

ADDENDUM NO. 2

Replace Obsolete /Inadequate Electric Panels Group A  
(Phases XI, XII and XIII)  
VA #537-12-163  
At Jesse Brown VAMC

TO: "ALL BIDDERS OF RECORD"

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM OF THE DRAWINGS AND SPECIFICATIONS BY INSERTING ITS NUMBER IN THE PROPOSAL FORM. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION. THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS. IT MODIFIES THEM AS FOLLOWS:

**QUESTIONS AND ANSWERS:**

- 1) Upon review of the plans, the title page lists more drawings than are provided. Is that intended?  
Answer: Yes. The design was done for the entire facility and the cover sheet references a list of all the drawings in the design package. This contract is only a portion of the entire system and the other sheets can be useful for planning shutdowns and temporary connections. Building plans such as 5 and 21 are omitted, as there is no direct or indirect work in these areas.
- 2) Is the survey of risers, panels and branch circuits to be done on all Phases (XI, XII & XIII) prior of any physical work?  
Answer: Yes. This is a fully functional facility. The survey and as built can start as soon as coordinated with the COTR. The temporary and/or replacement work cannot begin until all submittals are approved and circuit mapping complete and accepted.
- 3) Is contractor responsible to keep energize Data/telephone closets and emergence equipment 24/7 on the areas affected?  
Answer: Yes. The voice/ data system shall not be de-energized during the physical replacement activities and related changeovers. Provide temporary receptacles and separate scheduled changeover for the voice/data equipment. At the completion of the work, schedule a separate change over to restore and remove all temporary. The locations of the voice/data closets are shown in plan.
- 4) Is the Short circuit study, coordination study and ARC Flash study from the breaker at the substation to the last panel on the riser or the entire substation have to be included?

Answer: Begin at the 4160V connection and continue to the end of the system. The VA will provide short circuit current at 4160V. The contractor shall accurately field measure all distances and verify device model and serial numbers. This study must accompany the panel board shop drawing submittal.

- 5) Is a temporary riser and panels per each riser needed, even if is only one panel at the riser?

Answer: All temporary systems shall be in conduit and sized to meet the existing peak demand load. Temporary risers can only occur in electrical closets and horizontal temporary feeders are allowed above lay in ceilings if installed per code and approved by the COTR. Include replacing all ceiling disturbed.

- 6) Can multiple risers be work at the same time?

Answer: No. This is a fully occupied facility and large-scale shutdowns will not be allowed.

- 7) Panels serving elevators are require having shunt trip breakers?

Answer: Yes. All work must meet the requirements of VA Standards and latest version of NFPA 70. All work to comply with NFPA 70E.

- 8) General Note #4 on drwg. E201 states to provide a ground bus with each panel. On drwgs. E005 and E006 under the phases XI, XII, and XIII, the new feeders shown to each of the panels do not include any ground wires in them. What are we to follow?

Answer: All panels shall have a ground bus. All feeders shall have full size copper conductors with grounding conductor. Replace any conduit that does not meet fill requirements.

- 9) Key Note #1 and 2 on drwg. E201- Where is these Key Notes to be applied to on this drawing?

Answer: Keynote 1 applies to all bus sizes 400 amp and larger. Keynote 2 applies to all distribution panels

- 10) What does the dark and light lines mean?

Answer: Ignore the print quality. All feeders and panels in the scope of the work are to be replaced.

- 11) Do we replace transformers and transfer switches?

Answer: No

- 12) Do we replace distribution panels?

Answer: Yes.

- 13) When we test the breakers in the substation is there a spare?

Answer: Provide temporary breaker if using off-site testing service or when test duration exceeds shut down time.

- 14) Who tests the breakers?

Answer: Substation breakers are to be tested using NETA Certified service and certified technicians.

15) Is there clearance in the basement ceiling?

Answer. Most cases no. It is important to note that the existing feeders run horizontally in a low height dirt bottom crawl space. It is not a basement. All areas of the crawl space are OSHA 'Permit Required Confined Space'. Installation work is significantly difficult and the contractor must provide temporary lighting, power and Personal Protective Equipment.

16) Can we use aluminum?

Answer: Copper for wire, no aluminum conduit.

17) Is there an existing power system study that can be modified to included/analyze the new panel boards?

Answer: No

18) Will the VA provide details about the protective devices in Substations 4 & 11?

Answer: No, the contractor must include field verification of all equipment models and distances.

19) Will the VA provide details about the protective devices in the medium voltage switchgear (serviced by the utility) down to substations 4 & 11 for quotation of the Power System Study?

Answer: Begin the study at the last interface of 4160V, which is not the utility point of common coupling.

20) Clarify if an Arc Flash Hazard Analysis is required?

Answer: Yes

21) Will you provide a narrative description of the Arc Flash/Coordination Study desire and intent?

Answer: Provide arc flash labels on all panels and distribution points.

22) Do we have to provide the files?

Answer: all submittals PDF format. As Builts plans and risers in CAD and PDF, Device Study in PDF plus turn over project directory in the format used so the project can be opened by the source software and entire study re-calculated by the VA.

23) Sheet E005 shows four panels in Phase X that are connected to the riser in Phase XI. Are they included?

Answer: Yes

24) Do we replace medium voltage feeders or medium voltage equipment?

Answer: No

25) Do we replace ATS, UPS or Disconnects?

Answer: No

26) What if we find something that does not work.

Answer: Immediately notify the CO and COTR.

27) Can we re-use conduit?

Answer: Yes if it serviceable, like new condition, no rust or damage, meets code, goes to the correct location and has the correct pull boxes.

28) Can we use radios?

Answer: No for music, yes for hand held when frequencies are approved by the COTR and VA Police.

29) What if the panels are not correct?

Answer: The contractor is to field verify the panels and circuit breaker mix prior to shop drawing review. Minimum of 42 poles and 22k AIC for any branch circuit panel and 65k AIC for any distribution panel. In addition, modify the conduit, mounting, position, etc. to comply with Code. It is known that the building is existing and not all working clearances are achievable. Include in the bid minor adjustments to any panel not exceeding 3 feet horizontally or vertically.

30) Do replace the transfer switch feed?

Answer: Yes, replace normal, emergency and load feeds.

31) Can we re-use racks?

Answer: Rework existing racks to meet current code when re-used.

END OF ADDENDUM NO. 2