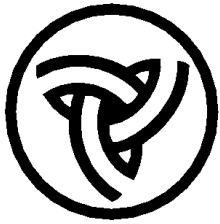


# TRANSPORTATION BULLETIN



Illinois Department of Transportation

## **ADDENDUM NO. 1**

Dated: March 2, 2011

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### Item No. 9A – Construct T-Hangar Site

Logan County Airport

Lincoln, Illinois

Logan County

IL Project No.: AAA-4033

AIP Project No.: 3-17-0062-B17

Contract No.: LO027

### REASON FOR ADDENDUM:

It was discovered that the existing electrical power originates in the T-hangar that is located north of the hangar to be removed, passes through the building to be removed and continues on to the T-hangar located south of the hangar to be removed. The reason for this addendum is to include the work required to maintain electrical power to the south hangar.

## **TO ALL PLAN HOLDERS:**

### **Section III - Special Provisions,**

#### **Item AR800523, Hangar Demolition**

#### **Page 14, CONSTRUCTION METHODS:**

Revise the second paragraph to read as follows:

Electrical power to the building to be removed (the single unit hangar) is from a Main Distribution Panel located in T-Hangar #2. T-Hangar #2 is located north of the single unit hangar to be removed. T-Hangar #2 feeds the single unit hangar with a 20 Amp, 120/240 VAC, single phase, 3-wire circuit. Based on field data the feeder circuit appears to be 3 #8 AWG Type USE, 600 Volt conductors (2 phase conductors and a neutral). The single unit hangar has a j-box with splices for a 120 VAC tap that feeds the lights and receptacles in this hangar. The feeder circuit passes through this hangar and continues on to feed the South T-Hangar. The feeder circuit from the j-box in the single unit hangar to the South T-Hangar is believed to be 3 #4 AWG direct bury cables. The feeder circuit terminates on a fuse panel located in the North section of the South T-Hangar. Power to the South T-Hangar will need to be restored when the single unit hangar is removed. Contractor shall locate the existing feeder from T-Hangar #2 to the single unit hangar and from the single unit hangar to the South T-Hangar. Contractor shall provide 3 #8 AWG (minimum) Type XLP-USE, 600 Volt, Copper Conductors (2 phase conductors and a neutral) and splice to the existing feeder circuit to maintain power to the South T-Hangar.

The extent of the electricity inside the single unit hangar to be removed consists of a junction box, lights, outlets, and associated wiring and conduits. The Contractor shall disconnect the electrical power to this building at the source in adjacent building (T-Hangar #2). All electrical equipment and materials shall be removed and disposed of in a legal manner. Nothing from this building may be sold or re-used in another building. All miscellaneous material inside the building to be removed shall be removed and disposed of off the airport site.

XLP-USE cable shall comply with UL Standard 44, UL Standard 854, and Federal Specification A-A-59544. Conductor shall be concentric-strand, soft copper, conforming to ASTM B8 and Underwriters' Laboratories Standard UL44 for Rubber Insulated Wires. Insulation shall be rated for 600-Volt. Insulation shall be cross-linked polyethylene conforming to Underwriter's Laboratories Requirements for Type USE-2 insulation. Cable shall be UL-listed and marked USE-2. Conductor insulation shall be black for phase conductors and white for neutral conductors to comply with NEC 200.6.

Underground cable installation and splices shall conform to the requirements of Item 108 INSTALLATION OF UNDERGROUND CABLE FOR AIRPORTS of the Illinois Department of Transportation Division of Aeronautics Standard Specifications for Airports. Cable shall be direct buried in earth 18-inches minimum below grade. Direct bury splices will be permitted for this application and shall include splice markers in accordance with the requirements of Item 108, Part 108-3.4 CABLE MARKERS.

