

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES 1 19
2. AMENDMENT/MODIFICATION NO. 0002	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 4200554723	5. PROJECT NO. (If applicable) PCN 99035	
6. ISSUED BY John F. Kennedy Space Center, NASA Procurement Office, OP-ES Kennedy Space Center, FL 32899	CODE OP-ES	7. ADMINISTERED BY (If other than Item 6) Same as block 6		

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and Zip Code)	9A. AMENDMENT OF SOLICITATION. X NNK15554723R
	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. The proposal due date is extended from September 10, 2015 to September 14, 2015 by 3PM local time.
- B. Provide Government answers to potential bidder's questions, see attached.
- C. Incorporate changes to the solicitation as a result of responses to bidder questions, see attached
- D. All references to "Bahia Grass Sod" throughout the solicitation is changed to "Bahia Grass Seed".
- E. KSC Project Specific Requirement J-B-20 Permit Requirement is changed from "None" to "FDEP NPDES"
- F. 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) Randall A. Gumke	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	16C. DATE SIGNED 9/3/2015

NNK15554723R – Central Campus Solar Plant Addition, PCN: 99035

A. ANSWERS TO BIDDERS QUESTIONS:

1. **REFERENCE:** Specification 79K39955, Section 48 14 00, Paragraph 2.1.1, Page 322
Scope and Basis of Design

QUESTION: The specifications speak about a Sunpower module being used as the basis of design. It also speaks about an equivalent panel being approved based on certain criteria listed in the specs. Does this equivalent panel need to be specified before award or after award as mentioned on the site visit?

RESPONSE: Submittal data for Government approval is required after contract award during the shop drawing phase of the project.

2. **REFERENCE:** Specification 79K39955 & Drawing 79K39954

QUESTION: Specifications and drawings do not specify any certain brand for basis of design. What is the basis of design for the inverter(s) used in the drawings?

RESPONSE: No specific inverter was used as the basis of design. Salient characteristics were provided in the specifications and drawings.

3. **REFERENCE:** Specification 79K39955

QUESTION: The specifications talk about the use of an alternate solar panel. Will NASA also consider alternates for the solar racking and inverters?

RESPONSE: The project is to be bid as specified in the solicitation. Requests for deviations may be considered after contract award in accordance with the Deviation and Waivers clause of the solicitation/contract.

4. **REFERENCE:** Solicitation p.3-13 - Crushed concrete for the ground cover

QUESTION: Is the contractor required to load the concrete at the crushing site and haul it to the solar array site, or will NASA actually load it into the contractor's trucks at the crushing site?

RESPONSE: The contractor will be responsible for loading/transporting/unloading the crushed concrete.

5. **REFERENCE:** Solicitation p.3-13

QUESTION: Can NASA verify that the contractor is no longer responsible for crushing the concrete that will be used as the ground cover if one of the options is exercised?

RESPONSE: NASA will have the Government Furnished Property / Material crushed concrete available at the DARCY site in the amounts noted in the solicitation.

6. REFERENCE: Solicitation p.55-56

QUESTION: Is the trade agreement act in effect on this project or only the Buy American Act limiting products to those produced domestically with 50% components of US origin?

RESPONSE: Only Buy American Act is in effect for this project. See Section I. 5 FAR 52.225-9, Buy American – Construction Material (May 2014)

7. REFERENCE: N/A

QUESTION: Is this a sales tax exempt job?

RESPONSE: No.

8. REFERENCE: Solicitation Page 135

QUESTION: Page 135 of the solicitation calls for biological surveys to be completed by NASA. Will it be the Contractor's responsibility for the mitigation or the government's? If it's the contractor's responsibility, should this be included in the proposal cost or can it be worked out after award as a contract modification?

RESPONSE: The Government will perform the necessary mitigations resulting from biologic surveys.

9. REFERENCE: Drawing 79K39954, Sheets S-001 – S-301

QUESTION: If the solar racking type originally in the drawings can be adjusted, will NASA accept having two solar panels high in the portrait orientation on each row of solar panels?

RESPONSE: The project is to be bid as specified in the solicitation. Requests for deviations may be considered after contract award in accordance with the Deviation and Waivers clause of the solicitation/contract.

10. REFERENCE: Solicitation Section C.2 (b) 1 a. & b.

QUESTION: Based on the solicitation verbiage in the referenced section, please verify that the onsite concrete is crushed and will be provided to the contractor therefore no mobile crushing plant is required?

