Answer: Contractors should assume sufficient space for mounting an Ethernet switch and 24Vdc power supply will be available. The location of the remote HMI panel will be coordinated with the Government pending determination of the size and the Contractor's preference based on auxiliary equipment.

32. "Section 01 45 00 Paragraph 3.4.2 requires an onsite CQC System Manger who is a graduate electrical engineer with a minimum of 10 years installation experience on construction of power generation/electrical system similar to this Contract. It goes on further to say exceptions to the graduate engineer requirement "may" be reviewed by the Government.

This particular project is a straight forward exciter removal/installation. Most individuals that superintend or provide quality control on these exciter retrofits are not graduate engineers, rather trade individuals that have construction experience.

The startup, commissioning and modeling is completed by a specialist who is knowledgeable in regards to the particular equipment being installed. The QC System manager would rely on this specialist for proper functionality of the equipment.

We request that the paragraph be modified to add ..."or a construction individual with 10 years' experience installing electrical systems similar to this contract."

Answer: In accordance with Specification Section 01 45 00 Paragraph 3.4.2, the CQC System Manager must be a graduate electrical engineer with a minimum of 10 years installation experience in construction of power generation/electrical systems similar to this Contract.

33. "Section 01 45 00 Paragraph 3.4.3 requires a graduate civil engineer (with structural track or focus) with 2 years' experience supervising structural features of work in the field with a construction company to perform specialized quality control duties. The only structural item on this project is the installation of seismic anchors. This is a common task performed on electrical system replacement projects of which a QC System manager with construction experience is qualified to oversee. We request that this requirement be removed."

Answer: Reference Amendment 0005. Specification Section 01 45 00 Paragraph 3.4.3 was revised to remove the requirement to provide a graduate civil engineer.

34. "Section 01 45 00 Paragraph 3.4.3 requires a graduate environmental engineer with 3 years' experience to perform specialized quality control duties. The only environmental hazards on this project are asbestos and lead. An abatement company supervisor with abatement experience would have more than enough experience to oversee quality control for this scope of work. We request the requirement to be changed to "Abatement Supervisor with 5 years' experience."

Answer: Reference Amendment 0005. Specification Section 01 45 00 Paragraph 3.4.3 was revised to require an Abatement Supervisor with five (5) years of experience instead of a graduate environmental engineer.

35. "Could the PowerPoint and videos presented during this site visit be made available for download?"

Answer: A password protected pdf of the PowerPoint slides was sent to the email addresses that registered and were approved by security for the virtual site visit on 1 July 2020. A link was sent to those same email addresses with directions on how to view the secure video on YouTube. A YouTube account must be created using the email address that the link is sent to in order to view the video. If you did not register for the virtual site visit and would like to view these items, complete one of the Site Visit Request Forms attached to Notice ID W912P519R0001 Excitation Rehabilitation Single Award Task Order Contract (SATOC) for Nashville District Power Plants in Beta.sam.gov and email the completed form to Rob Holdsworth at Robert.B.Holdsworth@usace.army.mil to be vetted through security and sent the links. Please note security approval of foreign nationals may take up to 2 weeks.

36. “Would you please provide a list of the participants to the Virtual Site meeting?”

Answer: Reference Amendment 0005, which includes the attendee list for the virtual site visit as an attachment.

37. “May we request and 2 weeks extension to submit questions?”

Answer: Reference Amendment 0004. The question due date was extended to 24 July 2020.

38. “Original due date was August 14. Per slide 5 proposals are now due on September 2, 2020. Will that date be confirmed in an amendment?”

Answer: Reference Amendment 0004. The proposal due date was extended to 2 September 2020. With Amendment 0005 the due date is now extended to 28 September 2020.

39. “We are asking for a 2 week extension of the question period. This will allow for a thorough review of all documents.”

Answer: See the Government’s Response to Question No. 37.

40. “Can the virtual power point presentation made available to the registered participants?”

Answer: See the Government’s Response to Question No. 28.

41. Technical Specifications “Page 6 Section 01 00 00 Page 2 Paragraph 1.2.2 Access to Site. Please confirm that there are no black-out dates where on-site work cannot be performed and also if only one unit at the time can be taken out of service.”

Answer: Reference Amendment 0005. Specification Section 01 00 00 Paragraph 1.4 Unit Outages and Sequence of Installation was revised. A unit outage must be coordinated and approved by the Contracting Officer 14 calendar days in advance. Unit outages should last no more than 60 days. Only one unit outage is allowed at a time. The outage unit must have all testing completed and be accepted by the Government before an outage is granted for another unit. The unit installation sequence will be as follows: Unit 3, Unit 2, Unit 1.

42. Technical Specifications “Page 68 Section 01 35 26 Page 12 Paragraph 1.6.1.4 Crane Operators/Riggers. Please clarify if the contractor is required to provide a certified crane operator for the overhead crane or if the overhead crane will be supplied by USACE at no cost to the contractor. Please clarify if the contractor is responsible for rigging equipment and for providing riggers with the appropriate certification. Please also confirm if the contractor is responsible for all documentation related to use of overhead crane, such as, lifting plan, certificates for Operator/Rigger etc.”

Answer: Reference Specification Section 01 35 26 Paragraph 1.6.1.4. The contractor must provide Operators, Signal Persons, and Riggers meeting the requirements in EM 385-1-1, Section 15.B for Riggers and Section 16.B for Crane Operators and Signal Persons. Contractors must provide proof of current qualification. The overhead crane can be used; however, the contractor must supply rigger, operator, and rigging equipment. The contractor is also required to have a lifting plan, and provide documents for any and all crane inspections.

43. “We kindly ask the Government to extend the questions due date to 3 August 2020 at 1:00 PM Central Time (30 days prior bid due date informed during Pre-Proposal meeting held on July 1st, 2020).”

Answer: See the Government’s Response to Question No. 37.

44. “Please inform the expected outage period per unit and if there is any special outage requirement.”

Answer: See the Government's Response to Question No. 41.

45. "Please confirm that the Power House Crane has access to all existing equipment that needs to be removed."

Answer: Confirmed. The overhead crane has access to all existing equipment to be removed.

46. Part / Clause: 01 00 00, 1.2.2 "Please confirm if during the outage period the Contractor is allowed to work 6 days a week and 10 hrs per day and if double shifts per day will be allowed?"

Answer: Reference Amendment 0005. Specification Section 01 00 00 Paragraph 1.3 Contractor's Working Hours was revised. The Contractor's working hours shall be the same as the project staff. Proposed changes to Contractor working hours which extend past 5:00 p.m. weekdays, on Friday, on weekends, and Federal holidays or which are different from Government working hours must be coordinated and approved by the Contracting Officer 30 calendar days in advance. This includes working six (10) hour days per week. No double shift will be allowed. Differing working hours are not guaranteed or warranted by the Government.

