Date: February 24, 2016

Project: FedEx Hangar Mechanical and

Electrical Upgrade Design-build

Solicitation No.: 16120

Addendum No. One

TO ALL PLANHOLDERS:

The enclosed addendum amends the proposal documents for the above referenced Project.

Acknowledgment of this addendum is required on the Proposal Submittal. Failure to do so may subject the proposer to disqualification.

Sincerely,

Rich Wooten, CDT, CPSM Contract Compliance Specialist

ADDENDUM TO THE DESIGN/BUILD DOCUMENTS	Page Number	No. of Pages
Addendum No. ONE	Date Addendum Issued: February 24, 2016	
Issuing Office	Previous Addenda Issued	
Rich Wooten, CDT, CPSM		
Alaska Industrial Development Export Authority	None	
813 W Northern Lights Blvd Anchorage, AK 99503		
Phone: (907) 771-3019 Fax: (907) 771-3044		
Project: FedEx Hangar Mechanical and Electrical	Date and Hour Quotes Due: March 15, 2016 at 4:00	
Upgrade Design-build	p.m., prevailing Anchorage time.	
Solicitation No.: 16120		

NOTICE TO PROPOSERS:

Proposers must acknowledge receipt of this addendum prior to the hour and date set for proposal due date by one of the following methods:

- (a) By acknowledging receipt of this addendum on the proposal form submitted.
- (b) By email or telefacsimile which includes a reference to the project and addendum number.

The proposal documents require acknowledgment individually of all addenda to the drawings and/or specifications. This is a mandatory requirement and any proposal received without acknowledgment of receipt of addenda may be classified as not being a responsive bid. If, by virtue of this addendum it is desired to modify a proposal already submitted, such modification may be made by email or telefacsimile provided such an email or telefacsimile makes reference to this addendum and is received prior to the opening hour and date specified above.

The Design/Build documents for the above project are amended as follows (All other terms and conditions remain unchanged):

GENERAL – QUESTIONS & ANSWRES

- 1) **Q:** Are consulting firms that participated in development of the RFP eligible to compete for the design/build contract?
 - **A:** No, firms that participated in the development of the drawings are precluded from participating on the design/build.

PROPOSAL AND CONTRACT REQUIREMENTS

2) **Section 01 05 00 Design and Construction Procedures:** Remove and replace in its entirety with updated Section 01 05 00 (attached, nine (9) pages).

END OF ADDENDUM

SECTION 01 05 00 - DESIGN AND CONSTRUCTION PROCEDURES

1.01. RELATED REQUIREMENTS

- A. Section 01 01 60 Design Submittals
- B. Section 01 54 00 Security

1.02. MANAGEMENT AND COORDINATION

A. Access to and Use of Site(s): Following the Notice to Proceed with construction, the Design-Builder shall have access to the building site. Design-Builder will be required to coordinate access and construction schedules with FedEx through the Owner.

Access to the site prior to Notice-to-Proceed for construction shall be coordinated through the Contracting Agency. No on-site staging of materials or equipment will be allowed prior to the Notice to Proceed for construction.

- B. Changes in the Work:
 - 1. See Conditions of the Contract for procedures.
 - 2. Requests for Information or Clarification of Owner's RFP: Owner's Representative
 - 3. Requests for Substitutions from Approved Construction Documents: Owner's Representative
 - 4. Requests for Modifications to Approved Construction Documents: Owner's Representative
- C. Progress Schedule:
 - 1. As specified in Section 01 32 00.
- D. Progress Documentation for Owner Information:
 - During Schematic Design, Design Development, and Construction Documents Periods: Graphic displays and narratives sufficiently detailed to allow Owner to identify the status of the design.
 - 2. During Construction and Closeout: Written reports, graphic displays, and/or photographs sufficiently detailed to allow the Owner to identify the status of the construction.

1.03. QUALITY REQUIREMENTS

- A. Design Criteria: During development of the design, the design and performance criteria must be refined, finalized, and documented.
 - Pre-Design Conference shall be administered by the Design-Builder. The purpose of this conference is to clarify the design and performance criteria included in the RFP. Design-builder shall coordinate with the Owner to facilitate attendance by major Owner group Stakeholders. Design-builder group attendees should include the architect/engineer of record from each design discipline as well as a representative from each construction trade involved in the project. Design-Builder shall prepare a written record of the conference for review and approval by the Owner.

B. Design and Construction Documents:

1. <u>Design Development Documents</u> shall consist of the preparation, for review and approval by the Owner, drawings and other documents to fix and describe the size and character of the entire project as to mechanical, and electrical systems, materials and such other essentials as may be

appropriate. The Design-Builder shall incorporate into the Design Development Documents resolution to comments made in response to the Schematic Design Documents and any Owner requested scope changes.