RESPONSE: No mobile crushing plant will be required by the contractor. The Government shall have the Government Furnished Property / Material concrete crushed at the DARCY site and the contractor shall load, transport, and un-load crushed concrete as required by the solicitation.

11. REFERENCE: Solicitation Section C.2 (b) 1 a. & b.

QUESTION: Based on the answer provided for who is providing the crushed concrete, is the specification section 32 11 24 going to be revised if the government is providing and if so does the GFCI crushed concrete meet what is specified for the ASTM's?

RESPONSE: Part 2 PRODUCTS of Specification 32 11 24 is not applicable. Crushed concrete in accordance with these requirements will be provided by the government. See also new Addenda item C. 2 (b) 1. d.

12. REFERENCE: Drawing 79K39954, Sheet C-101

QUESTION: On drawing sheet C-101 there are two references to a specification section 21 12 20. There was no such specification section provided, however there is section 32 12 20. Should the sheet refer to 32 12 20?

RESPONSE: The note should reference specification section 32 12 20. See also new Addenda Item C.2 (b) 2. d.

13. REFERENCE: Drawing 79K39954, Sheet C-101

QUESTION: On sheet C-101- swing gate detail it refers to vinyl posts and fabric. The specification section 32 31 13 does not mention vinyl. Which is correct; and if vinyl is correct is all the fencing to be vinyl?

RESPONSE: Vinyl coating is not required on the posts. The specification section 32 31 13 is correct. See also Addenda Item C.2 (b) 2. e.

14. REFERENCE: Drawing 79K39954, Sheet S-101

QUESTION: On sheet S-101 of the plans, Equipment Building 1 Foundation detail, it shows both notes B & C to be applicable to the 5'x15' pad. Please clarify.

RESPONSE: A 9" thick slab is required per specific note B. Note C does not apply to the 5' x 15' area. See also Addenda Item C.2 (b) 2. f.

15. REFERENCE: Drawing 79K39954, Sheet C-106

QUESTION: Sheet C-106, note B calls for Bahia seed and mulch. The specs, page 297, call for sod. Please clarify.

RESPONSE: Provide Bahia seed and mulch. See also Addenda Item C.2 (b) 1. e. and f.

16. REFERENCE: Drawing 79K39954, Sheet E-102, General Notes

QUESTION: If an alternate module and layout are proposed, may the array extend slightly beyond the designed array footprint as long as internal clearances are observed and the array does not interfere with any existing underground utilities or buildings and is sufficiently far away from the new fence to avoid shading? The approximate size increase requested is 13

feet beyond the designed footprint in two locations: north of 1A, 1B and 1A1, and east of 2A1 and 2A2.

RESPONSE: The project is to be bid as specified in the solicitation. Requests for deviations may be considered after contract award in accordance with the Deviation and Waivers clause of the solicitation/contract.

17. REFERENCE: Specification 79K39955, Section 26 05 70, Paragraph 1.5.5

QUESTION: Has the KSC already confirmed that Florida Power and Light will accept the proposed size of the new solar array? Has a preliminary interconnection application been filed with the utility? Will the contractor be required to prepare the interconnection application or simply coordinate with FPL to inspect the system prior to energizing?

RESPONSE: The size of the new solar array is not an issue with Florida Power and Light (FPL). FPL is aware of the project, but no preliminary application has been filed with the utility. The Contractor shall prepare the interconnection application which shall be submitted to FPL by the Government.

18. REFERENCE: Solicitation Options 3, 4, 5

QUESTIONS:

- a. Does the concrete that is to be reclaimed/crushed contain metal reinforcement? If so, is the contractor responsible for separating the concrete from metal?
- b. What is the current volume of concrete in the Darcy Area? Or provide the dimensions of the concrete stock pile to be utilized for this project?
- c. May the contractor utilize other external (non- Darcy Area) sources of recycled crushed concrete if it meets the same specification requirements? If so, is there any requirement to remove the proposed recycled concrete material from the DARC Y landfill?

RESPONSES:

- a. Concrete may contain some trace metals. The contractor is not responsible for separating the concrete from the metal.
- b. The current volume amount is unknown. The concrete will be provided in amounts of 8,000 tons and 1,500 tons as stated in the specification.
- c. The contractor may not utilize external sources of crushed concrete

19. REFERENCE: Drawing 79K39954, Sheet S-301, Detail 5

QUESTION: Is the contractor required to use the foundation design shown in the project drawings? May the contractor propose an alternate foundation system provided that it is designed and stamped by a FL-registered professional engineer to withstand all environmental loads?

