

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE

PAGE OF PAGES

1 24

2. AMENDMENT/MODIFICATION NO. 0002	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 4200466548R	5. PROJECT NO. (If applicable) 98860
6. ISSUED BY John F. Kennedy Space Center, NASA Procurement Office, OP-ES-A Kennedy Space Center, FL 32899	CODE OP-ES-A	7. ADMINISTERED BY (If other than Item 6) Same as block 6	CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)	9A. AMENDMENT OF SOLICITATION. X NNK13466548R
	10A. MODIFICATION OF CONTRACT/ORDER NO.
	10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is required to sign this document and return copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

The purpose of Amendment 0002 is to:

- A. Provide Government answers to potential bidder's questions.
- B. Incorporate changes to the solicitation as a result of responses to bidder questions.
- C. All other terms and conditions remain unchanged.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Sherry Gasaway, Contracting Officer
15B. CONTRACTOR/OFFEROR	16B. UNITED STATES OF AMERICA
(Signature of person authorized to sign)	BY <u>Sherry Gasaway</u> (Signature of Contracting Officer) <u>May 21, 2013</u>
15C. DATE SIGNED	16C. DATE SIGNED

NNK13466548R – Revitalize Medium Voltage, Industrial and Payload Process Areas, PCN: 98860

A. ANSWERS TO BIDDERS QUESTIONS:

1. REFERENCE: Section M.1.b.(1) Factor 1 - Technical Experience

QUESTION: This section requires all three projects listed to have been individually valued at or over \$3M to receive an "ACCEPTABLE" rating. We request you consider allowing the technical experience projects to be rated "acceptable" at a lower dollar value (\$1M) to demonstrate the very specific technical experience and perhaps require an additional listing of all projects in the last five years over \$3M to demonstrate the ability to manage and successfully complete projects of larger dollar value.

RESPONSE: No, the Government is keeping the value at \$3M.

2. REFERENCE: Section M.1.b.(1) Factor 1 - Technical Experience

QUESTION: This section requires all three projects listed to have been performed under NAICS code 237130. We request you consider expanding the NAICS code for the technical experience projects to include other related NAICS codes such as 238210.

RESPONSE: No. The Government will not be revising the NAICS code to include other NAICS codes.

3. REFERENCE: N/A

QUESTION: Will we be allowed to access & work in manholes with live cables (other circuits) in the man holes?

RESPONSE: Yes, and reference solicitation Project Specific Requirement J-B-28 POWER MANHOLE ENTRY SAFETY REQUIREMENTS.

4. REFERENCE: N/A

QUESTION: Will NASA perform all switching?

RESPONSE: NASA will perform all the switching on energized systems. Also, reference Project Specific Requirement J-B-1 UTILITY OUTAGE, ENERGIZED ELECTRICAL WORK, ELECTRICAL HAZARD ANALYSIS, AND EXCAVATION PERMITS.

5. REFERENCE: Sheet 74

QUESTION: Sheet 74 note "C" indicates VFI 18A and VFI 19A; where are these to be installed?

RESPONSE: Reference new Addendum Item No. 14

6. REFERENCE: Solicitation Section C – Description/Specification/Work Statement

QUESTION: Both Option 3 and 5 list the removal of cable designated AU. Which option should it be in?

RESPONSE: Reference new Addendum Items No.15 and 16.

7. REFERENCE: Solicitation Section C – Description/Specification/Work Statement

QUESTION: Option 3, 1.f both cables are listed as 94. Should 1 cable be 93?

RESPONSE: Reference new Addendum Items No.17 and 18.

8. REFERENCE: Solicitation Section C – Description/Specification/Work Statement

QUESTION: Cable AZ is listed in Option 3 and Cable 39 is listed in Option 5. Should they be listed in the same option?

RESPONSE: Reference new Addendum Items No.15, 16 ,17 & 18.

9. REFERENCE: Solicitation Section C – Description/Specification/Work Statement

QUESTION: Cable 36 is not listed in any option. Which option should it be listed in?

RESPONSE: Reference new Addendum Items No.15 and 16.

10. REFERENCE: Drawing E-002

QUESTION: Specific Note A, “ASSUME SPLICES ARE REQUIRED IN ALL MANHOLES FOR BOTH NEW CABLES AND CONNECTIONS TO EXISTING CABLE.” Are there any exceptions to this statement?

RESPONSE: For bidding purposes there are no exceptions. Indicate on the cable pulling plan where splices are planned to be installed.

11. REFERENCE: Drawing E-415

QUESTION: Specific Note J is not shown on the Site Plan. Question: Is it required?

RESPONSE: Reference new Addendum Item No.19.

12. REFERENCE: Drawing E-425

QUESTION: Specific Note C, "Field verify location of existing Fire Pump ATS". Please provide location of ATS or give the distance for bid purposes.

RESPONSE: The ATS is located within 20-feet South of the end of the conduit run indicated.

13. REFERENCE: Drawing E-431

QUESTION: Zone B/7 Refer to Drawing E-103 for continuation. Drawing E-103 continuation is not shown. Please provide a Site Plan showing the continuation.

RESPONSE: Reference new Addendum Item No. 20. The approximate distance between this J-Box at Bldg. M7-407 and the center of Substation 119 is approximately 90-feet.

14. REFERENCE: Drawing E-432

QUESTION: Zone B/8 Refer to Drawing E-103 for continuation. Drawing E-103 continuation is not shown. Please provide a Site Plan showing the continuation.