- a. Design Development Documents include detailed expansion of the Program Data and Drawings so that the Project's size, appearance, form, construction type, and engineering systems are developed by means of drawings and appropriate written material. Major material selections, equipment items, and quality of finishes shall be identified.
- Design Development drawings and specifications shall specifically include the following items:
 - i Mechanical drawings, schedules and diagrams or a narrative sufficiently developed to reflect the intended major mechanical elements to include preliminary equipment layouts.
 - ii Electrical drawings, schedules and diagrams or a narrative sufficiently developed to reflect the specific power service, lighting, telephone, fire detection and alarm, security and electronic communications systems and identification of required equipment areas.
 - Narrative outline of specifications, which reflect initial materials and systems selections for each section of the specifications, which shall follow the Construction Specifications Institute (CSI) MasterFormat, 50 Division format.
- c. The Design-Builder shall submit to the Owner a statement of design and construction costs (or credits) associated with the Owner's comments and requested scope changes, if any.
- d. The Design-Builder shall obtain and coordinate all preliminary reviews or approvals as required by government or private entities, which have regulatory authority over a proposed project. In addition, the Design-Builder shall obtain and coordinate all preliminary reviews or approvals with local, regional, state, and/or federal agencies having jurisdiction regarding applicable laws, statutes, regulations, and codes or privately owned utility companies or other entities that may impose conditions for a project and from such agencies as may be specifically designated by the Owner.
- 2. <u>Construction Documents</u> shall consist of drawings and specifications setting forth in detail the requirements for construction of the entire project, for approval by the Owner. The Design-Builder shall incorporate into the Design Development Documents resolution to comments made in response to the Design Development Documents and any Owner requested scope changes.
 - a. The Design-Builder shall prepare a complete set of signed and sealed Construction Documents for the project in accordance with the latest edition of the Construction Specifications Institute Manual of Practice, Volume Two, Formats for Specifications and Manuals, and Manual of Practice, MasterFormat, Master List of Section Titles and Numbers, as may be revised and updated. (The term "Construction Documents" as used in this Agreement means the bid documents less the bidding requirements and contract forms.) Additionally, the Design-Builder is required to supply the construction documents on electronic media, i.e.; Adobe Acrobat © PDF files for drawings and specifications. Drawings and specifications shall specifically include the following carefully coordinated items:
 - i Detailed engineering working drawings for heating, ventilating, plumbing work, and engineering analysis. Mechanical working drawings should include plans, sections, details, schedules, diagrams, and notes.
 - ii Detailed engineering drawings for electrical work and engineering analysis. Electrical systems may include major power distribution, interior and exterior lighting, low voltage

- systems, direct current applications and emergency and special effects lighting. Electrical working diagrams should include plans, sections, details, schedules, diagrams, and notes.
- iii Project Manuals including detailed, Mechanical, and Electrical specifications describing related work, standards references, product descriptions, acceptable substitutions, and installation requirements as outlined in the Construction Specifications Institute Manual of Practice, Volume Two, Formats for Specifications and Manuals.
- iv The Design-Builder shall submit to the Owner copies of all engineering calculations that establish the size, shape, dimensions, and capacity of the work involved and energy calculations in a format acceptable to the Owner.
- b. The Design-Builder shall obtain and coordinate all preliminary reviews or approvals as required by government or private entities, which have regulatory authority over a proposed project. In addition, the Design-Builder shall obtain and coordinate all preliminary reviews or approvals with local, regional, state, and/or federal agencies having jurisdiction regarding applicable laws, statutes, regulations, and codes or privately owned utility companies or other entities that may impose conditions for a project and from such agencies as may be specifically designated by the Owner.
- c. The Design-Builder shall submit to the Owner a statement of design and construction costs (or credits) associated with the Owner's comments and requested scope changes, if any, provided upon approval of the Construction Documents.