RESPONSE: The Contractor is not required to use the foundation design shown in the project drawings. Signed and sealed foundation system design and calculations are required submittals during the shop drawing process after award.

20. REFERENCE: Drawing 79K39954, Sheet E-105

QUESTION: Is the contractor required to use central inverters for the project? Newer inverters with a capacity of 60kW are available and would be mounted on the array racking, eliminating long DC runs.

RESPONSE: Yes, the use of central inverters is required for this project.

21. REFERENCE: Solicitation – Proposal Due Date

QUESTION: I am formally requesting a change in the solicitation due date. Current response date is 10 September 2015, requesting date change to 24 September 2015.

RESPONSE: The bid due date has been extended to September 14, 2014, 3PM local time.

22. REFERENCE: Specification 79K39955, Section 48 14 00, Solar Plant

QUESTION: Basis of design is SunPower. Is there a point of contact (P.O.C) for SunPoint who is familiar with this project?

RESPONSE: No.

23. REFERENCE: Drawing 79K39954, Sheet C-101, General Construction Note E, Permits

QUESTION: General Construction Note E on drawing C-101 states “GC is responsible for obtaining any EPA permitting *where required*. Contractor shall coordinate all environmental issues with the NASA Environmental Management Branch”. Since this work does not involve any new retention pond or new storm water management structures and utilizes existing drainage ditches, what EPA permitting/involvement is anticipated? Since NASA Environmental will be handling this, will an EPA permit be required?

RESPONSE: No EPA permits are required. Since the required land disturbance is greater than 1 acre, the contractor will be required to obtain a Florida Department of Environmental Protection (FDEP) Nation Pollutant Discharge Elimination System (NPDES) permit.

24. REFERENCE: Solicitation Page 131, Permits

QUESTION: J-B-20 Permit Requirements under paragraph (a) states “the following permits are known to be required for this project: **None**”. The very next paragraph (b) on the same page states “The contractor is responsible for obtaining the following permits, *if required*, before beginning work...”: -FDEP/Brevard County onsite sewage treatment and disposal system construction/permit abandonment & -FDEP/Brevard

County well construction/abandonment permit”. There are no notes on the drawings indicating any sewage treatment and disposal system construction or demolition or any well construction or abandonment work. Is either of these permits required for this project? Are any permits required to be provided or paid for by the GC bidder (Offeror) other than an FDEP NPDES permit needed for the earthwork temporary controls specified in the Solicitation at page 136 or J-B-28?

RESPONSE: There are no permits required other than the FDEP NPDES.

25. REFERENCE: Solicitation Page 133, MOT

QUESTION: J-B-24 Traffic Control Requirements describes in detail the standards for traffic control. With the existing conditions at the site of the work already having an asphalt roadway into and out of the site at the north and south, can we use these two (2) existing asphalt access roads for access to the site to avoid disrupting traffic on the roadways around the site (namely 4th & 5th St and C & D Avenues)?

RESPONSE: The only access to the site is off of 5th Street near C Avenue or 4th Street near C Avenue. Access through the existing Florida Power and Light solar array site (M6-0900) is not permitted.

26. REFERENCE: Drawing 79K39954, Sheet C-101, General Construction Note F, As-Builts

QUESTION: The GC is responsible for any potential damage to existing underground improvements. Can NASA provide as-builts of any known underground improvements on the project site?

RESPONSE: There are no as-builts available for this site. The Government will provide underground utility location services prior to contractor excavation activities. The land area to be located will need to be cleared by the contractor prior to the utility locates being performed.

27. REFERENCE: Solicitation Page 138, Storage Tanks

QUESTION: J-B-31 describes requirements for storage tanks. The bidding documents (plans & specs) do not indicate any storage tank work. Is there a requirement for providing a storage tank(s)?

RESPONSE: No construction of storage tanks is included in the project. The contract clause is included in the event the contractor provides storage tanks for fuel or other liquids during the construction process.

28. REFERENCE: Solicitation Page 139, Hazardous Waste

QUESTION: J-B-32 states “The Contractor shall be responsible for identifying processes and operations and the location and nature of all potentially hazardous and controlled waste.....”. Is this statement referring to hazardous materials brought onto

NASA property only during performance of this contract by the GC, or does it also include hazardous wastes found to have existed on NASA property before we began work? If the latter is true, please provide a hazardous material survey indicating the type, quantity, location and nature of any hazardous material currently on this site.