RESPONSE: Reference new Addendum Item No. 21. The approximate distance between this J-Box at Bldg. M7-407 and the center of Substation 119 is approximately 150-feet.

15. REFERENCE: Drawing E-436, Specific Note R

QUESTION: What is the height and depth of the existing MV Pull Box?

RESPONSE: 72-inches high and 16.25-inches deep (existing width is 27.875 inches).

16. REFERENCE: Drawing H-006

QUESTION: Transformer PCB's were not detected in (8) samples analyzed. Drawing E-001 General Note 9 states to test for PCB's. Since they have already been tested by the government is another test required?

RESPONSE: Yes. Reference new Addendum Item No. 22.

17. REFERENCE: J-B-28 Unique Project Specific Requirements, Power Manhole Entry Safety Requirements, Para 1.3

QUESTION: How many manholes will totally de-energized?

RESPONSE: One, MHP-65A in Option 2. All other manholes will have energized cables within the manhole.

18. REFERENCE: J-B-28 Unique Project Specific Requirements, Power Manhole Entry Safety Requirements, Para 1.5

QUESTION: Where the integrity of an existing feeder is suspect due to failure history, an engineering assessment shall be made and, if deemed necessary, the suspect section(s) of the cable shall be de-energized prior to entering a manhole/vault known to contain or assumed to contain the feeder.

a. Is the government providing this engineering assessment?

RESPONSE: Yes.

b. How will the contractor know if cables are suspect?

RESPONSE: The Government will advise the Contractor of any Orsino Substation supplied cable failures during the course of the project, and any determination regarding suspect cables.

19. REFERENCE: J-B-28 Unique Project Specific Requirements, Power Manhole Entry Safety Requirements, Para. 3.2.2

QUESTION: An engineering review of the feeder circuit and manhole documentation shall confirm that there are no remaining energized cables. Is the government providing this engineering review?

RESPONSE: Yes. The review will be supplied to the Contractor.

20. REFERENCE: J-B-28 Unique Project Specific Requirements, Power Manhole Entry Safety Requirements, Para. 3.2.2

QUESTION: The switching order shall be reviewed by the project electrical engineer.

a. Who is providing the project electrical engineer?

RESPONSE: Government engineers will review the switching order and the switching order will also be provided to the Contractor.

b. Para. 3.2.6 who verifies the loads are off after switching?

RESPONSE: The Government with Contractor witness.

- c. Is an energized work permit required for visual inspections and ground checks?

RESPONSE: No, but a confined space entry permit and job hazard analysis is required.

- d. What are the sizes of the manholes?

RESPONSE: Manhole sizes vary widely. For bidding purposes regarding materials to be provided assume: MHP-1 and MHP-9 are 25-feet by 25-feet. All others assume 12-feet by 12-feet.

21. REFERENCE: RECORD OF MANHOLE LATEST CONFIGURATION

QUESTION: What type of labeling is required on the manhole walls?

RESPONSE: Reference new Addendum Item No. 23.

22. REFERENCE: Kennedy NASA Procedural Requirements KNPR 8715.7

QUESTION: Paragraphs 3.5.5 Shock Hazard Analyses and 3.5.6 Flash Hazard Analyses and Arc Flash PPE. Is this requirement to be provided by a Florida Registered Professional Engineer?

RESPONSE: No. Requirement must be provided by an electrical safety professional and will be reviewed by the Government. However, an individual with PE registration in any state would be acceptable.

23. REFERENCE: J-B-27 RECYCLING AND SALVAGING MATERIALS

QUESTION: J-B-27 RECYCLING AND SALVAGING MATERIALS states that the cable will become the contractor's property for salvage. If the PILC Cable results indicate represent a PCB Hazard will the government provide equitable payment to the contractor for lost salvage costs?

RESPONSE: Yes. Salvage value will be based on material value at the time of contractor proposal submission.

24. REFERENCE: Drawing S-401, Detail 1

QUESTION: A note exists to provide underpinning with an arrow drawn to a dashed line.

- a. We believe the arrow should point at the gravel retaining wall, is this correct?

RESPONSE: No. The underpinning is to provide protection for building spread footing during construction and installation of the electrical conduits.

b. We will not be undermining the gravel retaining wall; can the underpinning PE design be eliminated?

RESPONSE: No, see response No. 24 a. above.

25. REFERENCE: Drawing E-001, General Note 26 Asbestos Containing Material

QUESTION: At this time we do not know if asbestos is present in any of the manholes. Could we provide a line item cost for asbestos abatement in a single manhole? (This could save a considerable amount of money)

RESPONSE: Based on previously completed work, asbestos in manholes is not anticipated. If asbestos abatement (and Orangeburg duct) is required, it will be handled as a contract change.

26. REFERENCE: N/A

QUESTION: Is there a requirement for Surveying duct banks, manholes, directional drilling and the site work on the C drawings?

RESPONSE: Yes, Reference new Addendum Items No. 24 and 25.

27. REFERENCE: Spec Section J-B-25, PCB Management

QUESTION: Specifically where is the Ransom Road Material Yard located in relation to the jobsite?

RESPONSE: Reference Sheet V-002 location map. The Ransom Road yard is located at the South-West extremity of the location map. It is approximately 4 miles from the Industrial Area Chiller Plant M7-407.

28. REFERENCE: Spec section J-B-27, Recycling and Salvage

QUESTION: Where is the Schwartz road Landfill?

RESPONSE: Reference Sheet V-002 location map. The Schwartz Road yard is located near the center of the North-extremity of the location map. It is approximately 7 miles from the Industrial Area Chiller Plant M7-407.