47. Part / Clause: 01 95 00 Asbestos and LBP, Report of Findings "Please confirm the understanding that no sample of analyzed meet the definition of LPB, therefore no LBP abatement activity is expected in the scope of work."

Answer: Government has no confirmed samples reporting actionable LBP levels. Contractor is responsible for performing sampling as required.

48. Part / Clause: 48 19 26, 2.6.7 "Specification 48 19 26 section 2.6.7 defines that Reactive Compensation will not be required. However, during the Pre-Proposal Meeting presentation, Reactive Drop Compensation was required in the Control Features of the Excitation System (slide 25). Please confirm if the feature will or will not be required."

Answer: Reactive differential compensation is not required. Line Drop Compensation (which is commonly implemented in the same fashion as reactive droop compensation) is required. The slides were unclear by stating this requirement as reactive droop compensation, when really the same functionality in line drop compensation is desired. The technical specifications (Section 48 19 26 Paragraph 2.6.8) take precedence here.

49. Part / Clause: 01 35 70, 1.3.19 "The CCNA Security certification (one of the approved baseline certification required in the DoD 8570.01-M) has been retired by CISCO and no new ones will be granted and no existing one will be extended. Instead, the new CCNA covers the security topics. Please confirm if the new CCNA certification will be accepted for the contractor personnel assigned to cybersecurity."

Answer: The new CCNA certification will not be accepted for the contractor personnel assigned to cybersecurity. The DoD 8570.01-M will be updated to reflect the new baseline requirements.

50. Part / Clause: 26 25 00, 2.1.4.3 "Please confirm if the housing of the non-segregated bus duct can be made of aluminum or if it has to be made of steel."

Answer: Reference the Government Response to Question No. 14.

51. Part / Clause: 48 19 26, 2.4.1 "Please confirm if a cast coil type Power Potential Transformer (PPT) is acceptable."

Answer: Reference Amendment 0005. Specification Section 48 19 26 Paragraph 2.4.1 was revised to require contractors to provide VPI type PPT. Cast coil type PPT is not acceptable.

52. Part / Clause: 48 19 26, 2.4.1 "Please confirm if Aluminum will be accepted as winding material for the Power Potential Transformer (PPT)."

Answer: Reference Amendment 0005. Specification Section 48 19 26 Paragraph 2.4.1 was revised to require copper winding material. Aluminum winding material is not acceptable.

53. "The Specification - in Section 48 19 26, Paragraph 2.4.1 – describes protective relaying CTs as "For each unit, three suitable relaying accuracy current transformers (CTs) shall be installed on the PPT secondary.," but the project plan schematics in sheets E-600, E-611, E-612, E-613, E-660 show these CTs on the primary leads of the PPTs. Which configuration is being specified?"

Answer: Reference Amendment 0005. Drawing (E-600, E-611, E-612, E-613, and E-660) was modified to show the CTs installed on the PPT secondary

54. "Based on the "Buy American Requirement" notice and by request of inapplicability determination, how much of the construction materials content would need to originate in the US to avoid disqualification? (if applicable)."

Answer: Offerors seeking to submit a request for determination of inapplicability must comply with the requirements of FAR 52.225-12(b). Additionally, please reference FAR 52.225-11, which provides, in part, that "construction material manufactured in the United States...whose cost of components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all of its components" may be considered "domestic construction material." Please reference FAR 52.225-12 for additional information on the requirements of the Buy American Act.

55. Part / Clause: 52.211-12(a) "We respectfully ask Government to include the following underlined text in the Liquidated Damages clause:

For the Prototype Project, the amount is \$4,368.65 per calendar day of delay until the work is completed or accepted, not to exceed 20% of the contract price including amendments."

Answer: Per FAR 52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000), the liquidated damage amount is \$4,368.65 per calendar day of delay until the work is completed or accepted for the Prototype Project.

56. Part / Clause: General "Please confirm if there are any preparations at the external parking lot for electrical power to feed the contractor's office trailers."

Answer: Contractor office trailer electrical power will be determined after award upon evaluation of site. The external parking lot has 480 volts, 3 phase, 15 amps available.

57. Part / Clause: General "Please confirm if there are hookups (connections points) for internet access point at the intended locations for the contractor's office trailers."

Answer: Internet access will be provided via a guest wi-fi.

58. Part / Clause: General "Please inform the actual clearance between the back doors of the existing exciter cubicles and the wall."

Answer: The clearance between the back doors of the existing exciter cubicles and the wall is 40 inches.

59. Part / Clause: General "Please inform the dimensions of the terrazzo floor squares."

Answer: The dimensions of the terrazzo floor squares are 36" x 36", although some are 33" x 36." For additional information, reference revised Drawing No. Q16-79/110.2.

60. Part / Clause: General "Please inform if the terrazzo floor was installed as squares or poured at site."

Answer: The terrazzo floor was poured in squares.

61. Part / Clause: General “Please inform any available information regarding the terrazzo floor: original manufacturer, type, name, color, etc.”

Answer: Reference Amendment 0005. Drawings for the terrazzo floor have been added to revised Drawing No. Q16-79/110.2.

62. Part / Clause: 01 00 00, 1.7.1 “Please confirm the need of the Project Signs requested 15 days after issuance of NTP in Section 01 00 00, page 3, Paragraph 1.7.1 Project Signs – General. Those type of signs is usually installed close to the site mobilization date.

e.g.: Only the submittal review period of 30 days already make this 15 days (design and supply and assembly the sign) unfeasible.”

Answer: Reference Amendment 0005. Specification Section 01 00 00 Paragraph 1.7.1 was revised to require signage to be installed upon site mobilization.

63. Part / Clause: General 1.3 Submittals “Please inform if Government will consider to review some of the required submittals due date requirements. There are some conflicts and inconsistencies with some due dates and other requirements (e.g.: Seismic Restrains calculation within 90 days of NTP. This is the same due date for the exciter cubicles design. The way it is now, we need to send the Seismic Restrain calculation using not approved design. Our suggestion would be to prepare the seismic calculations using the approve design drawings).”

Answer: The referenced Submittal dates are not in conflict. Specifically, the exciter "Outline Drawings" (for exciter cubicles) is due within 60 days of NTP, whereas the seismic restraint details are due within 90 days of NTP.

64.

Section 4.0 Volume I Factor I Performance Confidence

Section/subsection title 4.1 Submission Requirements

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Question: “Solicitation states "Projects shall be summarized in tabular form using the table format given at the end of this section." There is no table format provided. Should we supply the information in our own table format?”

Answer: Reference Amendment 0005. That sentence was deleted from Section 00 21 00, Paragraph 4.1.

65.