RESPONSE: The statement refers to hazardous materials brought onto NASA property by the contractor, not any hazardous materials existing on the site.

29. REFERENCE: Solicitation Page 142, Scrap Metal

QUESTION: J-B-34 states “All metals coated with non-liquid PCB paints with levels below 50 parts per million shall be recycled by the contractor. Any metals coated with non-liquid PCB paints with levels above 50 ppm shall utilize the Schwartz Road Landfill after Government approval”. The bidding documents (plans & specs) do not indicate any existing metals on site that require disposal during demolition. Is this statement referring to PCB painted metals brought onto NASA property only during performance of this contract by the GC, or does it also include hazardous wastes found to have existed on NASA property before we began work? If the latter is true, please provide a hazardous material survey indicating the type, quantity, location and nature of any PCB painted metals currently on this property.

RESPONSE: The statement refers to hazardous materials brought onto NASA property by the contractor, not any hazardous materials existing on the site.

30. REFERENCE: Solicitation Page 132, Import Fill Dirt

QUESTION: J-B-22 states “The Contractor *may* use the Kennedy Space Center borrow area to supply required fill”. Are we allowed to import fill from offsite independently from KSC in lieu of using the KSC borrow pit?

RESPONSE: Yes, provided it meets specification requirements and is free of hazardous materials.

31. REFERENCE: Drawing 79K39954, Sheet S-301, Bollard

QUESTION: The steel pipe bollard shown on S-301, detail 6, is indicated intermittently on electrical plans E-402 & E-403 with flag notes F & E respectively. There are many other circles similar to the symbol for the bollard on these two sheets. Please confirm there are seven (7) bollards on E-402 and four (4) bollards on E-403.

RESPONSE: Yes - There are seven (7) bollards on Sheet E-402 and four (4) bollards on Sheet E-403 in the areas of the electrical equipment pad and DC circuit breakers.

32. REFERENCE: Drawing 79K39954, Sheet S-001, Note D, 2-4, Dewatering

QUESTION: Will dewatering discharge waters be allowed to be drained to the roadside ditches surrounding the project site? If not, where will these discharge waters be allowed to be disposed?

RESPONSE: Dewatering effluent shall be directed to an upland area and flow indirectly to roadside ditches.

33. REFERENCE: Solicitation

QUESTION: From the Solicitation:

a. Minimum value of overall maximum DC power values for array installation areas are as follows:

Each photovoltaic panel - 325 Watts DC Pmax minimum
Inverter 2A - 452,400 Watts DC Pmax
Overall Site - 1,440,400 Watts DC Pmax

(Note Basis of Design Values are as follows:
Each photovoltaic panel - 335 Watts DC Pmax
Each string of 8 photovoltaic panels - 2680 Watts DC Pmax
Inverters 1A and 1B - 1,018,400 Watts DC Pmax
Inverter 2A - 466,320 Watts DC Pmax
Overall Site - 1,484,720 Watts DC Pmax)

Could you clarify that the minimum size is 1,440,400 and that the basis of design size of 1,484,720 is not required, but simply an indication of how the plans were created?

RESPONSE: Yes - The drawings were based on the design basis which is greater than the solicitation minimum size requirement.

34. REFERENCE: Specification 79K39955, Section 05 12 00, Page 86 & 85

QUESTION:

2.4 SHOP GALVANIZING - All steel components shall be hot dipped shop galvanized after fabrication and drilling attachment holes per ASTM A123/A123M or ASTM A153/A153M, as applicable. Minimum thickness of zinc coating shall be G90. Galvanized surfaces shall be free of "passivated" or "stabilized" coatings. Field painting of all new and existing steel members indicated on Drawings is specified in Section 09 90 00 - PAINTS AND COATINGS.

3.1 FABRICATION - Fabrication shall be in accordance with the applicable provisions of AISC 325. Fabrication and assembly shall be done in the shop to the greatest extent possible. The fabricating plant shall be certified under the AISC 201 for Category Conventional Steel Building structural steelwork. Structural steelwork, except surfaces of steel to be encased in concrete, surfaces to be field welded, shall be prepared for painting in accordance with endorsement "P" of AISC 201 and coated with the specified field applied paint finish system specified in Section 09 90 00 PAINTS AND COATINGS

Pages 86 and 85 calls for field painting. This seems like an overkill and will result in a poor finish. I propose deleting the requirement to both galvanize and field paint

surfaces. You should allow galvanized or factory painting, but not require two coatings. Further, require field coating of cut or welded surfaces.