29. REFERENCE: Spec Section J-B-11 TEMPORARY CONSTRUCTION TRAILERS

QUESTION: Specifically where will the contractor laydown area located in relation to the jobsite?

RESPONSE: Construction trailer and lay down area is anticipated to be within 1-mile of the Industrial Area Chiller Plant (M7-407).

30. REFERENCE: Spec Section J-B-21 ORANGEBURG DUCTWORK.

QUESTION: Can the Govt. identify which of the existing/to be used and existing/to be demolished ductbanks are of orangeburg pipe construction?

RESPONSE: Based on previously completed work Orangeburg duct work is not anticipated. If Orangeburg duct abatement is required, it will be handled as a contract change.

31. REFERENCE: Drawing Sheet #E-511 and E-513, 33.70.02.00.20, 2.5

QUESTION: Please verify that pre-cast structures (manholes and outdoor equipment pads) are acceptable in lieu of cast-in-place structures.

RESPONSE: Reference new Addendum Item No. 26.

32. REFERENCE: Solicitation section C.2, Addenda to Specifications and Drawings

QUESTION: Item #10 directs us to replace paragraph 2.4.5 with new paragraph. New paragraph refers only to 500MCM 5kV cable omitting any reference to 5kV 4/0 AWG and 350MCM cables. Shouldn't the direction be to supplement the existing paragraph 2.4.5 instead of replacing it?

RESPONSE: No. Refer to Sheet 36 (E-004). For 5 kV cables, concentric neutral construction is only required for Cables 61, 62, 63 and 65. Other 5 kV cables have a separate equipment ground conductor installed with the medium voltage power circuit conductors.

33. REFERENCE: Drawing Sheets #E-511, E-512 & E-513, Spec Section 33.71.02.00.20, 3.3.1 & 3.3.5

QUESTION: Where underground ducts transition to aboveground protected locations (into transformers, cabinets and switchgear, are PVC sweep elbows acceptable, or are RGS (or PVC/RGS) elbows required?

RESPONSE: PVC sweep elbows are acceptable outdoors and underground where they

are protected by metal enclosures.

34. REFERENCE: Spec Section 33.71.02.00.20, 3.4 Cable Pulling

QUESTION: To clarify, cables passing through manholes are required to wrap to sides of manhole, taking longest path to exit, but not requiring at least a full (360+ degree) wrap inside manholes?

RESPONSE: Yes

35. REFERENCE: Attachment J-C, DBW, FL130001 04/05/2013 FL1

QUESTION: Regarding wage determination: Would all medium voltage work be considered "line construction" (as opposed to "Electricians" rate) or does "line construction" apply only to overhead distribution?

RESPONSE: Contact the below union representatives to determine above distinctions:

Electrician Representative: Dan Hunt at 386-232-6079

Line Construction: Bill Hitt at 352-303-8981

36. REFERENCE: Attachment J-C, DBW, FL130001 04/05/2013 FL1

QUESTION: Electrician rates ELEC-0756-001 12/31/2012 has fringes shown in a different format than what we normally see "Cable Splicer..... Rates = \$25.90 Fringes = 5.50% + 8.50". Yet in the Line Construction heading, ELEC-0222-001 10/15/2012, it is shown as "Cable Splicer..... Rates = \$31.66 Fringes = 5.00 + 23%". Can you verify the fringes for Electrician?

RESPONSE: See response to bidder's question No. 35 above.

37. REFERENCE: Specifications Section 02 82 33.13 20 item 1.3.1 Description of Work

QUESTION: Remove/control lead-based paint/ paint with lead as indicated on the drawings. This leads us to infer that lead abatement procedures would be expected as part of the project scope, however we have not found any such indication/direction for any paint removal on the project drawings. Are there instructions for paint removal on the plans that we might have missed, or is paint removal just a contingency that we should prepare for, just in case?

RESPONSE: Contaminated paint or paint not sampled must be considered hazardous and appropriate worker and environmental protection applies. Contractor shall provide all needed procedures for worker protection, paint removal and disposal. The only paint removal required is that necessary to perform the demolition or installation work, and the

installation method must not generate paint dust or fumes (no drilling or hole saws).

38. REFERENCE: Spec Section J-A-8, page 111

QUESTION: Who pulls the NPDES Construction Stormwater & Environmental Resources Permit?

RESPONSE: A NPDES permit is not required for this project. If that changes, NASA will obtain the permit.

39. REFERENCE: Spec Section 02.41.00, 3.2.2.a

QUESTION: Demolished PILC cable is to be tested for PCBs prior to release of cable to contractor. Is this testing to be accomplished by the contractor or by the Govt.?

RESPONSE: Reference new Addendum Item No. 27

40. REFERENCE: Spec Section 02 82 13.00 98,

QUESTION: Just to clarify, item 1.1 states "No asbestos abatement work is in the contract scope."

- a. So, other than awareness and avoidance, asbestos related issues are not expected. Is this correct?

RESPONSE: Yes

- b. In the eventuality that abatement work is judged necessary, the contractor is to stop work pending an asbestos abatement contract change. Is this correct as well?

RESPONSE: Yes. Work stoppage will be limited to the area affected by the asbestos abatement.

41. REFERENCE: Drawing Sheets #H-001 thru H-006.

QUESTION: According to testing results in the appendices, the transformer oil is expected to be PCB free, although the exterior paint of SS-B, SS-C and SS-EE has been PCB contaminated. Is this correct?