Section SECTION 00 21 00 PROCEDURES FOR SUBMITTAL OF OFFERS AND PROPOSAL EVALUATION APPROACH

Section/subsection title 2. Proposal Evaluation Process and

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Question: "In the Procedures For Submittal Of Offers And Proposal Evaluation Approach under 2.2.3 Price Evaluation: The SSEB, Cost Engineering, and Contracting Officer/Source Selection Authority (SSA) will evaluate price proposals independent of the technical evaluation. The SSEB will not have access to price information until completion of the technical evaluation." However, Volume I – Factor IV – Small Business Participation Plan pg. 22 of 76 "(b) Submit the total combined dollar value and percentage of work to be performed by both large and small businesses ..."

Answer: The Small Business Participation Plan will be evaluated by the Small Business Chief independently from the technical evaluation. Thus, the SSEB will not have access to price information until after the technical evaluation.

66. “Will the Corps be distributing a list of attendees?”

Answer: See the Government’s Response to Question No. 36.

67. "Will the Corps be distributing a copy of the PowerPoint presentation presented at the site visit?"

Answer: See the Government's Response to Question No. 28.

68.

Section 48 19 26

Section/subsection title 2.10.1

Page 31

Question: "Please provide photos of photo of the brush rigging and brushes"

Answer: Answer: See the Government's Response to Question No. 28. The brush rigging and brushes are visible in the PowerPoint presentation and video from the virtual site visit.

69. Section 48 19 26

Section/subsection title 2.10.1

Page 31

Question: "Please provide the number of brushes per ring"

Answer: Reference the Government's Response to Question No. 27.

70. Section 48 19 26

Section/subsection title 2.10.1

Page 31

Question: "Please provide the type, style of brush – rigging"

Answer: See the Government's Response to Question No. 28. The brush rigging and brushes are visible in the PowerPoint presentation and video from the virtual site visit. The existing commutator brush rigging is a free to slide, trailing edge, constant force spring pressure and semi-captive spring type.

71. Section 48 70 01

Section/subsection title 1.3

Page 3

Question: "Please provide the Governor MVA base, Type, Make and Model / Photo of governor nameplate"

Answer: See photo labeled "Governor nameplate" attached to Amendment 005

72. Section 48 70 01

Section/subsection title 1.3

Page 3

Question: "Please provide the Baldwin-Lima-Hamilton Kaplan Turbine make and model. Please provide a photo of the nameplate"

Answer: The Baldwin-Lima-Hamilton Kaplan turbine is an adjustable blade propeller type with 58,200 HP for nameplate. See photos labeled Generator nameplate and Exciter nameplate attached to Amendment 005.

73. Section 48 70 01

Section/subsection title 1.4.3

Page 3

Question: "Confirm MOD-027-1 testing should be completed as no turbine or governor work is completed under this project"

Answer: See the Government's Response to Question No. 29.

74. Section W912P519R0001

Section/subsection title STANDARD FORM 1442

Page 1

Question: "Please provide anticipated award date and NTP date"

Answer: The Government anticipates a 1st Quarter FY21 award and 2nd Quarter FY21 NTP for the prototype project.

75. Section 48 19 26

Section/subsection title 2.6.13

Page 26

Question: "Confirm Voltage Matching voltage will be measured from the existing Gen Sync PTs. New PTs for this requirement will not be required or supplied"

Answer: Confirmed. No new PTs are required for this functionality. Anticipated wiring to connect this measurement for each excitation system has been provided in the solicitation contract drawing set, specifically on drawings E-701, E-711, and E-721.

76. Section 26 25 00

Section/subsection title 2.2

Page 7

Question: "Please provide photos of the non-segregated bus and surrounding areas where the proposed tap will be located."

Answer: See the Government's Response to Question No. 28. The non-segregated bus and surrounding areas are visible in the PowerPoint presentation and video from the virtual site visit.

77. Section 26 25 00

Section/subsection title 2.2

Page 7

Question: "Please provide manufacture, type, ampacity, BIL rating for the existing bus"

Answer: The generator bus is of the nonsegregated phase type rated at 13.8 kV with continuous current carrying capacity of 2000 A and a momentary current rating of 40,000 rms amps. BIL rating for the generator breaker is 95 kV.

78. Section 48 19 26

Section/subsection title 3.3.5.3

Page 40

Question: "Please provide pictures of the existing BATT board, INSTR board, BENCH board, relay panel and control room area"

Answer: See the Government's Response to Question No. 28. The existing BATT board, INSTR board, BENCH board, relay panel and control room area are visible in the PowerPoint presentation and video from the virtual site visit.

79. "Please clarify bid due date. Solicitation Form 1442 shows 08/14/2020, presentation provided during virtual bid walk stated 09/02/2020."

Answer: See the Government's Response to Question No. 38.

80. "Are there defined outage seasons for the units/plant? Are there any restrictions on unit outages during any time of the year?"

Answer: See the Government's Response to Question No. 41.

81. "Is there a particular order desired for upgrade of the units?"

Answer: See the Government's Response to Question No. 41.

82. "Are there restrictions on having more than one unit down at a time?"

Answer: See the Government's Response to Question No. 41.

(End of Summary of Changes)

Section 00 10 00 - Solicitation

BASIC CONTRACT SCOPE OF WORK

This is an Indefinite Delivery Indefinite Quantity (IDIQ), Single Award Task Order Contract (SATOC) for the removal of the existing excitation equipment and replacement of Solid State Excitation equipment/systems in support of the U.S. Army Corps of Engineers, Nashville District (LRN) hydropower mission.

The SATOC will be utilized by LRN for demolition, fabrication or installation of low-, medium- or high-voltage electrical controls and equipment in hydropower generating facilities throughout the Cumberland River System in Tennessee and Kentucky. The equipment may consist of electrical controls, digital turbine governors, medium-voltage cables, breakers, exciters, transformers and similar equipment used in the production and distribution of power generated at Cumberland River facilities. The potential exists for the contractor to encounter asbestos or lead-based paint in connection with the work, and remediation of affected components will be required as part of the scope of work. This description is not intended to be all encompassing and is subject to change.

The basic contract will be awarded and administered (e.g. issuing modifications, etc.) by the Nashville Contracting Division, 110 Ninth Avenue South, Nashville, TN 37203-3817. Basic contract data for the IDIQ-SATOC contract is as follows:

- The Government intends to award one (1) IDIQ-SATOC contract.
- This procurement is Full & Open.
- Period of contract shall not exceed four (4) year base period and three (3) two (2) year option periods for a total of ten (10) years.
- The minimum guaranteed contract amount is \$25,000 for the base period. There is no guaranteed minimum for the option periods.
- The total combined contract capacity under this SATOC contract is \$30,000,000 over the ten (10) year period.
- A bid guarantee is only required for the Prototype Project in accordance with FAR 52.228-1. Payment and performance bonds shall be submitted for each individual task order within ten (10) calendar days following task order award.
- Liquidated damages amounts will be provided in this solicitation for the Prototype Project and with each individual task order.
- Wage Determinations will be provided in this solicitation for the Prototype Project and with each individual task order

Task Order: Evaluation Criteria and Award:

The Prototype Project will be awarded as a task order against the SATOC. If selected for award of the SATOC, the Offeror's proposed price for the Prototype Project will be binding for the task order awarding the Prototype Project. Award of that task order is anticipated within 90 days of the proposal due date. See Section 00 21 00 for additional information on the Prototype Project.