RESPONSE: The project is to be bid as specified in the solicitation. Requests for deviations may be considered after contract award in accordance with the Deviation and Waivers clause of the solicitation/contract.

- 35. REFERENCE:** Specification 79K39955, Section 26 05 13.00 98, Paragraph 2.1.2, Conductor Core, Page 135

QUESTION:

2.1.2 Conductor Core - a. Material: Provide annealed copper core (phase) conductor material in accordance with ASTM B8.

SECTION 26 05 13.00 98 on Page 135 calls for copper conductors. Will you allow aluminum if sized up as appropriate?

RESPONSE: No. Provide copper as specified.

- 36. REFERENCE:** Specification 79K39955, Section 26 20 00, Paragraph 2.6.1, Page 211

QUESTION:

2.6.1 Conductors - Conductors No. 8 AWG and larger diameter shall be stranded. Conductors No. 10 AWG and smaller diameter shall be solid, except that conductors for solar photovoltaic DC power systems, remote control, alarm, and signal circuits, classes 1, 2, and 3, shall be stranded unless specifically indicated otherwise. Conductor sizes and capacities shown are based on copper, unless indicated otherwise. All conductors shall be copper.

SECTION 26 20 00 on Page 211 calls for copper conductors. Will you allow aluminum if sized up as appropriate?

RESPONSE: No. Provide copper as specified.

- 37. REFERENCE:** Specification 79K39955, Section 48 14 00, Page 323

QUESTION: Spec Section 48 14 00, page 323 indicate the AC output and the DC input are nearly identical. I believe your engineer assumed the inverter is running at 97% efficiency so the DC input should be only slightly higher. Industry standard is to load the inverters at 120 – 140% depending on weather and site conditions, resulting in smaller inverters. Would this be acceptable, either as part of the proposal or as a separate section in the proposal regarding value engineering?

RESPONSE: No. The project is to be bid as specified in the solicitation.

38. REFERENCE: Drawing 79K39954, Sheet S-302

QUESTION: The drawings illustrate modules at a 20 degree slope mounted on steel piles in concrete, may alternative mounting means be proposed that meet ASCE requirements, assuming that the means are suitable to the racking manufacturer and PV module manufacturer?

RESPONSE: The Contractor is not required to use the foundation design shown in the project drawings. Signed and sealed foundation system design and calculations are required submittals during the shop drawing process after award.

39. REFERENCE: Drawing 79K39954, Sheet E-102

QUESTION: Is there a minimum spacing between rows, or is the 14' (min.) specification of the N-S aisles the only limitation?

RESPONSE: Row spacing must allow for the maintenance or removal of any Photovoltaic (PV) module or system component in a safe manner, but not less than the design basis of four (4) feet.

40. REFERENCE: Specification 79K39955, Section 48 14 00, Paragraph 2.1.6.4, Page 327

QUESTION: We understand that the contract specifications and drawings are based on a 600VDC system. Is it acceptable to install a 1000VDC system, provided that inverters and modules are listed to 1000V and installed in a standards-compliant manner? This will reduce the cost of the system to NASA without compromising safety or reliability.

RESPONSE: The project is to be bid as specified in the solicitation. Requests for deviations may be considered after contract award in accordance with the Deviation and Waivers clause of the solicitation/contract.

41. REFERENCE: Specification 79K39955, Section 48 14 00, Paragraph 2.1.6.2, Page 325

QUESTION: Please clarify the 48 14 00 2.1.6.2 requirement that "Photovoltaic panels shall be of current design and manufacture with 320,000 of the same panels previously produced for ground based solar plant installation." If a manufacturer has produced 160,000 units each of a 325W module and a 340W module, where the modules are part of the same product line, is this requirement met?

RESPONSE: Yes. If a manufacturer has produced 160,000 units of panels each of 325W module and a 340W module where the modules are part of the same product line, the requirement is met. See also Addenda Item C.2 (b) 2. g.

42. REFERENCE: Solicitation – Proposal Due Date

QUESTION: I would like to request to extend the bid date one full week, in part because of the Labor Day holiday just prior to the bid date.

RESPONSE: The bid due date has been extended to September 14, 2014, 3PM local time.

43. REFERENCE: Specification 79K39955, Section 48 14 00, Paragraph 2.1.6.2 e, Page 325

QUESTION: Basis of Design uses 600Vdc string and inverter technology. May we use other stringing and inverter technology?