RESPONSE: Yes, but refer to specific equipment identified by Flag Note C on Sheet H-005 that has PCB contaminated paint. Also, reference new Addendum Items No. 22 and 28.

42. REFERENCE: 26 11 13.00 98, 2.2.1.1

QUESTION: The spec calls out type 2 suffix B and suffix C. Is type 2B acceptable for this project?

RESPONSE: No. Provide as specified.

43. REFERENCE: Section M.1.b.(1) Factor 1 - Technical Experience

QUESTION: The spec calls for all past performance projects to have been performed under NAICS code 237130, for the past few years. Due to such issues such as a project being funded by recovery money, or to work around certain contractual issues, the government has issued many of these types of projects, for several million dollars each, under different codes, such as "service contracts". Will KSC consider other NAICS code projects during t evaluation?. These projects have all of the same types of work as the KSC project, but the government chose to assign them different numbers, according to where present funds were available?

RESPONSE: Projects meeting the description of Power and Communication Line and Related Structures Construction will be evaluated as being performed under NAICS Code 237130. See Section M.1.b.(1).

44. REFERENCE: Synopsis

QUESTION: The synopsis states "The acquisition shall be conducted as a 100% small business set-aside.", will the Government consider a large business.

RESPONSE: No

45. REFERENCE: Section 26 11 13.00 98

QUESTION: Impedance requirement in Section 26 11 13.00 98, page 263, sub-section 2.2.3.5 call for the tested impedance to be between 6.0125% and 6.5%. IEEE/ANSI standards allowed test tolerance for transformers is of +/- 7.5%.

Please request that this allowed test tolerance be confirmed to IEEE/ANSI usual allowed tolerance of +/- 7.5%

RESPONSE: The government will not allow the requested tolerance. Transformer manufacturers can meet the contract specified requirement. This requirement has to be met for the new transformers.

B.) INCORPORATE CHANGES INTO SOLICITATION

(b) Addenda to Specifications and Drawings:

14. Sheet 74 (E-513), revise Specific Note C as follows:

From: "Basis of design for switch dimensions are shown below. Adjust dimensions as required based on actual equipment provided: 88" for VFI-13, VFI-18A, and VFI-19A. 124" for VFI-14, VFI-31, VFI-32, and VFI-80."

To: "Basis of design for switch dimensions are shown below. Adjust dimensions as required based on actual equipment provided: 88" for 4-position switches, 124" for 6-position switches."

15. Option 5 Scope of Work Notes are revised as follows:

Note 1a: From: "Remove 15 kV cables AD, AE, AJ, AU, and AW."

To: "Remove 15 kV cables AD, AE, AJ, AW and AZ."

Note 1b: From: "Install new 15 kV cables 34, 35, 37, and 39."

To: "Install new 15 kV cables 34, 35, 36, 37, and 39."

16. Option 5 Drawing Notes are revised as follows:

Note 4: From: "References to the following existing cables on E-003 and other electrical sheets indicated below: AD, AE, AJ, AU, and AW. Notes A, B, and D apply."

To: "References to the following existing cables on E-003 and other electrical sheets indicated below: AD, AE, AJ, AU, AW, and AZ. Notes A, B, and D apply."

Note 5: From: "References to the following new cables on Sheet E-004 and other electrical sheets indicated below: 34, 35, 37, and 39. Notes A, C, and D apply."

To: "References to the following new cables on Sheet E-004 and other electrical sheets indicated below: 34, 35, 36, 37, and 39. Notes A, C, and D apply."

17. Option 3 Scope of Work Notes are revised as follows:

Note 1c: From: "Removal of medium voltage cables designated as K through T, V, AU, AZ, BA, and BB (Sheet E-003)."

To: "Removal of medium voltage cables designated at K through T, V, AU, BA, and BB (Sheet E-003)."

Note 1f: From: "Installation of low voltage cables designated as 94 and 94 (Sheet E-004) and enclosed low voltage circuit breaker."

To: "Installation of Low Voltage cables designated 93 and 94 (Sheet E-004) and enclosed low voltage circuit breaker."

18. Option 3 Drawing Note is revised as follows:

Note 8: From: "References to the following existing cables on Sheet E-003 and other electrical sheets indicated below: K thru T, V, AU, AZ, BA, and BB. Notes A, B, D, and E apply on Sheet E-003."

To: "References to the following existing cables on Sheet E-003 and other electrical sheets indicated below: K thru T, V, AU, BA, and BB. Notes A, B, D, and E apply on Sheet E-003."

19. Sheet 57 (E-415); the five (5) Specific Flag Note H indications, in Drawing Zone D/5-7 (for the 5 ducts leaving building M7-407 to the new Substation 119 location) are changed to Flag Note J indications.

20. Sheet 63 (E-431), revise note in Drawing Zone B7 as follows:

From: "REFER TO DRAWING E-103 FOR CONTINUATION"

To: "CONDUITS ROUTED TO EXISTING SUBSTATION 119 – REFERENCE DETAIL 1 ON SHEETS E-103 AND E-405"

21. Sheet 64 (E-432), revise note in Drawing Zone B8 as follows:

From: "REFER TO DRAWING E-103 FOR CONTINUATION"

To: "CONDUITS ROUTED TO EXISTING SUBSTATION 119 – REFERENCE DETAIL 1 ON SHEETS E-103 AND E-405"

22. Sheet 33 (E-001), revise the first sentence in Note 9 as follows:

From: "THE CONTRACTOR SHALL TEST TRANSFORMER OIL FOR PCB'S PRIOR TO REMOVAL."