Future Projects: Future requirements will be procured by issuance of firm fixed-price task orders against the SATOC. Each task order will be initiated by the issuance of a Request for Proposal (RFP) to the SATOC-holder and will include, among other information: the statement of work, opportunity for a site visit, technical plans and specifications, period of performance, liquidated damages, and wage determinations.

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
0001		30,000,000	Job	\$1.00	\$30,000,000.00 NTE

Excitation Systems and Appurtenances
FFP
EXCITATION EQUIPMENT REPLACEMENT CONSTRUCTION SATOC
FOR NASHVILLE DISTRICT POWER PLANTS IN ACCORDANCE WITH
EACH INDIVIDUAL TASK ORDER'S SPECIFICATIONS AND PLANS TO
BE ISSUED UNDER THIS CONTRACT. SATOC SHALL NOT EXCEED
\$30,000,000.00 FOR THE LIFE OF THE CONTRACT. GUARANTEED
MINIMUM IS \$25,000.00.

FOR INFORMATIONAL PURPOSES; DO NOT INCLUDE PROPOSED
PRICING ON THIS LINE ITEM (CLIN).

FOB: Destination
MILSTRIP: W38XDD92311091
PURCHASE REQUEST NUMBER: W38XDD92311091
PSC CD: Z2MD

MAX NET AMT	\$30,000,000.00
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ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
1001 OPTION	Option 1 FFP EXCITATION EQUIPMENT REPLACEMENT CONSTRUCTION SATOC FOR NASHVILLE DISTRICT POWER PLANTS IN ACCORDANCE WITH EACH INDIVIDUAL TASK ORDER'S SPECIFICATIONS AND PLANS TO BE ISSUED UNDER THIS CONTRACT. SATOC SHALL NOT EXCEED \$30,000,000.00 FOR THE LIFE OF THE CONTRACT.		Job		NSP

FOR INFORMATIONAL PURPOSES; DO NOT INCLUDE PROPOSED
PRICING ON THIS LINE ITEM (CLIN).

FOB: Destination

MILSTRIP: W38XDD92311091

PSC CD: Z2MD

MAX
NET AMT

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
2001 OPTION	Option 2 FFP EXCITATION EQUIPMENT REPLACEMENT CONSTRUCTION SATOC FOR NASHVILLE DISTRICT POWER PLANTS IN ACCORDANCE WITH EACH INDIVIDUAL TASK ORDER'S SPECIFICATIONS AND PLANS TO BE ISSUED UNDER THIS CONTRACT. SATOC SHALL NOT EXCEED \$30,000,000.00 FOR THE LIFE OF THE CONTRACT.		Job		NSP

FOR INFORMATIONAL PURPOSES; DO NOT INCLUDE PROPOSED
PRICING ON THIS LINE ITEM (CLIN).

FOB: Destination

MILSTRIP: W38XDD92311091

PSC CD: Z2MD

MAX
NET AMT

ITEM NO	SUPPLIES/SERVICES	MAX QUANTITY	UNIT	UNIT PRICE	MAX AMOUNT
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3001
OPTION

Option 3
FFP

Job

NSP

EXCITATION EQUIPMENT REPLACEMENT CONSTRUCTION SATOC
FOR NASHVILLE DISTRICT POWER PLANTS IN ACCORDANCE WITH
EACH INDIVIDUAL TASK ORDER'S SPECIFICATIONS AND PLANS TO
BE ISSUED UNDER THIS CONTRACT. SATOC SHALL NOT EXCEED
\$30,000,000.00 FOR THE LIFE OF THE CONTRACT.

FOR INFORMATIONAL PURPOSES; DO NOT INCLUDE PROPOSED
PRICING ON THIS LINE ITEM (CLIN).

FOB: Destination

MILSTRIP: W38XDD92311091

PSC CD: Z2MD

MAX
NET AMT

Section 00 21 00 - Instructions

CLAUSES INCORPORATED BY REFERENCE

252.236-7008 Contract Prices-Bidding Schedules

DEC 1991

CLAUSES INCORPORATED BY FULL TEXT

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)

Section 00 70 00 - Conditions of the Contract

INSPECTION & ACCEPTANCE TERMS

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	N/A	N/A	N/A	N/A

52.228-11 (DEV) PLEDGES OF ASS

52.228-11 (DEV) PLEDGES OF ASSETS (APR 2020)(DEVIATION 2020-O0016)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond—(1) Pledge of assets; and (2) Standard Form 28, Affidavit of Individual Surety, except that the words “being duly sworn, depose and say” on the Standard Form 28 are replaced with the word “affirm” and the Standard Form 28 is not required to be sworn and notarized in block 12.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of—

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form); and/or

(2) A recorded lien on real estate. The offeror will be required to provide—

(i) A mortgagee title insurance policy, in an insurance amount equal to the amount of the lien, or other evidence of title that is consistent with the requirements of Section 2 of the United States Department of Justice Title Standards at <https://www.justice.gov/enrd/page/file/922431/download>. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

INSPECTION AND ACCEPTANCE TERMS

Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0001	Destination	Government	N/A	Government

1001	N/A	N/A	N/A	Government
2001	N/A	N/A	N/A	Government
3001	N/A	N/A	N/A	Government

CLAUSES INCORPORATED BY REFERENCE

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
52.203-13	Contractor Code of Business Ethics and Conduct	OCT 2015
52.203-19	Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements	JAN 2017
52.204-4	Printed or Copied Double-Sided on Postconsumer Fiber Content Paper	MAY 2011
52.204-9	Personal Identity Verification of Contractor Personnel	JAN 2011
52.204-10	Reporting Executive Compensation and First-Tier Subcontract Awards	OCT 2016
52.204-13	System for Award Management Maintenance	OCT 2016
52.204-15	Service Contract Reporting Requirements for Indefinite-Delivery Contracts	OCT 2016
52.204-18	Commercial and Government Entity Code Maintenance	JUL 2016
52.204-19	Incorporation by Reference of Representations and Certifications.	DEC 2014
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities.	JUL 2018
52.204-25	Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.	AUG 2019
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	OCT 2015
52.209-9	Updates of Publicly Available Information Regarding Responsibility Matters	JUL 2013
52.209-10	Prohibition on Contracting With Inverted Domestic Corporations	NOV 2015
52.210-1	Market Research	APR 2011
52.211-18	Variation in Estimated Quantity	APR 1984
52.215-2	Audit and Records--Negotiation	OCT 2010
52.215-11	Price Reduction for Defective Certified Cost or Pricing Data-- Modifications	AUG 2011
52.215-13 (Dev)	Subcontractor Certified Cost or Pricing Data - Modifications (Deviation 2018-O0015)	JUL 2018
52.215-15	Pension Adjustments and Asset Reversions	OCT 2010
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other than Pensions	JUL 2005
52.215-19	Notification of Ownership Changes	OCT 1997