RESPONSE: The project is to be bid as specified in the solicitation and central inverters using 600VDC technology are required. Requests for deviations may be considered after contract award in accordance with the Deviation and Waivers clause of the solicitation/contract.

44. REFERENCE: Specification 79K39955, Section 48 14 00, Paragraph 1.1, Page 313

QUESTION: Please specify wind load rating of the required photovoltaic panels. UL1703 is mentioned in Section 48, but it is only 30 psf. Brevard County wind loads will exceed UL 1703 limits.

RESPONSE: The photovoltaic panel must meet UL 1703, and the panel mounting assembly must meet Specification 48 14 00, Section 2.1.6.2 a., and Section 2.1.3 which address the wind loading requirements for the Photovoltaic Panels. These sections also reference the Structural Drawings as follow: Detail 5 on S-301 and S-001 Section B – Design Criteria, require Wind Loads as per ASCE 7-10, Ultimate Design Wind Speed of 157 MPH and Nominal Design Wind Speed of 125 MPH.

45. REFERENCE: Solicitation Section L, Paragraph L. 10 (a) & (c), Pages 79 & 80

QUESTION: The solicitation requires PPQs for 3 projects. Would CCASS evaluation meet this requirement?

RESPONSE: Providing CCASS evaluations will not eliminate the requirement in L. 10 (c) (1) to provide Past Performance Questionnaires. CCASS evaluations can be provided under L. 10 (c) (3) as optional.

46. REFERENCE: Solicitation Section L. 9, Page 77

QUESTION: The solicitation requires various numbers of copies of items to comprise the offer. Some are price related and others qualification related. How should these be bound, all in 1 binder with dividers, or 2 binders.

RESPONSE: Providing 2 binders is the preferred method.

47. REFERENCE: Solicitation

QUESTION: What amount of the bid bond are your team is asking for this solicitation.

RESPONSE: Please reference solicitation section L. 9.(c) (11). It must meet NASA FAR Supplement (NFS) 1852.228-73.

48. REFERENCE: Solicitation Section L, Paragraph L. 10 (a)(1) and Section M, Paragraph M.1 (b) (1)

QUESTION: The solicitation requires the prime contractor to have 3 projects meeting a very specific set of criteria. Our company has significant electrical and PV project experience but not all the projects meet all the specified criteria. We have teamed with a company that does meet all the criteria. The solicitation calls for 3 project from the prime and 3 from the teaming partner.

Can the prime contractor use a large electrical project as one of the past performance projects? We would then include an additional PV project from our teaming partner to ensure you receive information on 6 PV projects.

RESPONSE: The solicitation Section M, Paragraph M.1(b) (1) (ii), requires the following:

- “A minimum of three projects shall demonstrate experience in the complete installation and commissioning of ground based solar generating plants of 1 Mega-Watt or greater power output interconnected to a medium voltage (4.16 kV or greater) utility power distribution system. Combined the projects shall demonstrate experience in the electrical, mechanical, structural, civil, and environmental aspects involving all of the following:
- (1) Providing detailed engineering design services, shop drawings and as-built documentation;
 - (2) Electrical, structural, civil, and environmental aspects of site preparation;
 - (3) Installation of underground duct bank, medium voltage cable, and pad-mounted transformer systems (5-15 kV class or greater);
 - (4) Planning, scheduling, and coordinating multiple work elements;
 - (5) Performing job hazard analysis, and the use of proper procedures and personal protective equipment when performing electrical work.”

Therefore, the inclusion of more than three solar experience projects is acceptable. The use of a large electrical project can be used for electrical experience.

49. REFERENCE: Solicitation Section M, Paragraph M.1(b)(1)

QUESTION: Section M lists the criteria for projects to be used to demonstrate technical experience. The projects must be more than 50% complete and exceed \$1 million. We have a large project where the work completed to date is over \$4 million. However, the project is not 50% complete. Will you consider this to demonstrate technical experience?

RESPONSE: Per the solicitation Section M.1(b)(1)(i) “All contracts/projects listed in the Technical Experience Summary must be in progress with at least 50 percent of the

construction work completed or have been successfully completed within seven (7) years of the date of issuance of this solicitation **August 11, 2015.**”

We will only consider projects that their construction work completed is at least 50 percent.

50. REFERENCE: Solicitation

QUESTION: Would it be possible to add NAICS code 221114, Solar Electric Power Generation, to this solicitation?

