

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE	PAGE OF PAGES 1 29
2. AMENDMENT/MODIFICATION NO. 003	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO. 4200457725	5. PROJECT NO. (If applicable) PCN 98986	
6. ISSUED BY NASA/Kennedy Space Center Office of Procurement, OP-ES Andrew Dennis Kennedy Space Center, FL 32899	CODE	7. ADMINISTERED BY (If other than item 6)	CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)		(X)	9A. AMENDMENT OF SOLICITATION NO. NNK13457725R	
		(X)	9B. DATED (SEE ITEM 11) February 1, 2013	
			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 _____ 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 ACKNOWLEDGMENT 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 your 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 ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

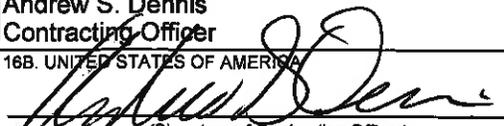
CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
<input type="checkbox"/>	
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as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

E. IMPORTANT: Contractor is not, 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 this amendment is to add reference drawings, extend the closing submission date for Part 2 (Price Volume), document answers provided to questions received, and revise the Solicitation in accordance with the answers provided.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		Andrew S. Dennis Contracting Officer	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		 (Signature of Contracting Officer)	3/28/2013

The Government's responses to questions submitted on the Solicitation are contained within this amendment. Questions 1-18 were answered on Amendments 1 and 2. The responses to questions shall not be construed as altering the requirements of the RFP except as specifically revised in this amendment.

1. Questions received and the associated Government responses are shown below:

19. Is there a pricing schedule with CLINs or bid form for offerors to complete, or should contactors provide one lump sum price?

Response: Offerors are requested to provide one lump sum price to perform the requirements of the project. In accordance with the proposal instructions in Provision L.19, this price should be stated in Block 17 of the signed form 1442 and in Section B, clause B.1 "Firm Fixed Price".

20. Amendment 2 (Item #7) indicates that an original and 6 copies are to be submitted. Page 97 in the original RFP asks for 3 copies of the SF1442, 3 copies of Section B, 1 Bid Bond and 2 copies of the Small Business Subcontracting Plan. Please clarify.

Response: Proposal copies shall be submitted in accordance with Provision L.19, General Proposal Preparation Instructions, Tables A and B. This Provision specifies the numbers of copies required for each portion of the proposal. The Solicitation SF1442 is being revised to clarify accordingly.

21. Amendment 1 (Q&A #4) indicates we may submit past performance data for selected major subcontractors on or before the submission due date for part 2. Should the past performance for selected major contractors be provided in original and 6 copies? Also, what format should they be submitted in (binder, stapled/hole punched)?

Response: The past performance information for selected major subcontractors shall be provided in accordance with Provision L.19, General Proposal Preparation Instructions, Table A-Part 1. Please consult Table A, Part 1 for the requested number of copies and page limitations. It is suggested that offerors submit this information in an appropriate format to allow for insertion by the Contracting Officer into the binders previously provided for Part 1, Section A.

If not already submitted, NASA would prefer submission of past performance for selected major subcontractors prior to the submission due date for Part 2 (Price).

22. Please provide allowable loads and all available information regarding the bridge on SR-405 over the Indian River.

Response: See Solicitation Attachment J.1B, Section J.1B.24.

23. Referencing drawing MP501 detail 2, this detail indicates the taper from the 1" wall to the 3/8" wall and a general location is given for this detail on sheets MP501 and MP502, however, the exact distance above the top of steel cannot be determined. Please indicate how far from the top of steel the 1" wall should extend.

Response: The 1" wall shall extend 9 inches above the top of steel of the W18x106's.

24. Referencing drawing MP101 column line A-8, please provide a section showing the 45 degree bend.

Response: A 45 degree bend is not depicted along column line A-8 on sheet MP101. At this location, the 90 degree elbow is rolled approximately 36 degrees and a mitered elbow is required to obtain the centerline alignment as dimensioned from column line 8 (4'-6").

25. Referencing the quench water nozzle at column line 7 in section G/MP303, please indicate the distance of the weld neck flange from the center line of the header pipe.

Response: Deck Quench is being deleted from the contract requirements.

26. Looking at the SF 1442, block 12b states that the bonds must be provided 1 day after award. Typically bonds are provided 10 days of award, which is enough time to provide the bonds. Is the 1 day a typo?

Response: Performance and Payment Bonds shall be required within 10 calendar days after contract award. The Solicitation is being revised accordingly.

27. REFERENCE: Drawing sheet A-001, General Note 1

Do the requirements call for any dimpled, dinged, or miss-cut panels to be replaced with new panels or will minor defects (dimpled, dinged, or miss-placed holes) in the aluminum panels be accepted?

Response: Dimpled, dinged, or miss-cut panels will be required to be replaced.

28 Per OMB a security plan must be written following NIST 800 guidelines. Will an IT security plan in accordance with NFS 1852.204-76 Security Requirements for Unclassified Information Technology Resources - Clause I.20 be required? If so, please forward the relevant IT documents and requirements for access to NASA's IT infrastructure.

Response: Yes. An IT Security Plan is required for this project. Detailed discussions about the contents of the Plan will begin after contract award. Applicable documents are:

NPD 2810.1, NASA Information Security Policy

NPD 1382.17, NASA Privacy Policy

NPD 2540.1, Personal Use of Government Office Equipment including Information Technology

NPR 2810.1, Security of Information Technology

NPR 1382.1, NASA Privacy Procedural Requirements

NID 1600.55, Sensitive But Unclassified (SBU) Controlled Information

These applicable documents can be found at <http://www.nasa.gov/offices/ocio/itsecurity/index.html>. NASA FAR Supplement Clause 1852.204-76, Security Requirements for Unclassified Information Technology Resources (JAN 2011) is included in Solicitation NNK13457725R by reference under Clause I.3. The full text of the clause is as follows:

SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (JANUARY 2011)

(a) The contractor shall protect the confidentiality, integrity, and availability of NASA Electronic Information and IT resources and protect NASA Electronic Information from unauthorized disclosure.