To: "THE CONTRACTOR SHALL TEST TRANSFORMER OIL FOR PCB'S WITHIN 120-DAYS PRIOR TO REMOVAL."

23. Solicitation Attachment J-B, Section J-B-28, Sub Section RECORD OF MANHOLE LATEST CONFIGURATION – Revise the first sentence as follows:

From: "Once the work inside a manhole is complete, the contractor shall take photos inside the manhole and shall label all the walls in the manhole
EXAMPLE: MH-E9 West Wall to MH-E10."

To: "Once the work inside a manhole is complete, the contractor shall take photos inside the manhole and shall label all the submitted photographs from the manhole EXAMPLE: MH-E9 West Wall to MH-E10."

24. Specification 33 40 00, Section 1.3 SUBMITTALS, add the following:

Add: "SD-11 Closeout Submittals
Post-Installation Inspection"

25. Specification 33 40 00, Revise Paragraph 3.8.3.b Post-Installation Inspection:

From: "Reports: The deflection results and final post installation inspection report shall include: a copy of all video taken, pipe location identification, equipment used for inspection, inspector name, deviation from design, grade, deviation from line, deflection and deformation of flexible pipe systems, inspector notes, condition of joints, condition of pipe wall (e.g. distress, cracking, wall damage dents, bulges, creases, tears, holes, etc.)."

To: "Reports: The deflection results and final post installation inspection report shall include: site civil record drawings provided by a registered Florida surveyor, a copy of all video taken, pipe location identification, equipment used for inspection, inspector name, deviation from design, grade, deviation from line, deflection and deformation of flexible pipe systems, inspector notes, condition of joints, condition of pipe wall (e.g. distress, cracking, wall damage dents, bulges, creases, tears, holes, etc.)."

26. Sheet 33 (E-001); Add General Note 28: "Equipment pads and foundations shall be cast-in-place. Manholes may be pre-cast structures."

27. Specification 02 41 00, Section 3.2.2.a: Revise the sixth sentence as follows:

From: "Demolished cable shall be tested for PCBs in accordance with specified environmental testing requirements."

To: "Demolished cable shall be tested by the Government for PCBs in accordance with specified environmental testing requirements; Contractor shall provide up to a 3-foot sample of each demolished section as requested."

28. Specification 02 41 00, Section 3.2.2.c: Revise entire paragraph as follows:

FROM: "Painted metals are to segregated and disposed of in accordance with Section 01 57 20.00 10 ENVIRONMENTAL PROTECTION."

TO: "All painted metals with PCB content greater or equal to 50ppm or paint that is not sampled for hazardous materials remain the property of the Government. Painted metals are to be segregated and disposed of as follows:

- 1) Metals, excluding for oil filled transformers, with paint not sampled or PCB content greater or equal to 50 ppm shall be disposed of in accordance with Section 01 57 20.00 10 ENVIRONMENTAL PROTECTION at the KSC landfill as PCB Bulk Product Waste.
- 2) Immediately upon removal of oil filled substation transformer equipment drained of oil with PCB contaminated paint, the equipment shall be palletized, visqueen wrapped (10-mil minimum thickness, string re-inforced, no holes), with visqueen wrap secured such that no contaminated paint can escape during storage or transport.
- 3) Metals with paint not sampled shall be stored in a separate dumpster with proof covers such that no contaminated paint can escape during storage or transport.
- 4) Metals, except oil filled transformers, sampled with PCB content less than 50 ppm shall be recycled for salvage value by the Contractor or disposed of by the Contractor at KSC's Ransom Road facility."

29. Specification 26 23 00, Section 1.3 Definitions, Add Paragraph b as follows:

"b. Outdoor locations are considered "wet" locations and requirements for wet locations in this section apply."

30. Specification Section 26 05 13.00 98, Section 2.3.5 is revised as follows:

From: "Provide copper wires helically applied over the insulation shield, where the minimum total cross sectional area (of the shield wires) is 1/3 of the core conductor for 350 kcmil cable. Minimum size of an individual shield wire is No. 14 AWG."

To: "Provide copper wires helically applied over the insulation shield. Minimum total cross sectional area (of the shield wires) is 1/3 of the core conductor for 350 kcmil cable, and full conductor for 4/0 cable. Minimum size of an individual shield wire is No. 14 AWG."

31. Specification 26 05 71.00 40, Section 2.3.1 Power Circuit Breakers, revise the trip unit type in first sentence of 5th paragraph and 4th sentence of 8th paragraph to that incorporating ground fault protection as follows:

From: "Micrologic 5.0P"

To: "Micrologic 6.0P"

32. Specification 26 20 00 Section 2.21 FACTORY APPLIED FINISH, revise the first sentence as follows:

From: "Electrical enclosures installed outdoors should be NEMA 4X, Type 16 stainless steel."

To: "Electrical enclosures installed outdoors shall be NEMA 4X, Type 16 stainless steel."

33. Revise Project Deliverable J-A-1 SUBMITTAL SCHEDULES:

From:

(a) Within 15 days of Notice to Proceed, the Contractor shall provide, for approval by the Contracting Officer, the following schedules of submittals

(b) All submittals called for by the contract documents will be listed on one of the above schedules. If a submittal is called for but does not pertain to the contract work, the Contractor will include it in the applicable schedule and annotate it "N/A" with a brief explanation. Approval of the schedules by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but which have been omitted from the schedules or marked "N/A".

(c) Copies of both schedules will be re-submitted monthly annotated by the Contractor with actual submission and approval dates. When all items on a schedule have been finally approved, no further re-submittal of the schedule is required.