RESPONSE: NAICS code 221114 is primarily engaged in “operating solar electric power generation facilities”. The solicitation specified NAICS code 237130 involves construction to include “solar”. We will not be adding NAICS code 221114 to this solicitation.

51. REFERENCE: Solicitation Page 79, Teaming

QUESTION: Page 79 of 154 of the Original Solicitation describes allowing teaming arrangements. In Section L.10, (a), paragraph (1), it states “Offerors shall provide a technical experience summary of three (3) projects.....similar in size, content and complexity”. The next paragraph (2) in this same section states “Offerors proposing contractor teaming arrangements with major subcontractorsin addition to the three (3) projects performed by the prime contractor in paragraph (1) above offerors shall identify....three (3) projects that have been successfully completed by the major subcontractor...”. Does this mean that if we propose to team as a prime GC with a large solar subcontractor that we would need to submit six (6) projects, 3 of ours as prime GC and 3 from the large solar company?

RESPONSE: Yes, offerors proposing contractor teaming arrangements with major subcontractors shall provide three (3) projects performed by the offeror and three (3) projects performed by the major subcontractor.

52. REFERENCE: Solicitation Page 95, Past Performance

QUESTION: Page 95 of 154 of the Original Solicitation describes the type of past performance experience required. Section M.1. Factor 1, paragraph iii, states “At least one of the submitted projects must have been for the complete installation and commissioning of ground based solar generating plants of 1 Mega-Watt or greater power output interconnected to a medium voltage utility power distribution system and been valued at \$3,000,000 or greater”. Does this mean that if we team with a major subcontractor as described in the above question and we are required to submit six (6) past performance projects, that only 1 of the 6 would be required to be a 1 Mega-Watt Solar plant as described above and the other 5 projects could be other types of projects provided they are valued at \$1,000,000 or greater and are similar in size, content and complexity?

RESPONSE: Only one (1) of the solar generating plant projects has to meet Section

M.1(b)(1) (iii) “At least one of the submitted projects must have been for the complete installation and commissioning of ground based solar generating plants of 1 Mega-Watt or greater power output interconnected to a medium voltage (4.16 kV or greater) utility power distribution system and been valued at \$3,000,000 or greater”. The other five (5) have to meet Section M.1(b)(1) (iii) “All projects listed in the Contractor’s Technical Experience Summary must have been valued at \$1,000,000 or greater.”. The projects must also meet the remaining requirements under M.1.(b)(1).

//////////////////////////////////////END OF QUESTIONS AND ANSWERS//////////////////////////////////////

B. INCORPORATE CHANGES INTO SOLICITATION

C. 2 (b) Addenda to Specification and Drawings, Maps and/or Statements of Work:

1. **Specification 79K39955**

- d. Section 32 11 24, Pages 276 - 278 – Delete in its entirety PART 2 PRODUCTS.
- e. Section 32 92 23 - Sodding – Delete in its entirety.
- f. The attached specification section 32 92 20 - Seeding and Mulching - is hereby added to the solicitation.
- g. Section 48 14 00, Paragraph 2.1.6.2 replace “320,000” in the second paragraph with “160,000”.

2. **Drawing 79K39954**

- d. Sheet C-101, Zone E-4/5 and F-4/5 - Revise SITE ACCESS PAVEMENT DETAIL and RECLAIMED CRUSHED CONCRETE AGGREGATE SURFACE COVERAGE DETAIL - BID OPTION 3 notes as follows:

From: DUST CONTROL AGENT (SECTION 21 12 20)

To: DUST CONTROL AGENT (SECTION 31 12 20)

- e. Sheet C-101, Zone A/C-4/5 – Revise DOUBLE SWING GATE DETAIL as follows:

Revise Post Note:

From: VINYL COATED GATE POST

To: GATE POST

Delete Note 2 “FENCE FABRIC, POST, & BARS SHALL BE BLACK VINYL COATED.” in its entirety.

- f. Sheet S-101, Zone F/6 – Delete Flag Note C. Flag Note C as applied to other parts of the drawing shall remain in effect.

////////////////////////////////////END OF SOLICITATION CHANGES////////////////////////////////////

SECTION 32 92 20

SEEDING AND MULCHING
08/15

PART 1 GENERAL

1.1 SUMMARY

Establish a stand of grass in the areas indicated on the construction plans. The work includes seeding, fertilizing, and mulching as required. Maintain the seeded areas until a dense, mature stand of grass has been established.