(b) This clause is applicable to all NASA contractors and sub-contractors that process, manage, access, or store unclassified electronic information, to include Sensitive But Unclassified (SBU) information, for NASA in

support of NASA's missions, programs, projects and/or institutional requirements. Applicable requirements, regulations, policies, and guidelines are identified in the Applicable Documents List (ADL) provided as an attachment to the contract. The documents listed in the ADL can be found at: <http://www.nasa.gov/offices/ocio/itsecurity/index.html>. For policy information considered sensitive, the documents will be identified as such in the ADL and made available through the Contracting Officer.

(c) Definitions.

(1) IT resources means any hardware or software or interconnected system or subsystem of equipment, that is used to process, manage, access, or store electronic information.

(2) NASA Electronic Information is any data (as defined in the Rights in Data clause of this contract) or information (including information incidental to contract administration, such as financial, administrative, cost or pricing, or management information) that is processed, managed, accessed or stored on an IT system(s) in the performance of a NASA contract.

(3) IT Security Management Plan--This plan shall describe the processes and procedures that will be followed to ensure appropriate security of IT resources that are developed, processed, or used under this contract. Unlike the IT security plan, which addresses the IT system, the IT Security Management Plan addresses how the contractor will manage personnel and processes associated with IT Security on the instant contract.

(4) IT Security Plan--this is a FISMA requirement; see the ADL for applicable requirements. The IT Security Plan is specific to the IT System and not the contract. Within 30 days after award, the contractor shall develop and deliver an IT Security Management Plan to the Contracting Officer; the approval authority will be included in the ADL. All contractor personnel requiring physical or logical access to NASA IT resources must complete NASA's annual IT Security Awareness training. Refer to the IT Training policy located in the IT Security Web site at <https://itsecurity.nasa.gov/policies/index.html>.

(d) The contractor shall afford Government access to the Contractor's and subcontractors' facilities, installations, operations, documentation, databases, and personnel used in performance of the contract. Access shall be provided to the extent required to carry out a program of IT inspection (to include vulnerability testing), investigation and audit to safeguard against threats and hazards to the integrity, availability, and confidentiality of NASA Electronic Information or to the function of IT systems operated on behalf of NASA, and to preserve evidence of computer crime.

(e) At the completion of the contract, the contractor shall return all NASA information and IT resources provided to the contractor during the performance of the contract in accordance with retention documentation

available in the ADL. The contractor shall provide a listing of all NASA Electronic information and IT resources generated in performance of the contract. At that time, the contractor shall request disposition instructions from the Contracting Officer. The Contracting Officer will provide disposition instructions within 30 calendar days of the contractor's request. Parts of the clause and referenced ADL may be waived by the contracting officer, if the contractor's ongoing IT security program meets or exceeds the requirements of NASA Procedural Requirements (NPR) 2810.1 in effect at time of award. The current version of NPR 2810.1 is referenced in the ADL. The contractor shall submit a written waiver request to the Contracting Officer within 30 days of award. The waiver request will be reviewed by the Center IT Security Manager. If approved, the Contractor Officer will notify the contractor, by contract modification, which parts of the clause or provisions of the ADL are waived.

(f) The contractor shall insert this clause, including this paragraph in all subcontracts that process, manage, access or store NASA Electronic Information in support of the mission of the Agency.

29. REFERENCE: Specification 25 05 93, para 3.5; Drawing S-001, General Structural Note 2C:
Specification 25 05 93 Testing, Adjusting, Balancing for HVAC, para 3.5 requires testing the hazardous operations areas of the base at a pressure differential of 3" wg. On drawing sheet S-001, General Structural Note 2C requires welds separating the interior compartment to the exterior or adjacent compartments to resist a test pressure of 8" wg. Please confirm whether the pressure testing will be performed at 3" wg or 8" wg.

Response: Pressure testing shall be performed at 3" wg as required by specification 23 05 93, part 3.5. Welds shall be required to resist a test pressure of 8" wg as required by sheet S-001, General Structural Note 2C. 8"wg is the maximum pressurization the MLB could experience.

30. Throughout the specifications it is stated that accurate weights of all items and material removed from the ML and all items and material installed on or in the ML shall be determined, documented, and provided for record. Please confirm if the comprehensive weight management scope will be the Contractors responsibility or if only the weight adjustment information shall be provided to NASA.

Response: The contractor is only being asked to provide weight adjustment information to NASA.

31. This project includes a full survey of the existing girders/trusses. It is understood new work will have to maintain these positions when complete. What are the tolerances for this project?

Will it be necessary to field mill the bottom of the pin bearing plates on either end of the new G14? Is there some allowable thickness that may be machined off the 4.50" thick plate or should the contractor plan on providing additional plate thickness to accommodate the machining?

Response: See the construction drawings for required tolerances. The contractor shall not assume that it will be permissible for plates to be thinner than specified on the contract drawings. The contractor should plan accordingly.

32. REFERENCE: SD-102, Note B

Referenced note identifies the Contractor to "...PROVIDE A MINIMUM RESTRAINT AGAINST AN UPLIFT FORCE OF 500 KIPS AT EACH MOUNT MECHANISM". Confirm that this note only applies to existing Launch Mounts 1, 2, 4 and 5; since Launch Mounts 3 and 6 are being disconnected to remove T14.

Response: The note applies to all mount mechanisms. It is understood that the restraint at 3 and 6 will be temporarily removed during the removal of T14 and installation of G14.

33. REFERENCE: S-105

Please reference S-105, location of C/T interfaces. On the original ML project the government would not let the C/T interfaces be installed until construction was essentially complete and the ML could be weighted to determine the true center of gravity. This caused these pieces to be installed late in the game rather than when they might have been most logically. Will this same condition apply to this project?

Response: The construction drawings provide the installed positions of the C/T interfaces. No direction is given to delay this effort for weighing.

34. REFERENCE: S-105, flag note 1 and general note 2

Please reference S-105, flag note 1 and general note 2. Given mill tolerances and the required fit it is a certainty that a transition plate will be required. Is it acceptable to pre-machine the bottom of this transition plate before installation or is there concern that welding the transition plate to the girder will threaten the integrity of the fit between the bottom of this plate and the C/T interface piece? Will a point cloud survey be required to verify the profile of the bottom of the transition plate before installing the actual interface piece?