C. Construction Phase Services

- Construction Phase Services shall consist of providing assistance to the Owner in its oversight of the construction, commencing with the Notice to Proceed with construction and terminating following final acceptance of the Project and Owner approval of the Design-Builder's final invoice for all services throughout the construction phase.
- 2. The Design-Builder shall respond to Owner initiated requests through the Owner's Representative for clarifications of the Construction Documents including any inadequacies in the documents. The Design-Builder shall prepare appropriate instructions or modifications to the Construction Documents for field use. Design-Builder shall advise the Owner on those matters, which may affect the utilization of the project, or extra cost or additional time associated with Owner's change directives.
- 3. Project Meetings: As required in Section 01 20 00
- 4. The Design-Builder and its Design Consultants shall review, approve, or disapprove shop drawings, test results, samples, color selections, and other submissions of the contractor for conformance with the design concept of the Project and for compliance with the information given in the Construction Documents. The Design-Builder shall coordinate directly with the Subcontractors to obtain all submittals required by the Construction Documents and shall promptly notify the Owner concerning any submittals, or lack of submittals, which may delay construction progress. The Design-Builder and Design Consultants' approval of submittals must be in writing to the Subcontractors and copied to the Owner.
- 5. The Design-Builder's Design Consultant (Architect-of-Record) shall certify in each Application for Payment that the Consultant has personally inspected the Work, and that the Work represented by the Application has been constructed in accordance with the intent of the Design Consultant's Construction Documents.
- 6. Record Documents maintained and updated on site. The Design-Builder shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Directives, Change

Orders, Supplemental Agreements, and written interpretations and clarifications in good order and annotated to show all changes made during construction. These record documents together with all Approved samples and a counterpart of all Approved Shop Drawings will be available to the Owner for reference and copying. Upon completion of the Work, the annotated record documents, samples and Shop Drawings will be delivered to the Owner. Record documents shall accurately record variations in the Work, which vary from requirements shown or indicated in the Contract Documents.

- 7. Upon notice of Substantial Completion, the Design-Builder and Design Consultants shall participate in a detailed final construction inspection with the Owner's Representative of all mechanical and electrical aspects of the Project. The Design-Builder and its Design Consultants shall assist the Owner's Representative in the preparation of a list identifying any deficiencies or items to be accomplished and may be required to participate in final re-inspection of the Project with the Owner's Representative to ascertain that the corrections have been made.
- D. Substantiation Submittal Procedures:
 - 1. Time Frames: As specified in Section 00 51 00; paragraph 5.2. If there is a conflict between the degree of detail or completion specified and the progress of the design or construction, obtain a clarification before submitting.
 - 2. Recipient: Owner's Representative.
 - 3. Number of Copies: 3 hardcopies, plus copy on electronic media for Owner's use and records; Owner will return not more than one hardcopy.
 - 4. For time periods that constitute Milestones, all substantiation submittals required during that period must be complete and accepted before the Milestone can be considered achieved.
 - 5. Submit complete sets of documents containing all required items at the end of the following periods:
 - a. Design Development period
 - b. Construction Documents period: Refer to Section 01 05 00, Quality Requirements, Paragraph B.2.c. for requirements.
 - 6. Resubmissions: Clearly identified as such, with all changes made since the original submittal clearly marked.
- E. Owner's Review of Substantiation Submittals: Unless otherwise indicated, Owner will make formal acceptance of substantiation submittals.
 - 1. If a submittal is not acceptable, Owner will notify Design-Builder promptly.
 - 2. Allow minimum of 15 working days for review of major "end of period" submittals.
- F. Substantiation Submittal Schedule: Prepare and maintain a complete schedule of substantiation submittal items, showing:
 - 1. Contents, for each item:
 - a. Anticipated and actual item, with chapter and paragraph number and drawing identification, if any.
 - b. Anticipated submittal date, or time period(s) during which submittal is required.
 - c. Actual submittal date.
 - d. Action taken or other status.

- e. Identification of future re-submission requirement, if any.
- 2. If desired, schedule may be incorporated into overall progress schedule, provided substantiation submittal data can be reported separately from other progress information.
- 3. Submission: To Owner, within 30 days after notice to proceed.
- 4. Updates: To Owner, monthly in hard copy.
- G. Field Testing and Inspection: Perform all testing, observations, and inspections necessary to assure quality (see Quality Assurance below).
 - 1. Exception: Tests and inspections indicated to be performed by Owner's special inspectors or other independent agency. Coordinate required services ahead of time with the Owner.
 - 2. Qualifications of Testing/Inspection Agencies:
 - a. Qualified and equipped to perform applicable tests/inspection.
 - b. Regularly engaged in testing and inspection activities on a commercial basis.
 - c. Independent of Design-Builder and his Subcontractors' organizations.
 - d. Authorized to operate in the state in which the project is located.
 - e. Acceptable to Owner. Design-Builder shall provide firm independent of identified Owner's special inspector.
 - f. Substantiation Submittal: Submittal of qualifications, based on ASTM E 329 and ASTM E 548.
 - 3. Reports: Written report of each test/inspection; including complete details of conditions, methods, and results, signed by responsible individual.
- H. Reference Standards: Where products or workmanship is specified by reference to a document not included in the Contract Documents, comply with the requirements of the document, except where more stringent requirements are specified.
 - 1. Date of Issue: As indicated in each instance except where a specific date is established by code.