52.215-21	Requirements for Certified Cost or Pricing Data and Data	OCT 2010
	Other Than Certified Cost or Pricing Data -- Modifications	
52.219-4 (Dev)	Notice of Price Evaluation Preference for HUBZone Small Business Concerns (DEVIATION 2019-O0003).	JAN 2019
52.219-8	Utilization of Small Business Concerns	NOV 2016
52.219-9 Alt II (Dev)	Small Business Subcontracting Plan (Deviation 2018-O0018) - Alternate II	AUG 2018
52.219-16	Liquidated Damages-Subcontracting Plan	JAN 1999
52.222-3	Convict Labor	JUN 2003
52.222-4	Contract Work Hours and Safety Standards - Overtime Compensation	MAY 2018
52.222-6	Construction Wage Rate Requirements	AUG 2018
52.222-7	Withholding of Funds	MAY 2014
52.222-8	Payrolls and Basic Records	AUG 2018
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 Requirements and Related Regulations	MAY 2014
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
52.222-37	Employment Reports on Veterans	FEB 2016
52.222-40	Notification of Employee Rights Under the National Labor Relations Act	DEC 2010
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
52.223-2	Affirmative Procurement of Biobased Products Under Service and Construction Contracts	SEP 2013
52.223-3	Hazardous Material Identification And Material Safety Data	JAN 1997
52.223-5	Pollution Prevention and Right-to-Know Information	MAY 2011
52.223-6	Drug-Free Workplace	MAY 2001
52.223-15	Energy Efficiency in Energy-Consuming Products	DEC 2007
52.223-17	Affirmative Procurement of EPA-Designated Items in Service and Construction Contracts	AUG 2018
52.223-18	Encouraging Contractor Policies To Ban Text Messaging While Driving	AUG 2011
52.223-20	Aerosols	JUN 2016
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
52.228-12	Prospective Subcontractor Requests for Bonds	MAY 2014
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
52.232-23	Assignment Of Claims	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	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, Equipment, Utilities, and Improvements	APR 1984
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 Alt I	Accident Prevention (Nov 1991) - Alternate I	NOV 1991
52.236-15	Schedules for Construction Contracts	APR 1984
52.236-16	Quantity Surveys	APR 1984
52.236-17	Layout of Work	APR 1984
52.236-21 Alt I	Specifications and Drawings for Construction (Feb 1997) - Alternate I	APR 1984
52.236-26	Preconstruction Conference	FEB 1995
52.242-5	Payments to Small Business Subcontractors	JAN 2017
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	AUG 2018
52.245-1	Government Property	JAN 2017
52.245-9	Use And Charges	APR 2012
52.246-12	Inspection of Construction	AUG 1996
52.248-3	Value Engineering-Construction	OCT 2015
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (Apr 2012) - Alternate I	SEP 1996
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7000	Requirements Relating to Compensation of Former DoD Officials	SEP 2011
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.203-7002	Requirement to Inform Employees of Whistleblower Rights	SEP 2013
252.203-7003	Agency Office of the Inspector General	DEC 2012
252.203-7004	Display of Hotline Posters	OCT 2016
252.204-7003	Control Of Government Personnel Work Product	APR 1992
252.204-7004	Antiterrorism Awareness Training for Contractors.	FEB 2019
252.204-7012	Safeguarding Covered Defense Information and Cyber Incident Reporting	OCT 2016

252.204-7015	Notice of Authorized Disclosure of Information for Litigation Support	MAY 2016
252.204-7018	Prohibition on the Acquisition of Covered Defense Telecommunications Equipment or Services	DEC 2019
252.205-7000	Provision Of Information To Cooperative Agreement Holders	DEC 1991
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Country that is a State Sponsor of Terrorism	OCT 2015
252.211-7007	Reporting of Government-Furnished Property	AUG 2012
252.219-7003	Small Business Subcontracting Plan (DOD Contracts)	DEC 2019
252.223-7004	Drug Free Work Force	SEP 1988
252.223-7006	Prohibition On Storage, Treatment, and Disposal of Toxic or Hazardous Materials	SEP 2014
252.223-7008	Prohibition of Hexavalent Chromium	JUN 2013
252.225-7012	Preference For Certain Domestic Commodities	DEC 2017
252.225-7048	Export-Controlled Items	JUN 2013
252.225-7052	Restriction on the Acquisition of Certain Magnets and Tungsten.	DEC 2019
252.227-7033	Rights in Shop Drawings	APR 1966
252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	JUN 2012
252.232-7010	Levies on Contract Payments	DEC 2006
252.232-7017	Accelerating Payments to Small Business Subcontractors-- Prohibition on Fees and Consideration	APR 2020
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	DEC 2012
252.244-7000	Subcontracts for Commercial Items	JUN 2013
252.245-7001	Tagging, Labeling, and Marking of Government-Furnished Property	APR 2012
252.245-7002 (Dev)	Reporting Loss of Government Property (DEVIATION 2020- O0004)	FEB 2020
252.245-7003	Contractor Property Management System Administration	APR 2012
252.245-7004	Reporting, Reutilization, and Disposal	DEC 2017
252.247-7023	Transportation of Supplies by Sea	APR 2014

CLAUSES INCORPORATED BY FULL TEXT

52.204-21 BASIC SAFEGUARDING OF COVERED CONTRACTOR INFORMATION SYSTEMS (JUN 2016)

(a) Definitions. As used in this clause--

Covered contractor information system means an information system that is owned or operated by a contractor that processes, stores, or transmits Federal contract information.

Federal contract information means information, not intended for public release, that is provided by or generated for the Government under a contract to develop or deliver a product or service to the Government, but not including information provided by the Government to the public (such as on public Web sites) or simple transactional information, such as necessary to process payments.

Information means any communication or representation of knowledge such as facts, data, or opinions, in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual (Committee on National Security Systems Instruction (CNSSI) 4009).

Information system means a discrete set of information resources organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information (44 U.S.C. 3502).

Safeguarding means measures or controls that are prescribed to protect information systems.

(b) Safeguarding requirements and procedures.

(1) The Contractor shall apply the following basic safeguarding requirements and procedures to protect covered contractor information systems. Requirements and procedures for basic safeguarding of covered contractor information systems shall include, at a minimum, the following security controls:

(i) Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).

(ii) Limit information system access to the types of transactions and functions that authorized users are permitted to execute.

(iii) Verify and control/limit connections to and use of external information systems.

(iv) Control information posted or processed on publicly accessible information systems.

(v) Identify information system users, processes acting on behalf of users, or devices.

(vi) Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.

(vii) Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.

(viii) Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.

(ix) Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.

(x) Monitor, control, and protect organizational communications (i.e., information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.

(xi) Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.