Response: It is not acceptable to pre-machine. Verification of adherence to requirement for flat between the interface and transition plate must be provided.

35. REFERENCE: S-105, note 2

Please reference S-105, note 2 which specified that the transition plate shall have a maximum thickness of 1". Is there a minimum thickness? This could become important since all four (4) C/T interfaces have to be level within 1/16". Given camber issues and the differences between girders G3 and G5 there could be substantial machining required to achieve the required levelness.

Response: Minimum thicknesses have not been prescribed.

36. REFERENCE: S-702, detail 8

There is a piece of 3/4" plate that is noted as being "rolled" and welded to the 1" blast plate. Is there another option for this area other than welding a 3/4" rolled piece to the end? The piece is so small that the weld attaching it will probably be bigger than the piece itself and we are concerned about the heat.

Response: The small piece on the end is removed. The drawing is revised accordingly.

37. REFERENCE: S-708, Details 2 & 3

Details 2 & 3/S-708 represent a "tee" that is required for support of the heat shields:

- a) Please provide thicknesses of the materials required as there are none indicated.
- b) Please provide a more clarified detail to indicate how these "tees" are integrated with the plate girders? The intent of this "tee" and its relationship to both the plate girder and heat shields is unclear.
- c) Is there any part of this "tee" that is already indicated on the plate girder, perhaps as a stiffener?

Response:

a) Upper and lower heat shield supports shown in Details 2 and 3/S-708 are comprised of a WT7x30.5, horizontal stiffener plates, and a back plate. The horizontal stiffener plates are 1/4" thick. The back plate which interfaces with the support base that is welded to the girder is 3/8" thick. These dimensions also apply to Details 2 and 5 on S-710.

b) Refer to Detail 1/S-108. Detail 1 refers to these "tees" as the heat shield supports. The heat shield plates are bolted to the heat shield supports.

The heat shield supports are bolted to the support bases. The support bases are welded to the girders. The intent of the heat shield supports is to provide bolted connections for the heat shield plates and to provide a surface for adding shims between support base and heat shield support.
c) Prior to heat shield installation, the girders are installed with stiffeners on the inboard side but not the outboard side (exhaust hole side). Detail 1/S-108 indicates the configuration of heat shield components.

38. REFERENCE: Specification 05 05 23.00 98, p57, 3.3.1
In 05 05 23.00 98, p57, 3.3.1 "Heating and maintaining the proper temperature shall be accomplished by induction heating blankets unless approved otherwise by the Contracting Officer."

Will NASA consider expanding preheating options prior to contract award?

Response: Consideration of permitting different preheat methods shall be given on a case by case basis during the fabrication effort.

39. REFERENCE: S-001 Legend and SD-105 Note 7
Please note the hatching on SD-105 at the M/M interface locations on either side of T14. This hatching indicates that the existing mount mechanism interface plate and pin are to be reused or reinstalled; however, the flag note 7 on SD-105 indicates these components to be salvaged and stored at a location determined by CO. In all other areas of the drawings (e.g. S-312, and S-510) it appears that these two M/M interface plate and pins are to be furnished and installed with new components as part of the new G14.

Please confirm that the existing mount mechanism interface plate and pin are to be salvaged and turned over to the Contracting Officer without intent to reuse on this project, and that new plate and pin assemblies are to be installed with the new G14.

Response: The existing mount mechanism interface plates and pins are to be salvaged and turned over to the Contracting Officer without intent to reuse on this project, and new plate and pin assemblies are to be installed with the new G14.

40. REFERENCE: S-510 Hole in Interface Plate
There is no hole diameter specified for the hole in the interface plate. There is a very specific size and tolerance specified for the pin which inserts into it. Please provide the hole size and tolerance so that this work may be properly priced.

Response: The dimension for this hole is: COUNTERBORE DIAMETER = 8.996" (+0.0012"/-0.0000") DEPTH = 3.00" FOR FN1 INTERFERENCE FIT (TYP).

41. REFERENCE: S-510, Flag Note 2

Specified note calls for pins to be normalized to provide for a finished product with a Rockwell C32 (BHN 200). This pin is 9" in diameter. Please specify if the contractor will be responsible for reaching the specified value no matter what effort is required or will he simply be responsible for properly normalizing the steel in accordance with industry standards?

Response: The final product shall meet the requirements specified on the drawing.

42. REFERENCE: Sheet SD-101, Note B states:

"The contractor shall anchor the mobile launcher to provide a minimum restraint against uplift force of 500 Kips hold-down at each mount mechanism"

- A. Does this requirement apply to all 6 of the mount mechanism points or can we exclude the ones at lines 1-A and 1-H?
- B. Can we utilize the existing mount pillars as part of our hold-down system? If so, what is the allowable tension load rating at these pillars?
- C. If we need to provide complete and independent foundation / anchor systems, do we need to completely demolish these at the end of the project or can we demo them down to a certain distance below final grade?

Response:

A. Requirement applies to all 6 mount mechanism points.

B. The existing pillars can be used, however, welding to the pillars is not permissible. The capacity of the pillars exceeds 500 kips. The contractor's PE must demonstrate to the satisfaction of the government that his proposed technique for transferring the uplift force to the pillar is within code allowances.

C. The contractor shall remove all temporary foundations and anchoring systems to 3 feet below grade.

43. REFERENCE: On Sheets SD-301 and SD-302 there is a note indicating:

"Remove C/T stiffeners welded on both sides of girder web. Grind stiffeners smooth and paint per specifications to match existing girder."

- A. Is it possible to leave these stiffeners in place as long as any resulting conflicts with new systems are accounted for?

- B. If they do need to be removed completely, can we begin this task at the end of our structural reconstruction phase? We would like to use these two locations as shoring points during demolition and structural modifications

Response:

A. No.

B. There is no objection to performing the task when suggested.

44. REFERENCE: 405 Bridge Weight Limit

Can you please confirm the oversized load weight limit for the 405 Bridge leading to the CCAFS.