1.04. QUALITY ASSURANCE

A. General:

- The Design-Builder shall provide a mechanism for monitoring the performance and products of its own forces, the Design Consultants, Subcontractors, and sub-subcontractors of all tiers, during all phases of the Work, for compliance with the Contract Documents and applicable regulatory requirements, and coordination and cooperation with the Owner.
- B. Testing, Observations, and Inspections:
 - 1. Except as indicated herein below, the Design-Builder shall provide all testing, observations, inspections, and reports.
- C. IBC §1704 Special Inspections:
 - 1. The Owner will provide, with his own forces, all "Special Inspections" required by IBC §1704.
 - 2. The Design-Builder will be furnished a copy of all reports required by IBC §1704.
 - 3. Inspection and testing by the Owner shall not relieve the Design-Builder of its responsibilities for

- testing, observations, and inspections necessary for quality assurance. The Design Builder shall correct all non-compliant work at no expense to the Owner.
- 4. The Design-Builder shall, to the best of its ability, and without compromising quality incorporate into the Project's design materials and building systems that minimize "Special Inspections", or that do not require "Special Inspections", or are permitted exceptions to the "Special Inspections".
- 5. The Design-Builder shall coordinate and schedule, including consideration for conserving resources, all "Special Inspections" described in IBC §1704 directly with the Owner's "Special Inspectors".

1.05. CLOSEOUT SUBMITTALS

- A. Maintenance Manuals: Assemble system design information, operation and maintenance data, and copies of warranties into hard copy binders and compact disk (CD in Adobe Acrobat © pdf file format), organized by functional system (e.g. plumbing, HVAC, etc.) or material type (e.g., flooring, wall finishes, etc.) as appropriate using specification numbers where applicable.
 - 1. Binders: 3-ring, D-ring, with hard cover, project title on spine, Table of Contents in each volume, and stiff dividers with labeled tabs; contents divided into logical binders not more than 3 inches thick.
 - 2. Directory: Names, addresses, telephone numbers, of all design and construction entities, including subcontractors and suppliers, with names of products supplied.
 - 3. Software-Operated Systems and Equipment: Detailed program documentation, a general review of the programming approach, description of use on this project, and description of possible user-modifications.
 - 4. Drawings: Updated As-builts, bound into manuals, folded to size of binder. Include electronic CADD file on the compact disk. Electronic Files shall be the most current version of AutoCAD or later unless approved by the Owner, and files shall not have X-refs.
 - 5. Product Listing: Manufacturer's brand name for each major product actually installed, in alphabetical order by generic product name, cross-referenced to specification numbers and Table of Contents of manuals.
 - 6. Warranties: Photocopies of originals.
- B. Project Record Documents: During construction, maintain on-site one set of all documents forming the contract, including drawings, recording all changes made by addenda, by formal modifications, and in performing the work, for Owner's future reference.
 - 1. Storage: Separately from documents used for construction, in location where they can be kept clean and safe from fire and damage.
 - 2. Changes to be Recorded Include:
 - a. Actual measured locations and ends of existing and abandoned below grade utilities.
 - b. Actual measured locations (horizontal and vertical) of foundations and concealed utilities and appurtenances, referenced to visible permanent appurtenances.
 - c. Field changes of dimension and detail and details not on original documents.
 - d. Actual products used, in specification, with brand name or model number.
 - 3. Upon Final Completion, all changes recorded during construction shall be annotated on the

- electronic CADD files of the drawings and a complete electronic copy of all files submitted to the Owner's Representative.
- C. Spare Parts and Extra Materials: As specified for specific products; delivered to location on project site designated by Owner; with receipt from Owner.
- D. Maintenance Supplies and Tools: As specified for specific products; delivered to location on project site designated by Owner; with receipt from Owner.

1.06. DEMONSTRATION AND TRAINING

- A. Training: Perform training of Owner's personnel in operation and maintenance of equipment, consisting of:
 - 1. Training is required for all software-operated systems, HVAC systems and equipment, plumbing equipment, electrical systems and equipment, and other electrically-operated equipment.
 - 2. Instruction in operation, control, adjustment, shut-down, servicing, troubleshooting, and maintenance, for each equipment item for which training is specified.
 - 3. Instruction in care, cleaning, maintenance, and repair of materials, for:
 - a. Each item for which training is specified.
 - b. Roofing, waterproofing, other weather-exposed or moisture protection products.
 - c. Finishes, including flooring.
 - d. Fixtures and fittings.
 - e. Items as specified in other Chapters.
 - 4. Training Location: If not otherwise specified, conduct training on site, with DVD made for future use.
 - 5. Minimum Qualifications of Trainers: Trainers must submit proof of manufacturer training, or recommendation, of the items and equipment they are training on. Knowledge of the overall project equipment performance when tied to a larger system (e.g., as a pump in a heating zone, in a heating system) is required and shall be demonstrated during training.
 - 6. Maintenance Manuals: Ready for use in training.