(xii) Identify, report, and correct information and information system flaws in a timely manner.

(xiii) Provide protection from malicious code at appropriate locations within organizational information systems.

(xiv) Update malicious code protection mechanisms when new releases are available.

(xv) Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.

(2) Other requirements. This clause does not relieve the Contractor of any other specific safeguarding requirements specified by Federal agencies and departments relating to covered contractor information systems generally or other Federal safeguarding requirements for controlled unclassified information (CUI) as established by Executive Order 13556.

(c) Subcontracts. The Contractor shall include the substance of this clause, including this paragraph (c), in subcontracts under this contract (including subcontracts for the acquisition of commercial items, other than commercially available off-the-shelf items), in which the subcontractor may have Federal contract information residing in or transiting through its information system.

(End of clause)

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

The Contractor shall be required to (a) commence work under this contract within **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 the time specified in each task order**.

For the Prototype Project, work must be completed within 540 calendar days after the task order's notice to proceed.

The time stated for completion shall include final cleanup of the premises.

(End of clause)

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

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount **specified in each task order, for each calendar day of delay until the work is completed or accepted**.

For the Prototype Project, the amount is \$4,368.65 per calendar day of delay until the work is completed or accepted.

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

(End of clause)

52.216-19 ORDER LIMITATIONS (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than \$2,000.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor -

- (1) Any order for a single item in excess of **\$7,000,000.00**
 - (2) Any order for a combination of items in excess of **\$30,000,000.00**; or
 - (3) A series of orders from the same ordering office within ten (10) days that together call for quantities exceeding the limitation in paragraph (b) (1) or (2) of this section.
 - (c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.
 - (d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within ten (10) days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.
- (End of clause)

52.216-22 INDEFINITE QUANTITY. (OCT 1995)

- (a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.
- (b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum". The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum".
- (c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.
- (d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after the **completion date of any current task orders awarded before expiration of the applicable contract period.**

(End of clause)

52.217-7 OPTION FOR INCREASED QUANTITY--SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within **the performance period of the task order.** Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within **30 calendar days prior to the expiration of the contract**; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least **60 calendar days** before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed **ten (10) years**.

(End of clause)

52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REREPRESENTATION (MAR 2020)

(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 (d) 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 any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (f) of this clause or, if applicable, paragraph (h) of this clause, upon 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) If the Contractor represented that it was any of the small business concerns identified in 19.000(a)(3) prior to award of this contract, the Contractor shall rerepresent its size and socioeconomic status according to paragraph (f) of this clause or, if applicable, paragraph (h) of this clause, when the Contracting Officer explicitly requires it for an order issued under a multiple-award contract.

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

(e) 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.

(f) Except as provided in paragraph (h) of this clause, the Contractor shall make the representation(s) required by paragraph (b) and (c) 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, or with its offer for an order (see paragraph (c) of this clause), that the data have been validated or updated, and provide the date of the validation or update.

(g) 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 (f) or (h) of this clause.

(h) 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 rerepresentation and submit it to the contracting office, along with the contract number and the date on which the rerepresentation was completed:

(1) The Contractor represents that it [] is, [] is not a small business concern under NAICS Code **237190** assigned to contract number **W912P521D0002**.

(2) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [] is, [] is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [] is, [] is not a women-owned small business concern.

(4) Women-owned small business (WOSB) concern eligible under the WOSB Program. [Complete only if the Contractor represented itself as a women-owned small business concern in paragraph (h)(3) of this clause.] The Contractor represents that--

(i) It [] is, [] is not a WOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [] is, [] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (h)(4)(i) of this clause is accurate for each WOSB concern eligible under the WOSB Program participating in the joint venture.

[The Contractor shall enter the name or names of the WOSB concern eligible under the WOSB Program and other small businesses that are participating in the joint venture: .] Each WOSB concern eligible under the WOSB Program participating in the joint venture shall submit a separate signed copy of the WOSB representation.

(5) Economically disadvantaged women-owned small business (EDWOSB) concern. [Complete only if the Contractor represented itself as a women-owned small business concern eligible under the WOSB Program in (h)(4) of this clause.] The Contractor represents that--

(i) It [] is, [] is not an EDWOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [] is, [] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (h)(5)(i) of this clause is accurate for each EDWOSB concern participating in the joint venture. [The Contractor shall enter the name or names of the EDWOSB concern and other small businesses that are participating in the joint venture: .] Each EDWOSB concern participating in the joint venture shall submit a separate signed copy of the EDWOSB representation.

(6) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that it [] is, [] is not a veteran-owned small business concern.

(7) [Complete only if the Contractor represented itself as a veteran-owned small business concern in paragraph (h)(6) of this clause.] The Contractor represents that it [] is, [] is not a service-disabled veteran-owned small business concern.

(8) [Complete only if the Contractor represented itself as a small business concern in paragraph (h)(1) of this clause.] The Contractor represents that--

(i) It [] is, [] is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR part 126; and

(ii) It [] is, [] is not a HUBZone joint venture that complies with the requirements of 13 CFR part 126, and the representation in paragraph (h)(8)(i) of this clause is accurate for each HUBZone small business concern participating in the HUBZone joint venture. [The Contractor shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture: .] Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

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

(End of clause)

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)

52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES (JUL 2014)

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, 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)

52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED ITEMS (MAY 2008)

(a) Definitions. As used in this clause--

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material."

Recovered material means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall--

(1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and

(2) Submit this estimate to the **Administrative Contracting Officer**.

(End of clause)

52.225-11 BUY AMERICAN--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (OCT 2016)

(a) Definitions. As used in this clause--

Caribbean Basin country construction material means a construction material that--

- (1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different construction material distinct from the materials from which it was transformed.

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 an article, material, or supply incorporated directly into a construction material.

Construction material means an article, material, or supply brought to the construction site by the Contractor or 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 construction material (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.

Designated country means any of the following countries:

- (1) A World Trade Organization Government Procurement Agreement (WTO GPA) country (Armenia, Aruba, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France,

Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan, Ukraine, or United Kingdom);

(2) A Free Trade Agreement (FTA) country (Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Korea (Republic of), Mexico, Morocco, Nicaragua, Oman, Panama, Peru, or Singapore);

(3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Tanzania, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, or Zambia); or

(4) A Caribbean Basin country (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bonaire, British Virgin Islands, Curacao, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saba, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sint Eustatius, Sint Maarten, or Trinidad and Tobago).

Designated country construction material means a construction material that is a WTO GPA country construction material, an FTA country construction material, a least developed country construction material, or a Caribbean Basin country 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 nonavailability 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.

Least developed country construction material means a construction material that--

(1) Is wholly the growth, product, or manufacture of a least developed country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a least developed country into a new and different construction material distinct from the materials from which it was transformed.

“Free Trade Agreement country construction material” means a construction material that—

(1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or

(2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a FTA country into a new and different construction material distinct from the materials from which it was transformed.