Response: The oversized load weight limit depends on a number of factors including the axle loading and the separation between axles. Permits for oversized loads are issued on a case by case basis utilizing information provided by the contractor.

45. REFERENCE: Drawing FP302

Drawing FP302 shows locations for relocated and new quad and parallel valve solenoid panels, but does not show interconnecting tubing from the panels to the control valve actuators. Please verify these systems are to be provided, cleaned and tested as part of this proposal.

Response: Interconnecting tubing from solenoid valve panels to control valve actuators is required per flag note 22 on sheet FP504 and flag note 18 on sheet FP505. Cleaning and testing of the tubing is also required by notes on these two sheets.

46. REFERENCE: Drawing FP302, 504 and 505

Will SST tubing and KC type tube fittings required for this project be GFE or contractor furnished?

Response: SST tubing and KC fittings shall be provided by the contractor.

47. REFERENCE: Drawing FP302, 504 and 505

Where will removed and to be reused equipment and components be stored and protected during construction?

Response: The contractor shall be responsible for storing the equipment and components to be reused.

48. Will NASA be providing 3rd party weld NDT?

Response: No, the contractor shall provide an independent 3rd party weld inspection company to perform NDT.

49. REFERENCE: Drawing MP401

Contract drawings do not provide nozzle details for the pre liftoff 18" and 10" piping penetrations in the vehicle exhaust hole. Temporary caps will be required for testing. Should caps be removed and the pipes' end prepped under this contract?

Response: Prepping of the pipes' ends for future nozzle installation is not required under this contract. After hydrostatic testing, the pipe caps shall remain and the coatings damaged during cap installation shall be repaired in accordance with Specification Section 09 97 13.00 98.

50. REFERENCE: Drawing MP506

Are the welds required to produce the segmented fittings and tees shown on Drawing MP506 to be subjected to the same weld procedure development, certifications, inspections and NDT requirements of Specification Section 40 17 26 if provided by an outside supplier?

Response: Yes, the fabricated fittings shall be subject to the requirements of Specification Section 40 17 26.

51. REFERENCE: Drawing MP401

Will the installation of piping inside haunches shown on Drawing MP401 be considered "confined space"?

Response: If the work space and environment meets the criteria stated in the contract clause J.1.B.14 "CONFINED SPACE WORK REQUIREMENTS (MAY 2011)" it will be considered a confined space.

52. REFERENCE: Drawing MP507

Note 1 stipulates the quench deck flanges to be fabricated to ASTM A182 Grade 11, Class 11. This is a different material from the pipe, deck, and stud materials which would require additional weld procedure development and certifications for differing materials. Is this the intended material for these flanges?

Response: Deck Quench is being deleted from the contract.

53. REFERENCE: Drawing MP305

Drawing MP305 shows 30" and 42" x 1" wall piping on flanged risers. Please verify the same counterbore Detail 2 shown on MP501 would apply to each end of the 1" wall piping to adapt to the wall thickness of the lower tees or elbows, as well as the 150# weld neck flanges.

Response: Welded joints having different wall thicknesses shall be prepared in accordance with AWS D1.1/D1.1M, per Specification Section 22 70 00, paragraphs 2.1.3 and 2.1.3.1.

54. REFERENCE: E-107, E-108

For bid purposes shall we assume that feeder cables will be long enough to re-terminate in MLT electric rooms given the re-configuration of the cable trays?

Response: Yes.

55. REFERENCE: ED101 Zone C/5

Please provide the penetration type at this receptacle.

Response: The existing penetration is through outer corrugation, insulation and perforated ribbed aluminum panel similar to "Conduit Penetration Detail -4" on Sheet E-509.

56. REFERENCE: ED901 Compartment A4 Side 4

Does the ODMS Class 1 Div 2 Horn and Strobes require removal and reinstallation?

Also, there are two conduits up at the ceiling. Please provide the service required for these conduits and whether they will be required to be removed. Also, will new floor penetrations be required at the conduit chase?

Response: Yes, horn and strobe are required to be removed and reinstalled. Refer to MOD and MO sheets for demolition and installation of ODMS system.

The only conduits at the ceiling within 5 feet from face of and 2 feet to each side of the new crawler transporter stiffener locations are 2 for monitoring the VESDA unit, 3 ODMS signal, fire alarm signal, fire alarm initiating device, receptacle power, and an emergency light circuit. Wiring details for the fire alarm system (including the VESDA units) are shown on 242M2700002TRO-6951. The wiring details for the ODMS system is found in 242M2700002TRO-5887. 242M2700002 provides layouts of end items and

light fixtures. However, it is up to the contractor to determine exact amount of rework required based on means and methods for the installation of new steel. Quantities and service for existing cable and conduit will need to be field verified.

Yes. New floor penetrations will be required.

57. REFERENCE: ED901 Compartment B4 Side 4

In reference to the 11 conduits along the ceiling, what are the conduits for and will they require removal? Is 1 of the conduits for the LDMM System? If so will the jumper cable have to be replaced?

Response: The only conduits at the ceiling within 5 feet from face of and 2 feet to each side of the new crawler transporter stiffener locations are 2 for monitoring the VESDA unit, 3 ODMS signal, ODMS power, Fire alarm signal, Fire Alarm annunciation circuit and a light fixture. Wiring details for the fire alarm system (including the VESDA units) are shown on 242M2700002TRO-6951. The wiring details for the ODMS system is found in 242M2700002TRO-5887. 242M2700002 provides layouts of end items and light fixtures. However, it is up to the contractor to determine exact amount of rework required based on means and methods for the installation of new steel. Quantities and service for existing cable and conduit will need to be field verified.

The conduits are not part of the LDMM system. The cable system for the LDMM system is generally routed in cable trays with conductors routed in conduit from the nearest cable tray, down the wall, through the cellular floor deck to mud valves/drain sumps located below the floor.

Refer to Sheet EYD601 for the expected jumper cables to be modified for the LDMM system.