To:

(a) Within 15 days of Notice to Proceed, the Contractor shall provide, for approval by the Contracting Officer, the following schedules of submittals:

1. A schedule of all shop drawings and technical submittals required by the specifications and drawings. The schedule will indicate the specification or drawing reference requiring the submittal; the material, item or process for which the submittal is required; the "SD" number and identifying title of the submittal; the Contractor's anticipated submission date and the approval need date.
2. A separate schedule of all other submittals required under the contract but not listed in the specifications or drawings. The schedule will indicate the contract requirement reference; the type or title of the submittal; the Contractor's anticipated submission date and the approval need date (if approval is required).

(b) All submittals called for by the contract documents will be listed on one of the above schedules. If a submittal is called for but does not pertain to the contract work, the Contractor will include it in the applicable schedule and annotate it "N/A" with a brief explanation. Approval of the schedules by the Contracting Officer does not relieve the Contractor of supplying submittals required by the contract documents but which have been omitted from the schedules or marked "N/A".

(c) Copies of both schedules will be re-submitted monthly annotated by the Contractor with actual submission and approval dates. When all items on a schedule have been finally approved, no further re-submittal of the schedule is required.

34. Revise Specific Project Requirement J-B-28 UNIQUE PROJECT SPECIFIC REQUIREMENTS, POWER MANHOLE ENTRY SAFETY REQUIREMENTS, Para 1.1

From:

Underground utility work practices shall be in accordance with Part 3 of the NESC and NFPA 70E; medium voltage cable cutting practices shall be as follows:

Medium Voltage Cable Cutting – Identification of all cables to be cut is the responsibility of the Contractor, and the Contractor is notified that documentation identifying cables within manholes is not available. Cable cutting and demolition of any medium voltage cable can occur only after approval by the Contracting Officer. The Contracting Officer shall be notified 14 calendar days prior to an outage for demolition or cutting of cables on medium voltage systems. The Government has established a mandatory inspection point prior to the Contractor performing any medium voltage cable cuts or demolition. The Contracting Officer shall be notified 48 hours in advance of this mandatory inspection point. As part of the mandatory inspection point, the medium voltage cable to be worked on shall be positively identified and labeled utilizing electronic cable identifiers. A minimum of two different electronic cable identifying systems provided by different manufacturers shall be used in each cable identification process. Electronic cable identifying means used shall be specifically designed to identify de-energized 15 kiloVolt class 3-conductor paper-insulated-lead-covered (1-3/C PILC) and single conductor with concentric neutral (3-1/C CN) type cables in manholes with other energized cables present and adjacent to those being identified. Existing terminations and splices on both types of cables ground the lead sheath and concentric neutrals of cables to be tested at multiple locations. The Site Specific Safety Plan (SSSP) shall include each electronic means to be utilized, copies of the manufacture's instruction, and the procedure to be used by employees identifying the cable. The process of identifying and labeling the cable to be worked on shall be witnessed by the Government and shall follow the submitted procedure. All personnel shall be outside of the manhole and five (5) feet away from the manhole entry prior to the cable being spiked or cut. Cables shall be remotely cut or spiked.

To:

Underground utility work practices shall be in accordance with Part 3 of the NESC and NFPA 70E; medium voltage cable cutting practices shall be as follows:

Medium Voltage Cable Cutting – Identification of all cables to be cut is the responsibility of the Contractor, and the Contractor is notified that documentation identifying cables

within manholes is not available. Cable cutting and demolition of any medium voltage cable can occur only after approval by the Contracting Officer. The Contracting Officer shall be notified 14 calendar days prior to an outage for demolition or cutting of cables on medium voltage systems. The Government has established a mandatory inspection point prior to the Contractor performing any medium voltage cable cuts or demolition. The Contracting Officer shall be notified 48 hours in advance of this mandatory inspection point. As part of the mandatory inspection point, the medium voltage cable to be worked on shall be positively identified and labeled utilizing electronic cable identifiers. A minimum of two different electronic cable identifying systems provided by different manufacturers shall be used in each cable identification process. Electronic means of cable identification shall be specifically designed to identify de-energized 15 kiloVolt class 3-conductor paper-insulated-lead-covered (1-3/C PILC) and single conductor with concentric neutral (3-1/C CN) type cables in manholes with other energized cables present and adjacent to those being identified. **Electronic cable identifier shall only react to the unique signal transmitted by its paired device (receiver shall react only to the unique signal from transmitting unit).** Existing terminations and splices on both types of cables ground the lead sheath and concentric neutrals of cables to be tested at multiple locations. The Site Specific Safety Plan (SSSP) shall include each electronic means to be utilized, copies of the manufacture's instruction, and the procedure to be used by employees identifying the cable. The process of identifying and labeling the cable to be worked on shall be witnessed by the Government and shall follow the submitted procedure. All personnel shall be outside of the manhole and five (5) feet away from the manhole entry prior to the cable being spiked or cut. Cables shall be remotely cut or spiked.