“Least developed country construction material” means a construction material that—

- (1) Is wholly the growth, product, or manufacture of a least developed country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a least developed country into a new and different construction material distinct from the materials from which it was transformed.

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

WTO GPA country construction material means a construction material that--

- (1) Is wholly the growth, product, or manufacture of a WTO GPA country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a WTO GPA country into a new and different construction material distinct from the materials from which it was transformed.

(b) Construction materials.

(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)). In addition, the Contracting Officer has determined that the WTO GPA and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American restrictions are waived for designated country construction materials.

(2) The Contractor shall use only domestic or designated country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to information technology that is a commercial item or to the construction materials or components listed by the Government as follows:

None.

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) 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 restrictions 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)(4) 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)(4)(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) \1\
Item 1:			
Foreign construction material....
Domestic construction material...
Item 2:			
Foreign construction material....
Domestic construction material...

\1\ Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

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

Include other applicable supporting information.

(End of clause)

52.228-14 IRREVOCABLE LETTER OF CREDIT (NOV 2014)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to 40 U.S.C. chapter 31, subchapter III, Bonds, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d)(1) Only federally insured financial institutions rated investment grade by a commercial rating service shall issue or confirm the ILC.

(2) Unless the financial institution issuing the ILC had letter of credit business of at least \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of at least \$25 million in the past year.

(3) The Offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institutions have the required credit rating as of the date of issuance of the ILC.

(4) The current rating for a financial institution is available through any of the following rating services registered with the U.S. Securities and Exchange Commission (SEC) as a Nationally Recognized Statistical Rating Organization (NRSRO). NRSRO's can be located at the Web site <http://www.sec.gov/answers/nrsro.htm> maintained by the SEC.

(e) The following format shall be used by the issuing financial institution to create an ILC:

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date ____

IRREVOCABLE LETTER OF CREDIT NO. ____

Account party's name ____

Account party's address ____

For Solicitation No. **W912P519R0001** (for reference only)

TO: [____ U.S. Government agency]

[____ U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States \$ ____ . This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [____ issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on ____ , or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, International Chamber of Commerce Publication No. ____ -- (Insert version in effect at the time of ILC issuance, e.g., "Publication 600, 2006 edition") and to the extent not inconsistent therewith, to the laws of ____ --[State of confirming financial institution, if any, otherwise State of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[____ Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

____ [Confirming Financial Institution's Letterhead or Name and Address]

(Date) ____

Our Letter of Credit Advice Number ____

Beneficiary: ____ [U.S. Government agency]

Issuing Financial Institution: ____

Issuing Financial Institution's LC No.: ____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by ____ [name of issuing financial institution] for drawings of up to United States dollars ____ /U.S. \$ ____ and expiring with our close of business on ____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at ____ .

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, International Chamber of Commerce Publication No. ____ -- (Insert version in effect at the time of ILC issuance, e.g., "Publication 600, 2006 edition") and to the extent not inconsistent therewith, to the laws of ____ --[State of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

[City, State]

(Date) ____

[Name and address of financial institution]

Pay to the order of ____ [Beneficiary Agency] ____ the sum of United States ____ This draft is drawn under Irrevocable Letter of Credit No. ____

____ [Beneficiary Agency]

By: ____

(End of clause)

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least **25%** percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

(End of clause)

52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work unless otherwise stated in the technical specifications. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession unless otherwise stated in the technical specifications.

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and

(3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(End of clause)

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 address: www.acquisition.gov or <https://www.acq.osd.mil/dpap/dars/dfarspgi/current/index.html>

(End of clause)

52.252-4 ALTERATIONS IN CONTRACT (APR 1984)

Portions of this contract are altered as follows:

None

(End of clause)

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any **Defense Federal Acquisition Regulation Supplement (48 CFR 2)** clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

252.216-7006 ORDERING (MAY 2011)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the contract schedule. Such orders may be issued from the **date of contract award through four (4) year base period and three (3) two (2) year option periods (if exercised) for a total of ten (10) years**

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c)(1) If issued electronically, the order is considered ``issued" when a copy has been posted to the Electronic Document Access system, and notice has been sent to the Contractor.

(2) If mailed or transmitted by facsimile, a delivery order or task order is considered ``issued" when the Government deposits the order in the mail or transmits by facsimile. Mailing includes transmittal by U.S. mail or private delivery services.

(3) Orders may be issued orally only if authorized in the schedule.

(End of Clause)

252.236-7001 CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall--

(1) Check all drawings furnished immediately upon receipt;

(2) Compare all drawings and verify the figures before laying out the work;

(3) Promptly notify the Contracting Officer of any discrepancies;

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

(1) Large-scale drawings shall govern small-scale drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

See technical specifications table of contents section for complete index of drawings for the Prototype Project.

Drawings and specifications will be identified in individual task orders.

(End of clause)

252.236-7004 PAYMENT FOR MOBILIZATION AND DEMOBILIZATION (DEC 1991)

(a) The Government will pay all costs for the mobilization and demobilization of all of the Contractor's plant and equipment at the contract lump sum price for this item.

(1) **60 percent for the Prototype Project and future task orders** of the lump sum price upon completion of the contractor's mobilization at the work site.

(2) The remaining **40 percent for the Prototype Project and future task orders** upon completion of demobilization.

(b) The Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid if the Contracting Officer believes that the percentages in paragraphs (a) (1) and (2) of this clause do not bear a reasonable relation to the cost of the work in this contract.

(1) Failure to justify such price to the satisfaction of the Contracting Officer will result in payment, as determined by the Contracting Officer, of --

(i) Actual mobilization costs at completion of mobilization;

(ii) Actual demobilization costs at completion of demobilization; and

(iii) The remainder of this item in the final payment under this contract.

(2) The Contracting Officer's determination of the actual costs in paragraph (b)(1) of this clause is not subject to appeal.

52.228-15 (DEV) PERFORMANCE AN

52.228-15 PERFORMANCE AND PAYMENT BONDS-CONSTRUCTION (APR 2020) (DEVIATION 2020-00016)

(a) Definitions. As used in this clause—

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is \$150,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25, except that no seal is required). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment bonds (Standard Form 25A, except that no seal is required). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection.

(i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of the Treasury, Financial Management Service, Surety Bond Branch, 3700 East West Highway, Room 6F01, Hyattsville, MD 20782. Or via the internet at <http://www.fms.treas.gov/c570/>.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 3133(c)). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

Section 00 73 00 - Supplementary Conditions

SPECIAL REQUIREMENTS

1. SCHEDULE OF INSURANCE

a. The contractor shall, at its own expense, provide and maintain during the entire performance period of this contract at least the kinds and minimum amounts of insurance required below:

Workmen's Compensation and Employer's Liability Insurance	\$100,000
General Liability Insurance for Bodily Injury Liability	
Minimum Per Occurrence for Bodily Liability	\$500,000
Minimum Per Each Accident for Property Damage	\$100,000
Minimum Aggregate for Bodily Injury	\$500,000
Automobile Liability Insurance	
Minimum Per Person	\$200,000
Minimum Per Occurrence for Bodily Injury	\$500,000
Minimum Per Occurrence for Property Damage	\$ 20,000

b. Before commencing work under this contract, the contractor shall certify to the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the state in which this contract is to be performed or prescribed, and (2) until 30 days after the insurer of the contractor gives written notice to the Contracting Officer.

c. The contractor shall insert the substance of the clause entitled "Insurance Work on a Government Installation (FAR 52.228-5), "in subcontracts under this contract that require work on a Government Installation and shall require subcontractors to provide and maintain the insurance required above.