58. REFERENCE: ED901 Compartment B2 Side 2

In reference to the 11 conduits along the ceiling, what are the conduits for and will they require removal? Will a new floor penetration be required for the Leak Detection conduit?

Response: The only conduits at the ceiling within 5 feet from face of and 2 feet to each side of the new crawler transporter stiffener locations are Fire Alarm signal, Fire Alarm annunciator, and power to AHU5. Wiring details

for the fire alarm system (including the VESDA units) are shown on 242M2700002TRO-6951. 242M2700002 provides layouts of end items and light fixtures. The routing of the branch circuit conduit and are required to be worked. It is up to the contractor to determine exact amount of rework is required based on means and methods for the installation of new steel. Quantities and service for wiring was not included in the as-built information. Quantities and service for existing cable and conduit will need to be field verified.

A new floor penetration will be required.

59. REFERENCE: ED901 Compartment B2 Side 4

In reference to the 11 conduits along the ceiling, what are the conduits for and will they require removal? Will a new floor penetration be required for the Leak Detection conduit? Will the conduit running to the Emergency Luminaire need to be removed?

Response: The only conduits at the ceiling within 5 feet from face of and 2 feet to each side of the new crawler transporter stiffener locations are to Vesda monitor, FA initiating devices, FA notification devices, FA annunciator, ODMS, Emergency light, lights, and Vesda power. Wiring details for the fire alarm system (including the VESDA units) are shown on 242M2700002TRO-6951. The wiring details for the ODMS system is found in 242M2700002TRO-5887. 242M2700002 provides layouts of end items and light fixtures. It is up to the contractor to determine exact amount of rework required based on means and methods for the installation of new steel. Quantities and service for existing cable and conduit will need to be field verified.

A new floor penetration will be required.

The conduit and wire will need to be reworked. See response above for base assumptions.

60. REFERENCE: ED901 Compartment B3 Side 2

In reference to the 11 conduits along the ceiling, what are the conduits for and will they require removal?

Response: The only conduits at the ceiling within 5 feet from face of and 2 feet to each side of the new crawler transporter stiffener locations are the

power to the VESDA unit in B3 and the wiring to monitor the VESDA unit. Wiring details are shown on 242M2700002TRO-6951 . It is up to the contractor to determine exact amount of rework required based on means and methods for the installation of new steel. Quantities and service for existing cable and conduit will need to be field verified.

61. REFERENCE: ED901 Compartment A5 Side 4

Will the Air Sampling Device need to be removed? Will new floor penetrations be required for Vesda conduits? Will the wall opening be reinstated? If not please provide new conduit routing to Compartment A3.

Response: There are no Air Sampling Devices shown in the referenced image. There is compressed air and chilled water piping in the image. Refer to MCD and MC sheets for modifications to compressed air system. Refer to MHD and MH for modifications to chilled water system. The 5 conduits that will need to be rerouted through the girder penetration consist of 2 for VESDA, 1 for KCCS, 1 for the 20 A receptacle and 1 for the fire alarm devices.

New floor penetrations will be required.

Refer to Sections A and C on Sheet E-301 for new wall opening location. Additional penetrations should not be required.

Suggest routing conduit parallel with chilled water pipe shown in Section C on Sheet E-301. Exact routing shall be field verified.

62. REFERENCE: ED102 Compartment A4 Side 4 and ED901 Compartment A4 Side 4

Is the fixture to be removed and reinstated? Will it require new wire rope isolators?

Response: Yes. Follow detail A on Sheet ED502. Remove welded support from structure. Install new support. Reinstall luminaire and brackets.

Yes, new wire rope isolators will be required. Provide new 59A type wire rope isolators per Table 1 on Sheet E-503.

63. REFERENCE: E-101 Zone B/5 Girder Penetration

Is this a new penetration and what penetration detail is required from E-509?

Response: Yes, a penetration is required in the new girder. Follow “Conduit Penetration Detail – 4” on Sheet E-509.

64. REFERENCE: E-102 Receptacles on Skid Platforms
Will the receptacles require a new penetrations and what penetration detail is required from E-509?

Response: Yes, in addition to lighting circuits and KCCS circuits. Refer to Sheets S-302 and S-305 for penetrations through girders. Follow “Conduit Penetration Detail -4” on Sheet E-509.

65. REFERENCE: 242M2700002 As-Built Drawings E39 Conduit Corridors
Will all of the conduit corridors in AB5, AB6, AB7, and AB8 have to be removed?

Response: Yes, remove all conduit and wire back to Compartment AB5 unless otherwise noted (i.e. back to source).

66. Please provide all Walkdown sign in sheets.

Response: A copy of the sign in sheet for the organized Site Visit that occurred on February 13, 2013 is available upon request to the Contracting Officer.

67. REFERENCE: ED106 PAB5-1
If we are to remove the type 2 supports what will support the cable tray in this area? Does this affect the Data Tray as well?

Response: Refer to General Note 5. Remove only the portion of the support that does not affect other cable trays, conduits or subsystems that are to remain.

Yes, the data cable tray, power cable and other sub systems do share supports. Remove the portion of the supports that do not affect other cable trays, conduits or subsystem that are to remain and are attached to the same support.

68. REFERENCE: Electrical Conduit Supports
If unistrut is used for interior conduit supports, can standard conduit clamps be utilized or will u-bolts with flex-loc nuts be required?

Response: Provide U-bolts with flex-loc or double nut ends for conduit attachments to Unistrut.