35. Sheet 14 (C-103), Revise Note in Drawing Zone C3:

From: "PROPOSED (2) DIRECTIONAL BORES WITH (3-WAY) 5" DR11 (IPS) ELECTRICAL CONDUITS EACH"

To: "PROPOSED (2) DIRECTIONAL BORES WITH (3-WAY) 5" SDR 13.5 HDPE ELECTRICAL CONDUITS EACH"

36. Sheet 19 (C-401), Revise Note in Drawing Zone 5E:

From: "PROPOSED (2) DIRECTIONAL BORES WITH (2-WAY) 5" DR11 (IPS) ELECTRICAL CONDUITS EACH"

To: "PROPOSED (2) DIRECTIONAL BORES WITH (2-WAY) 5" SDR 13.5 HDPE ELECTRICAL CONDUITS EACH"

37. Sheet 19 (C-401), Revise Dimensional Note in Drawing Zone D/3-7:

From: "(2) 415 LF (2-WAY) 5" DR11 HDPE (IPS SIZE)"

To: "(2) 415 LF (2-WAY) 5" SDR 13.5 HDPE"

38. Sheet 20 (C-402), Revise Note in Drawing Zone F6:

From: "PROPOSED (2) DIRECTIONAL BORES WITH (3-WAY) 5" DR11 (IPS) ELECTRICAL CONDUITS EACH"

To: "PROPOSED (2) DIRECTIONAL BORES WITH (3-WAY) 5" SDR 13.5 ELECTRICAL CONDUITS EACH"

39. Sheet 20 (C-402), Revise Dimensional Note in Drawing Zone D/4-8:

From: "(2) 290 ± LF (3-WAY) 5" DR11 HDPE (IPS SIZE)"

TO: "(2) 290 ± LF (3-WAY) 5" SDR 13.5 HDPE"

40. Revise Section M.1.b.(1)

From:

Offerors must provide evidence that they have the technical experience needed to meet the technical performance requirements of this project. The Government will assess the technical experience of the offeror on projects identified in the offeror's Technical Experience Summary. Offerors must meet all of the following standards to receive an "Acceptable" rating on this factor:

All three projects listed in the Technical Experience Summary must have been successfully completed within five (5) years of the date of issuance of this solicitation **NNK13466548R, 15 April 2013.**

All three projects listed in the Technical Experience Summary must have been performed by the prime contractor or major subcontractor under NAICS code 237130, Power and Communication Line and Related Structures Construction. Projects shall collectively demonstrate experience in the electrical, structural, civil, and environmental aspects involving all of the following: (1) above-ground and underground low and medium voltage cable systems to 15 kV class; (2) 15 kV class pad mounted switching and transformer equipment; (3) 5-10MVA class medium voltage outdoor metal-clad switchgear; (4) low voltage outdoor switchgear equipment; (5) work planning to eliminate or minimize outages at operational or governmental facilities; (6) demolition of electrical systems including hazardous material abatement and disposal procedures; (7) switchgear control power, instrument/metering, automated transfer control systems including the use of programmable logic controllers or Schweitzer Engineering protective relay systems;

(8) providing detailed shop drawings and as-built documentation including wiring diagrams, arrangement drawings, software documentation, power system analysis, coordination studies and relay settings; (9) providing arc-flash and job hazard analysis and the use of proper procedures and arc-flash/shock prevention protective equipment when performing electrical work; (10) successfully locating existing medium voltage cables to be cut within manholes with other energized cables present by electronic means.

All three projects listed in the Technical Experience Summary must have been individually valued at or over \$3M.

At least one of the projects listed in the Technical Experience Summary must have been performed at an active and secure government facility.

Failure to meet all of the requirements under this factor will result in an “UNACCEPTABLE” rating and elimination from further consideration for contract award.

To:

Offerors must provide evidence that they have the technical experience needed to meet the technical performance requirements of this project. The Government will assess the technical experience of the offeror on projects identified in the offeror's Technical Experience Summary. Offerors must meet all of the following standards to receive an “Acceptable” rating on this factor:

All projects listed in the Technical Experience Summary must have been successfully completed within five (5) years of the date of issuance of this solicitation **NNK13466548R, 15 April 2013.**

At least three projects listed in the Technical Experience Summary must have been performed by the prime contractor or major subcontractor under NAICS code 237130, Power and Communication Line and Related Structures Construction. Projects shall collectively demonstrate experience in the electrical, structural, civil, and environmental aspects involving all of the following: (1) above-ground and underground low and medium voltage cable systems to 15 kV class; (2) 15 kV class pad mounted switching and transformer equipment; (3) 5-10MVA class medium voltage outdoor metal-clad switchgear; (4) low voltage outdoor switchgear equipment; (5) work planning to eliminate or minimize outages at operational or governmental facilities; (6) demolition of electrical systems including hazardous material abatement and disposal procedures; (7) switchgear control power, instrument/metering, automated transfer control systems including the use of programmable logic controllers or Schweitzer Engineering protective relay systems; (8) providing detailed shop drawings and as-built documentation including wiring diagrams, arrangement drawings, software documentation, power system analysis,

coordination studies and relay settings; (9) providing arc-flash and job hazard analysis and the use of proper procedures and arc-flash/shock prevention protective equipment when performing electrical work; (10) successfully locating existing medium voltage cables to be cut within manholes with other energized cables present by electronic means.

At least three projects listed in the Technical Experience Summary must have been individually valued at or over \$3M.

At least one of the projects listed in the Technical Experience Summary must have been performed at an active and secure government facility.

Failure to meet all of the requirements under this factor will result in an “UNACCEPTABLE” rating and elimination from further consideration for contract award.

41. Revise Section M.1.b.(2), first paragraph:

From:

Past performance information is one indicator of an offeror’s ability to perform the contract successfully. The Government will assess the past performance of the offeror on the three projects identified in the offeror’s Technical Experience Summary. (This assessment of past performance information is separate from the contractor responsibility determination required under FAR Subpart 9.1.)