1.2 SUBMITTALS

Submit suppliers' certifications that materials meet standards indicated.

1.3 QUALITY PRODUCT

All seeds and seed mixtures shall be free of noxious weed seeds as determined by the Florida Department of Agriculture.

- a. All seeds and seed mixtures shall not contain any weed seeds in excess of 0.50 percent.
- b. All seed shall be delivered in manufacturer's original, unopened 50 lb. bags with labels intact and bearing the complete analysis of the seed.

1.4 TESTS AND INSPECTIONS

- a. Owner may take samples of fertilizer and seed as they are delivered to the site for inspection and sampling.
- b. Fertilizer and seed which do not meet Specification requirements shall be rejected.
- c. Seeded areas:
 1. Inspect jointly with Owner six weeks after completion of seeding.
 2. Reseed any bare spots over one square yard in area or other unsatisfactory growth, in accordance with Specifications requirements.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Summer Mix: (May 1 to September 30)

- a. Seed
 1. Scarified Argentine Bahia grass certified 80 percent pure, 80 percent germination, and hulled Bermuda grass certified 90 percent pure, 80 percent germination.

2. Mix at a ratio of 10 lbs. hulled Bermuda grass to 90 lbs. scarified Argentine Bahia grass plus 150 lbs. brown head mullet per acre.
- b. Fertilizer: 16-4-8 ratio of nitrogen, phosphorous, and potash.
1. Nitrogen: Minimum 50 percent of nitrogen shall be from a natural organic source such as tankage or sludge.
 2. Potash: Derived from both muriate and sulphate.
 3. Minor elements: 2 units of magnesium, 0.25 units of manganese, and 1 unit of chelated iron.
- c. Hay: Agricultural quality from fields where seed crop is free of noxious weed seed.
1. Baled Pangola.
 2. Any of the Bahia's.
- 2.1.2 Winter Mix: (September 30 to May 1)
- a. Seed
1. Argentine Bahia grass certified 80 percent pure and 80 percent germination and hulled Bermuda grass certified 90 percent pure and 80 percent germination.
 2. Mix at a ratio of 10 lbs. hulled Bermuda grass to 100 lbs. Argentine Bahia grass plus 200 lbs. rye per acre.
- b. Fertilizer: N.P.K. 16-18-10 of nitrogen, phosphorous, and potash.
1. Nitrogen: Derived from nitrate nitrogen 6.40 and 9.60 ammoniacal nitrogen.
 2. Minor elements: 2 units of magnesium, derived from SUL-PO-MAG. N.P.K. derived from base mixtures of $\text{NaN}_3 + \text{D.A.P.} + \text{K}_2\text{O}$.
- (1) Make formulation from granular materials.
- c. Hay: Agricultural quality from fields where seed crop is free of noxious weed seed.
1. Baled Pangola.
 2. Any of the Bahia's.

PART 3 EXECUTION

3.1 SUMMER MIX INSTALLATION (MAY 1 TO SEPTEMBER 30)

- a. Fertilizer: Uniformly distribute at a rate of 500 lbs. per acre at time of seeding. Formulation shall be such as to provide not less than 80 lbs. each of nitrogen, phosphorous, and potash per acre.

- b. Seed: Uniformly distribute with calibrated equipment at a rate of 250 lbs. formula mix per acre.
- c. Thoroughly incorporate seed and fertilizer into the soil, in one operation, to a minimum depth of 1-1/2 inches.
- d. Within 24 hours after seeding, compact all seeded areas with a roller capable of producing 90 lbs. of compaction weight per square inch.
- e. Hay: Apply at a rate of 200 bales per acre to provide uniform coverage of approximately 2 inches depth.
- f. Apply water as necessary to establish and maintain a stable stand grass.

3.2 WINTER MIX INSTALLATION (SEPTEMBER 30 TO MAY 1)

- a. Fertilizer: Uniformly distribute at a rate of 600 lbs. per acre at time of seeding.
- b. Seed: Uniformly distribute with calibrated equipment at 310 lbs. rate per acre.
- c. Thoroughly incorporate seed and fertilizer into the soil; in one operation, to a minimum depth of 1-1/2 inches.
- d. Within 24 hours after seeding, compact all seeded areas with a roller capable of producing 90 lbs. of compaction weight per square inch.
- e. Hay: Apply at the rate of 200 bales per acre to provide uniform coverage of approximately 2 inches depth.
- f. Apply water as necessary to establish a stable stand of grass.

-- End of Section --