2. ADMINISTRATIVE DISPUTE RESOLUTION

In furtherance of Federal policy and the Administrative Dispute Resolution Act of 1990, ADR Act, Pub. L. 101-552, the Contracting Officer will try to resolve all post award acquisition issues in controversy by mutual agreement of the parties. Interested parties are encouraged to use alternative resolution procedures to the maximum extent practicable in accordance with the authority and the requirement of ADR ACT.

3. SMALL BUSINESS CONTRACT LEVEL METRICS

Contract Level Metrics. Socio-Economic Goals. Electronic Subcontracting Reporting System (eSRS) submissions will be required on a semi-annual basis. This will establish the degree to which small businesses (and subcategories) are utilized as subcontractors and if necessary, permit time for action to address the lack of satisfactory progress in small business utilization.

Metric: Small business subcontracting reporting

Goal: The contractor will meet or exceed small business subcontracting goals established in the contract.

Metric: Small Business Participation Plan reporting of the small businesses identified and committed to in the Small Business Participation Plan. Evaluated semi-annually.

Goal: The contractor will meet or exceed Small Business Participation Plan targets that are incorporated into the contract along with the identified small business subcontractors.

4. PROJECT LABOR AGREEMENT

Pursuant to FAR 22.503, a Project Labor Agreement (PLA) may be considered for certain projects as task orders meeting the criteria set forth in Executive Order 13502. Each task order may be evaluated on a project-by-project basis for possible application of a PLA.

5. Government Furnished Property (GFP) will be determined on a Task Order basis. If utilized, the GFP clauses included in the base contract are applicable.

WAGE DETERMINATION

The following Wage Rates Requirements (Construction) are applicable to the Prototype Project. Wage rate requirements for future task orders will be established on a per task order basis with the most recent wage determination for the county where the work will be performed.

"General Decision Number: TN20200001 01/03/2020

Superseded General Decision Number: TN20190001

State: Tennessee

Construction Type: Heavy Flood Control

Counties: Tennessee Statewide.

RIVER, HARBOR AND FLOOD CONTROL PROJECTS ON THE MISSISSIPPI RIVER AND TRIBUTARIES (excluding any contracts for any phase of construction of a Lock and Dam) EXCEPT THE METROPOLITAN AREAS OF MEMPHIS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 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 \$10.80 per hour (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 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date
0 01/03/2020

SUTN2010-001 09/01/1997

	Rates	Fringes
CARPENTER.....	\$ 7.25	
Laborers:		
Air Tool Operator.....	\$ 7.25	
CHAIN SAW OPERATOR OR FILER..	\$ 7.25	
REVTMENT & DIKES.....	\$ 7.25	
UNSKILLED.....	\$ 7.25	
Power equipment operators:		
ASPHALT PLANT DRYER OPR.,		
ASPHALT DISTRIBUTOR,		
ASPHALT ROLLER, BULLDOZER		
(ROUGH, INCL. DISC, PLOW,		
OR ROLLER), MOTOR PATROL		
(HAUL ROADS), TRENCHING		

MACHINE (18" & UNDER), SELF-PROPELLED ROLLER (EXCEPT ASPHALT, END DUMP EQUIP. (OFF HIGHWAY), MIXER (CONCRETE UP TO 21 CU. FT.), BOTTOM DUMP EUCLIDS (AND LIKE EQUIPMENT).....\$	7.25	.05
BULLDOZER (FINISHER, PUSH CAT & ON BARGES), MOTOR PATROL FINISHER, SCRAPER & LIKE EQUIP., FRONT END LOADER, BACKHOE TRACTOR MOUNTED) ASPHALT FINISHER OR SPREADING MACHINE, WELL POINT SYSTEM OPR., SELF PROPELLED LOADER (CONVEYOR TYPE).....\$	7.25	.05
FIREMAN (HEAVY CONSTRUCTION), PILEDRIVER, LEADSMAN, WINCHMAN.....\$	7.25	.05
OILER, PUMP, GREASER, TRACTOR (FARM TYPE INCL. DISC, PLOW OR ROLLER).....\$	7.25	.05
PILEDRIVER OPR., MECHANIC (HEAVY EQUIP.), CRANES, DERRICKS, DRAGLINES, WELDER, POWER SHOVELS & BACKHOES, MIXER (CONCRETE, 21 CU. FT. & OVER), ASPHALT PLANT OPR., TRENCHING MACHINE (OVER 18").....\$	7.75	.05

Truck drivers:

1 1/2 TONS OR LESS.....\$	7.25
OVER 1 1/2 TONS.....\$	7.25

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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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.

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)).

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.

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

General Decision Number: TN20200142 01/24/2020

Superseded General Decision Number: TN20190142

State: Tennessee

Construction Type: Heavy
Including Water and Sewer Line Construction

Counties: Cannon, Cheatham, Davidson, Dickson, Hickman,
Macon, Rutherford, Smith, Williamson and Wilson Counties in
Tennessee.

HEAVY CONSTRUCTION PROJECTS (including sewer/water
construction).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 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 \$10.80 per hour (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 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020

* ELEC0429-007 01/01/2020

	Rates	Fringes
Electrician.....	\$ 27.72	13.48

ENGI0369-016 05/02/2013		

Cheatham, Davidson, Dickson, Hickman, Rutherford, Williamson
and Wilson Counties

	Rates	Fringes
Operating Engineers:		
Bulldozer, Crane, and		
Forklift.....	\$ 22.97	9.85

ENGI0917-024 05/01/2017		

Cannon, Macon, and Smith Counties

Rates	Fringes
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Operating Engineers:		
Bulldozer and Crane.....	\$ 28.26	10.10
Forklift.....	\$ 25.97	10.10

SUTN2009-141 12/02/2009

	Rates	Fringes
LABORER: Common or General.....	\$ 10.25	0.00
LABORER: Flagger.....	\$ 8.73	0.00
LABORER: Pipelayer.....	\$ 11.71	0.00
OPERATOR:		
Backhoe/Excavator/Trackhoe.....	\$ 17.35	0.00
OPERATOR: Loader.....	\$ 13.50	0.00
TRUCK DRIVER: Dump Truck.....	\$ 10.76	0.00

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.

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)).

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.

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