1.07. OPERATION AND MAINTENANCE

- A. Operation and Maintenance: Design-Builder is responsible for the following:
 - 1. Preparation of maintenance plan for Owner's use, including description of maintenance activities, tools, and supplies required.
- B. Maintenance Data: Design-Builder shall prepare Maintenance Instructions containing information required to operate, prolong service life, or replace parts of the Work.
 - 1. Mechanical: The Design-Builder shall prepare separate mechanical, HVAC, operating and maintenance instructions containing information to operate, prolong service life, or replace parts of the work. Operating and maintenance data shall specifically include:
 - a. Pipe and duct identification schedules.

- b. Equipment nameplate directory with a list of all equipment indicating Owner's formatted designation, location of equipment, manufacturers' name, model number, serial number, electrical characteristics, primary control switch location and normal position of switch.
- Valve directory indicating valve number, size, location, function, service, type and normal position.
- d. Factory and Field start-up testing reports.
- e. Air and hydronic test and balance report.
- f. Mechanical HVAC Equipment Literature: For all equipment, fixtures, devices, valves and specialties, provide the following:
 - i Manufacturer's data sheets and cut sheets.
 - ii Model and serial numbers.
 - iii Capacity curves, charts and calculations.
 - iv Electrical characteristics.
 - Replacement parts list.
 - vi As-built equipment piping diagrams.
 - vii As-built equipment wiring diagrams.
 - viii Manufacturers' instructions for operation and maintenance.
 - ix Completely mark out on all literature sheets all non-applicable items.
 - x Where piping and wiring diagrams are not available from the manufacturer, they shall be produced by the Contractor.
 - xi Literature shall be grouped together by system, i.e., plumbing, heat generation, etc. For each system section, the Design-Builder shall produce and include a basic system written narrative description. Each narrative shall be comprised of the following:
 - 1) Brief system description, including sequence of operation.
 - Basic system function discussion, including any interaction with other systems or components.
 - 3) Primary system preventive maintenance procedures.
 - 4) How to isolate all major components.
 - 5) How to drain, fill and vent liquid systems.
 - 6) How to drain, clean and refill all tanks, pumps and tube bundles.
 - 7) How to clean coils and change air filters for air systems.
 - 8) Emergency shut-down procedures.
- g. Master Maintenance Schedule: List each item of mechanical and/or HVAC equipment requiring inspection and maintenance, showing component maintenance required and the intervals when such inspection and maintenance shall be performed (daily, weekly, monthly, semi-annually, etc.). For each item, reference the page within the maintenance manual where detailed manufacturers' maintenance instructions can be found.

- 2. Electrical: A one line diagram showing the service and feeder system with raceway, and conductor sizes. A blue-line print folded to 8-1/2" x 11" size indicating the location of end points of all conduits roughed in below grade for future extension. The conduit locations shall be dimensioned from a clearly identified reference point above grade. Each conduit shall be identified to indicate purpose, size and depth below finish grade.
- 3. Parts List: A complete parts list for each Product.
- 4. List of Subcontractors: Description of Work completed by Subcontractor.
- 5. Subcontractor Data: Name, Address, Telephone Number. Person responsible for Work done by Subcontractor.
- 6. List of Suppliers: Description of Equipment, Material, System, etc. supplied by Supplier.
- 7. Supplier Data: Name, Address, Telephone Number. Person responsible for Equipment, Material, System, etc. supplied by Supplier.
- List of Manufacturers: Description of Equipment, Material, System, etc. supplied by Manufacturer.
- 9. Manufacturer Data: Name, Address, Telephone Number. Person responsible for Equipment, Material, System, etc. manufactured by Manufacturer.
- 10. Maintenance Data: Must be provided for the approval of the Owner at least thirty (30) days prior to Substantial Completion. If the approved maintenance instructions are not on hand at the time of Substantial Completion and/or occupancy, the Design-Builder, at his own expense, shall make all repairs, replacement, and installation of any components that may be destroyed or damaged due to the absence of specified instructions, and shall hold the Owner harmless.

END OF SECTION 01 05 00