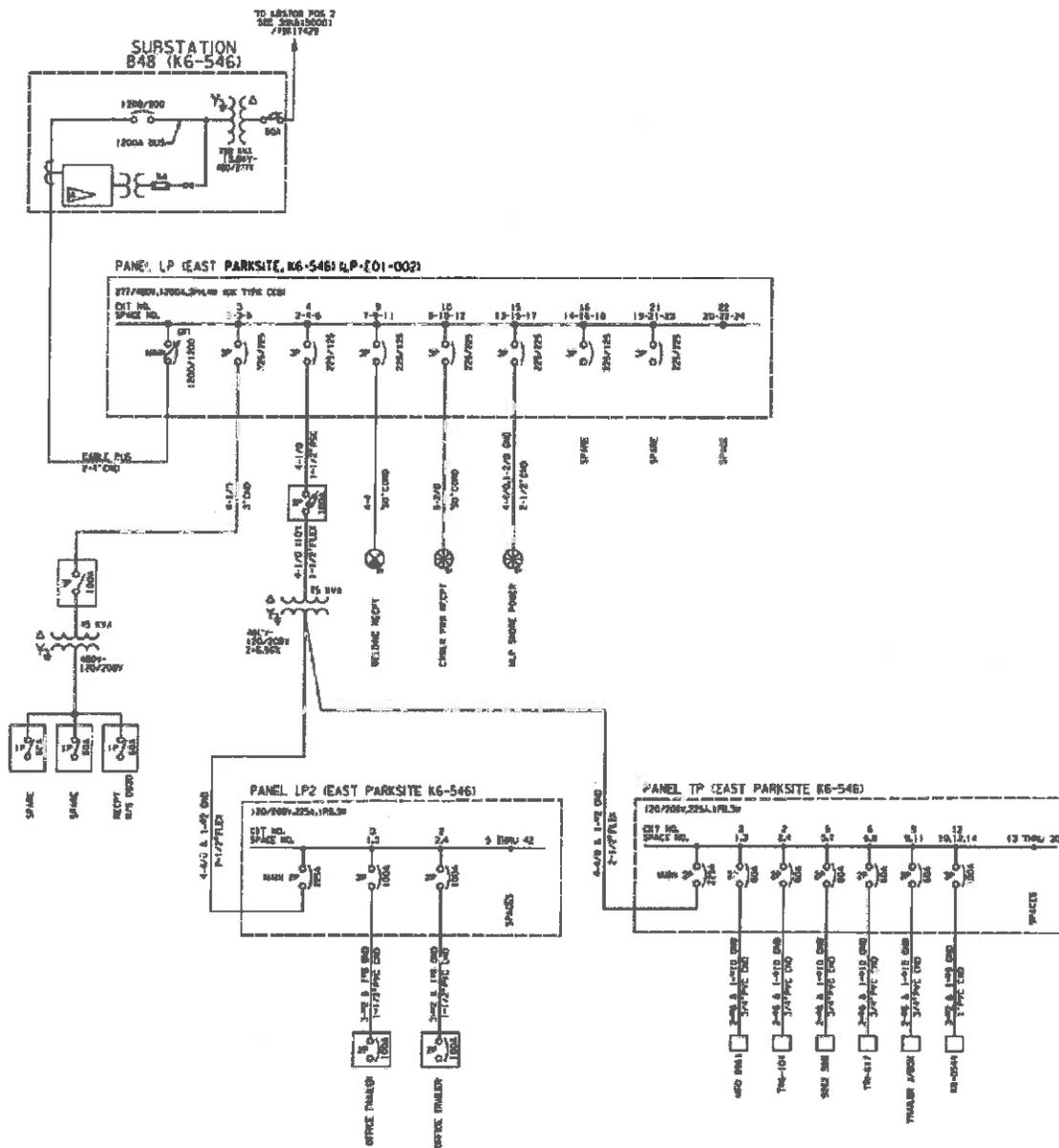
69. REFERENCE: General Condition – Life Safety
Will temporary circuiting be required to maintain the fire alarm system function during construction? Is there an expectation that the fire alarm system shall remain active during the performance of this project?

Response: No additional circuiting should be needed in addition to the temporary power connection provided under Key Note 8 on sheet ED601. This shall maintain power to the fire alarm system during construction in order to maintain battery life and programming.

The fire alarm system does not need to remain active during the period of performance of this project.

70. REFERENCE: General – temporary power
Please provide information regarding existing shore power switchgear at the parksite for use as temporary power source for construction.

Response: See attached one-line diagram of the power at the park site. The MLP Shore power circuit will be temporarily disconnected from Panel LP to temporarily feed MLB-B1-Transit-P1 panel per Attachment J1L. See Sheet G-102 flag note 20 for locations of electrical equipment



Also an unloaded 1 phase 7970KV-120/240V, 250 KVA transformer located next to building K6-547 is dedicated for the use of construction trailers.

71. Will NASA pay for major raw materials and fabrications stored off site? The concern is financing of fabrications that may not be installed for several months.

Response: Please refer to Clause G.5, Payment for Material/Equipment.

72. Please provide any special Maritime procedures for barge access to the site. Are permits or inspections required?

Response: There are no additional maritime procedures imposed by NASA above and beyond what is required for transport on navigable waters within the state of Florida. The contractor shall be required to coordinate barge activity with NASA for purposes of opening and closing the bridges on KSC property. Offloading activities at the barge terminal facility will need to be coordinated with NASA to ensure that imposed loads do not exceed allowable loads of the barge terminal facility structure.

73. Please provide design criteria for existing foundations at the site.

Response: The mount mechanisms can support over 500 kips in uplift. The mount mechanisms can support over 4 million pounds in downward force.

74. Please provide 3D AutoCAD/BIM model of existing Mobile Launcher structure.

Response: Please refer to J.1A.9 "DESIGN PROE AND STAAD MODELS AVAILABLE". 3D AutoCAD/BIM model of existing Mobile Launcher structure are not available.

75. Are we allowed to perform installation work on site on government holidays?

Response: Yes

76. Will shift work and overtime be allowed? Are there any gate restrictions outside of 8:00 AM to 5:00 PM?

Response: Shift work and overtime are allowed as approved by the contracting officer

77. How many days per month does NASA allow for impacted work due to weather conditions?

Response: None

78. If work is impacted more than 4 hours in a day due to weather conditions (wind, rain and/or temperature) will NASA allow for a schedule extension without compensation?

Response: Weather delays will not be adequate justification for schedule extensions.

79. If base operations, such as, road closures, heightened gate access restrictions or other NASA action that could not be anticipated and impacts our work, would that be consideration for a schedule extension?

Response: Base operations, such as, road closures, heightened gate access restrictions or other NASA action that could not be anticipated and impacts work will not normally be considered for a schedule extension. Extraordinary closure durations, however, may be cause for consideration of a schedule extension request.