To:

Past performance information is one indicator of an offeror’s ability to perform the contract successfully. The Government will assess the past performance of the offeror on the projects identified in the offeror’s Technical Experience Summary. (This assessment of past performance information is separate from the contractor responsibility determination required under FAR Subpart 9.1.)

42. Add the following specific requirements to solicitation Attachment J-B:

J-B-29 SOLID WASTE

The Contractor shall be responsible for the proper management of all solid waste generated at the Kennedy Space Center from the execution of this contract. The Contractor shall segregate and transport all solid waste to disposal locations designated in the Contract Documents. The Contractor shall police work areas daily for loose trash and debris. The Contractor shall collect and properly dispose of wind-blown debris daily to prevent migration of debris/trash offsite.

Trash items not requiring special handling, or which cannot be resold or recycled, shall be disposed of in receptacles slated for disposal in either the KSC Landfill or the Brevard County Landfill. The Kennedy Space Center has numerous policies and processes in place to properly categorize, handle, store and dispose of waste streams generated during the project. It is the contractor's responsibility to make every effort to reduce the impact of the project on the environment. This includes utilizing all practical means to reduce the amount of waste that is landfilled or incinerated.

J-B-30 DIVERTED SOLID WASTE

The Contractor shall dispose of the following solid wastes at onsite KSC disposal facilities: Soils, Trees / tree remains, Vegetative material, Non-pressure treated wood, Dimensional non-pressure treated lumber, Pallets (Unserviceable Wood), Blast Media (non-hazardous), and **clean non-coated concrete**.

DARCY (*Diverted Aggregate Reclamation and Collection Yard*)

The contractor shall segregate clean, unpainted concrete from other Construction and Demolition Debris and deliver it to the Kennedy Space Center's Diverted Aggregate Recycling and Collection Yard (DARCY). The DARCY is located west of the Schwartz Road Landfill entrance. The Government shall retain ownership of all material delivered to the DARCY. EPOC shall provide DARCY operating plan upon request.

J-B-31 SCHWARTZ ROAD LANDFILL OPERATIONS

The KSC Landfill is an unlined Class III landfill. Any waste permitted by DEP regulations for disposal in a Class III landfill as defined in Rule 62-701.200(14), FAC can be accepted at the landfill (**excluding friable asbestos**). For the purpose of meeting recycling, waste diversion and reuse goals, KSC has restricted certain solid waste from landfill disposal (See *article Recycling and Salvaging*). Landfilling of waste shall be the Contractor's last option for disposal. Hours of operations will be from 0730 hours to 1100 hours and from 1200 hours to 1500 hours on , Tuesday and Thursday, excluding holidays.

The physical dimensions of the waste shall be within the handling capabilities of the landfill disposal equipment. The physical dimensions for the landfill handling capabilities are 8 feet in length x 8 feet in width. Only the following items listed will be accepted at the landfill:

- (1) Asphalt: Asphalt removed from parking lots, driveways, and roadways.
- (2) Blast Media: The blast media must be as free from debris as possible and determined nonhazardous for acceptance into the KSC Landfill. The Spent Sandblast Media Disposal Form must accompany the blast media to the landfill and will be reviewed by the landfill operator. Blasting media determined to be a hazardous waste must be managed as hazardous waste.

- (3) Carpeting
- (4) Construction and Demolition Debris: Materials considered not water soluble and non-hazardous in nature, including but not limited to steel, brick, glass, concrete, asphalt, pipe, gypsum wallboard and non-pressure treated or unpainted lumber. This also includes rocks, soils, tree remains and other vegetative matter, which normally result from land clearing or development. Scrap metal from demolition projects should be managed according to guidance provided under article entitled "Recycling and Salvaging Materials". The landfill may not accept any painted materials that test above the lower Toxicity Characteristic Leaching Procedure (TCLP) detection limits for barium, cadmium, chromium, lead, and mercury. If TCLP results are above the lower TCLP detection limits, the Contractor shall submit a PWQ for evaluation per article entitled "Hazardous Wastes."
- (5) Fiberglass
- (6) Glass (except light bulbs or lamps).
- (7) Non-Friable Asbestos: Non-friable asbestos, also referred to as Non-Regulated Asbestos Containing Materials (NRACM) is handled on a case-by-case basis. KSC policy allows for the disposal of NRACM only. In order to dispose of non-friable asbestos, the Contractor shall complete and submit the KSC/Schwartz Road Landfill Non-Friable Asbestos form (KSC 28-1084 NS), which can be obtained from the Contracting Officer (CO) or the CO's designee. The form shall be sent to NASA EAB, TA-B1B.

The following scheduling procedures shall be followed before NRACM wastes are accepted at the landfill:

- a. The waste generator/hauler shall make arrangements with the landfill operator a minimum of 24 hours before disposal of NRACM waste and shall inform the operator of the quantity of the waste and the scheduled date the shipment will arrive at the landfill.
 - b. NRACM will be accepted at the landfill with prior arrangement with the scale house attendant (minimum of 24 hours notification) Tuesday and Thursday, excluding holidays, from 0730 hours to 1100 hours and from 1200 hours to 1400 hours. Regulated waste will not be accepted later than 1400 hours.
- (8) Pallets (Unserviceable Wood and Plastics): Pallets that are not reusable or recyclable are accepted.

- (9) PCB Bulk Product Waste: Refer to Clause "PCB Management."
- (10) Wood: Miscellaneous non-pressure treated wood items are accepted.
- (11) Yard Waste (Vegetation): Vegetation from maintenance and land clearing activities is accepted.