80. Please provide original ML Elevator manufacturer in order to fulfill attachment J.1.L of Solicitation NNK13457725R. And specification section 14 21 23. Is there a current elevator service and maintenance agreement for these elevators? If so, with whom? The concern is maintaining existing warranties.

Response: Mid-American Elevators Inc (820 N. Wolcott Av, Chicago, IL 60622, 773-486-6900) manufactured the Elevators on the Mobile Launcher

81. Please provide original ML Perforated Ribbed Aluminum Panel – Specification Section 07 42 13. As built do not provide manufacturer.

Response: Existing ML Perforated Ribbed Aluminum Panels were provided per Specification Section 07 42 13 by Creative Building Supply, Inc., PO Box 299, Lakewood NJ 08701, (732)367-6333

82. For items to be turned over to "Owner" what is the distance to location for storage? And is this to be part of our contract scope to transport and store at location or will owner be providing this.

Response: The contractor shall transport items to a government storage location not more than 10 miles from the job site.

83. Are all temporary utilities to be provided at site of work being performed at no cost to GC?

Response: Refer to contract clause H.9, KSC ON-SITE FACILITIES AND SERVICES

84. There are numerous welds [both shop and field welds indicated] to be performed. Will weld indications [shop vs field be strictly enforced?] It appears some shop welds should be field welds due to phasing & scheduling. Please update and clarify.

Response: The contractor may dictate means and methods of welding (shop vs. field) to suit phasing and scheduling of the project as long as the work meets the intent and design criteria stated in the drawings.

85. There are various indications of camber required at top of trusses/bulkheads i.e. Sheet S-309 and various other locations. Are we to assume bottom flanges have same cambers to be met? Please clarify.

Response: The camber applies to the entire member.

86. Will there be consideration given to extending bid date? Please consider extending due date.

Response: The proposal receipt date for Part 2 (Price) is being extended to April 15, 2013.

87. Can you provide a Geotechnical Report for the Project area?

Response: A geotechnical survey/report was not generated for this project.

88. Can you provide drawings for the following existing components:

- a. Mounting mechanism structural drawings
- b. Mounting mechanism foundation/piers
- c. Adjacent concrete slabs and foundations

Response:

- A. Drawing 75M05120 sheets 71-77 is provided for reference.**
- B. Drawings 232-28-274 is provided for reference (note that the drawing is not recent and conditions may have changed) & 75M05120 sheets 71-77**
- C. See Sheet G-102 for the adjacent slabs and foundation locations. Drawing 79K30008, sheet S8 for construction of original slabs is proved for reference.**

89. Can you provide overall weight of Mobile Launch Platform, specifically the Dead Load and Live Load reactions at the four Carrier Transport mount locations and at the six mounting mechanism locations?

Response: The estimated overall weight of the ML is 10000 kips. The estimated dead load at mount mechanisms 1, 2, 4, and 5 is 2000 kips. The estimated dead load at mount mechanisms 3 and 6 is 1200 kips. The estimated live load at all mount mechanisms is 400 kips. When supported

by the crawler transporter, the estimated dead load on interfaces 7 and 9 is 3200 kips and the estimated dead load on interfaces 8 and 10 is 1800 kips.

90. Can you provide a structural analysis model for the existing launch platform and the re-configured launch platform? If so, what structural analysis program was used?

Response: Please refer to J.1A.9 "DESIGN PROE AND STAAD MODELS AVAILABLE". Structural analysis models will be available after contract award.

91. Can you provide connections forces for the structural steel connections to be designed in accordance with specification section 05 12 00 Section 1.5.1?

Response: S-509 provides the information.

92. Note B on sheet SD102 states that "the contractor shall install shoring and bracing per the contractors approved plan. The contractor shall anchor the mobile launcher to provide a minimum restraint against an uplift force of 500 kips at each mount mechanism." Are you requesting 500 kip uplift restraint at the shoring points, or only at the six existing mount mechanisms at A1, A4, A8, H1, H4, and H8?

Response: Only at the six existing mount mechanisms.

93. Drawing K0000135925 Page MP506, Detail 4. Per numerous large pipe manufacture suppliers, 60" short radius 90 elbows are not available; can the contractor fabricate the tee using two mitered fittings?

Response: It is acceptable to fabricate the tee using two mitered fittings. Note, the fabricated fittings shall be subject to the requirements of Specification Section 40 17 26.

94. Drawing K0000135925, Page MO101, Note 7, references KSC-SPEC-0007E, KSC-SPEC-0005C, and KSC-SPEC-0008C for fabrication and install of the tubing. These specifications only reference stainless steel tubing. What is the proper specification for installation of the flexible nylon tubing call out in note 6 on page MO101?

Response: Use a 5 ft. piece of 1/2" EMT to secure the end of the tubing. Secure the horizontal runs of nylon tubing every 5 ft. and vertical runs every 10 ft. Secure all runs within 2 ft. of each bend. Details for securing the tubing are shown on sheet MO-601.

95. Drawing K0000135925, Page MO101, Note 7, references KSC-C-123 for cleaning. This is a general specification. What are the required particulate, and NVR samples? What is the allowable validation solvent for the flexible nylon tubing?

Response: Replace the tubing if the interior of the tubing is exposed to particulates during construction. Bag the end of the filters prior to construction to keep particulate from entering the tube.

96. S-708, section D. Heat shield support base. What size are the plates that form the "T"? If we use a WT can the flange be wider than 7", or would we need to rip it down?

Response: See response to question 37

97. S-708 and S-710. How thick is the plate that welds to the WT in the heat shield supports? How are they welded? Fillet or CJP?

Response: See response to question 37

98. Will the existing lifting bridle for the launch mount be made available and will it be certified for this application?

Response: The CLV Mobile Launcher Launch Mount Lifting Sling (see 242M0300004TRO-5191 for details) will be available for use. The contractor shall perform visual inspections and note any discrepancies prior to use. The sling is currently located in the VAB. The contractor shall transport the sling to the job site and back when complete.



99. Please provide the names of companies that are approved to perform testing services at the NASA facility, such as, weldment inspections, steel testing, elevator and mechanical and electrical testing.

Response: NASA does not maintain a list of approved companies.

2. Reference Drawings 242M0300004TRO-5191, 75M-05120, 232-28-274, and 79K30008 are added to the Solicitation. The added reference drawings are classified as "Sensitive But Unclassified" (SBU) information and contain Export Controlled data. Therefore, all offerors must explicitly request access to those documents through <https://www.fbo.gov>. Instructions for properly registering and requesting access can be found under Section 4.5 through 4.8 of the FBO Vendor Guide at https://www.fbo.gov/downloads/FBO_Vendor_Guide_v1.7.pdf. These drawings and specifications are required for your proposal preparation and must be requested by you.

Once properly registered, the documents are located at <https://www.fbo.gov/fedteds/NNK13457725R3>

3. Solicitation, Section C – Description/Specifications, Clause C.1 Specification/Statement of Work is revised to read as follows:

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The Contractor shall provide the item or services specified in Section B.2 in accordance with the following:

Attachment J1:

Drawings

Number: K0000135925
Title: Mobile Launcher Modifications for SLS
Date: 100%, February 28, 2013
No. of Sheets: 308

Specifications

Number: K0000135926-SPC
Title: Mobile Launcher Modifications for SLS
Date: 100%, February 28, 2013
No. of Sheets: 497

Drawings (For Reference Only)

CLV Mobile Launcher Launch Mount Stand Drawings (For Reference only)

Number: 242M0300005
Title: CLV Mobile Launcher Launch Mount Transporter & Support Stand
Date: 4/10/2008
No. of Sheets: 6

CLV Mobile Launcher Launch Mount Structure Drawings (For Reference only)

Number: 242M0300004
Title: CLV Mobile Launcher Launch Mount Structure
Date: 2/13/2009
No. of Sheets: 50

CLV Mobile Launcher Structure Drawings (For Reference only)

Number: 242M2700002
Title: CLV Mobile Launcher Structure
Date: 5/15/2011
No. of Sheets: 449

Drawings (For Reference Only)

Number: 79K06110
Title: Procedure for MI Cable Terminations
Date: October 29, 1980

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No. of Sheets: 12

Drawings (For Reference Only)

Number: 242M2700002TRO6951
Title: Fire Alarm Module Schematic Drawings (Revision 1)
Date: October 10, 2010
No. of Sheets: 41

Drawings (For Reference Only)

Number: 242M2700002TRO6962
Title: Fire Alarm As-Built Drawings (Revision 1)
Date: October 20, 2010
No. of Sheets: 17

Drawings (For Reference Only)

Number: 242M2700002TRO5887
Title: ODMS Record Drawings
Date: February 9, 2010
No. of Sheets: 62

Drawings (For Reference Only)

Number: 242M0300004TRO-5191
Title: CLV Mobile Launcher Launch Mount Lifting Sling Submittal
Date: November 13, 2009
No. of Sheets: 22

Drawings (For Reference Only)

Number: 75M-05120
Title: Launcher Umbilical Tower Structural Steel, Elevators and Cranes
Date: July 7, 1964
No. of Sheets: 78

Drawings (For Reference Only)

Number: 232-28-274
Title: Pile Test Sheet
Date: May 1963
No. of Sheets: 3

Drawings (For Reference Only)

Number: 79K30008

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Amendment 3

Title: ML Park Site No. 3 Utilities Modifications
Date: September 2, 1983
No. of Sheets: 39

4. Solicitation, Section J – List of Documents, Exhibits and Other Attachments, Clause J.1 List of Attachments, Attachment J.1.E is revised to add the following reference drawings:

Drawings (For Reference Only)

Number: 242M0300004TRO-5191
Title: CLV Mobile Launcher Launch Mount Lifting Sling Submittal
Date: November 13, 2009
No. of Sheets: 22

Drawings (For Reference Only)

Number: 75M-05120
Title: Launcher Umbilical Tower Structural Steel, Elevators and Cranes
Date: July 7, 1964
No. of Sheets: 78

Drawings (For Reference Only)

Number: 232-28-274
Title: Pile Test Sheet
Date: May 1963
No. of Sheets: 3

Drawings (For Reference Only)

Number: 79K30008
Title: ML Park Site No. 3 Utilities Modifications
Date: September 2, 1983
No. of Sheets: 39

5. The following requirements are deleted:

- a. Delete R6 rolled PL $\frac{3}{4}$ (typ) on sheet S-702, detail 8
- b. Delete quench water piping and penetrations
 - Delete quench water penetrations shown on sheet S-109
 - Delete quench water nozzles/supply (typical) on sheet MP-301
 - Delete quench water nozzles/supply (typical) on sheet MP-302
 - Delete quench water nozzles/supply (typical) on sheet MP-303

- Delete quench water nozzles/supply (typical) on sheet MP-304
- Delete quench water stub ups and flanges (typical 21 locations) on sheet MP-401
- Delete note 5 on sheet MP-401
- Delete sheet MP-507
- Delete deck quench piping, penetrations, and weld-o-let from detail H/S-109 & H/S-111 on Sheet MP-703.

6. Attachment J.1.B, Special Construction Project Specific Work Requirements, Item J.1.B.16, LANDFILL OPERATIONS /SOLID WASTE REMOVAL, Paragraph 7 (b) is revised to read as follows:

b. NRACM will be accepted at the landfill with prior arrangement with the scale house attendant (minimum 24 hours notification) Tuesday and Thursday during regular landfill hours, but will not be accepted later than 1400 hours.

7. Solicitation NNK13457725R, SF1442, Block 12b, is revised to 10 Calendar Days.

8. The closing submission due date for Part 2 (Price Volume) is extended to April 15, 2013, 3:00 PM local time. The Solicitation, Standard Form 1442, Block 13, paragraph (a) is revised to read as follows:

a. Sealed offers in original and (**See Provision L.19**) copies to perform the work required are due at the place specified in Item 8 by **1500** (hour) local time **04/15/2013** (date). If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

9. All other terms and conditions of NNK13457725R remain unchanged.