The existing feeder circuit to the South T-Hangar is a 120/240 VAC, 3-wire circuit without an equipment ground wire. To comply with the requirements of NEC 250.32, a ground rod needs

to be installed at/near the fuse panel for the South T-Hangar, bonded to the frame of the fuse panel and bonded to the neutral with a #6 AWG copper (minimum) conductor. Furnish and install a 3/4-in. diameter by 10-ft long, UL listed copper-clad ground rod at the South T-Hangar exterior near the fuse panel for this hangar. Top of ground rod shall be buried 30 in. below grade. All connections to ground rods shall be made with a UL listed ground rod connector or exothermic weld type connectors, Cadweld by Erico Products, Inc., Solon, Ohio, (Phone 1-800-248-9353), Thermoweld by Continental Industries, Inc., Tulsa, Oklahoma (Phone 918-663-1440) or Ultraweld by Harger Lightning Protection Grounding Equipment, Grayslake, Illinois (Phone 1-800-842-7437), or approved equal. Exothermic weld connections shall be installed in conformance with the respective manufacturer's directions using molds as required for each respective application. Connect the fuse panel enclosure frame/ground bar to the ground rod with a #6 AWG bare stranded copper grounding electrode conductor. Provide 3/4-inch Schedule 40 PVC conduit from the fuse panel to approximately 1 foot below grade for the #6 AWG grounding electrode conductor. PVC conduit shall enter the hangar building 24-inches minimum above finished floor to comply with the requirements of NEC 513. Bond the neutral to ground in this fuse panel with a #6 AWG (minimum) stranded copper bonding jumper.

Contractor shall coordinate work and any power outages with the Airport Manager and the Resident Engineer. Any shutdown of existing systems shall be scheduled with and approved by the Airport Manager prior to shutdown. Once shut down, the circuits shall be labeled as such to prevent accidental energizing of the respective circuits. All personnel shall follow U.S. Department of Labor Occupational Safety & Health Administration (OSHA) 29 CFR Part 1910 Occupational Safety and Health Standards for electrical safety and lockout/tagout procedures including, but not limited to, 29 CFR section 1910.147 The Control of Hazardous Energy (lockout/tagout).

The Contractor shall furnish and install all electrical materials necessary for complete and operational installation. The complete installation and wiring shall be done in a neat, workmanlike manner. All electrical work shall comply with the requirements of the NFPA 70 - National Electrical Code (NEC) most current issue in force, the respective equipment manufacturer's directions, and all other applicable local codes, laws, ordinances and requirements in force. Any installations which void the UL listing, ETL listing, (or other third party listing), and/or the manufacturer's warranty of a device will not be permitted.

Per NEC 513, aircraft hangars are classified as a Class I, Division 2, Group D hazardous location for a level of 18 in. above the floor for the entire area of the hangar. Per NEC 513.3(C) "Vicinity of Aircraft", the area within 5 ft horizontally from aircraft power plants or aircraft fuel tanks shall be classified as a Class I, Division 2 location that shall extend upward from the floor to a level 5 ft above the upper surface of wings and of engine enclosures. All electrical installations in the hangar shall conform to the applicable sections of NEC 500, 501, and 513 in addition to the other applicable sections of NEC. Where electrical equipment is installed in a classified hazardous location, it shall be suitable for use in the respective classified hazardous location. Where possible, avoid installation of electrical equipment, raceways, and wiring in the classified hazardous areas of aircraft hangars.

Locate Existing Underground Utilities and Cables. The location, size, and type of material of existing underground and/or aboveground utilities indicated on the Plans are not represented as being accurate, sufficient, or complete. Neither the Owner nor the Engineer assumes any responsibility whatever in respect to the accuracy, completeness, or sufficiency of the information. There is no guarantee, either expressed or implied, that the locations, size, and type of material of existing underground utilities indicated are representative of those to be

encountered in the construction. It shall be the Contractor's responsibility to determine the actual location of all such facilities, including service connections to underground utilities. Prior to construction, the Contractor shall notify the utility companies of his operational plans, and shall obtain, from the respective utility companies, detailed information and assistance relative to the location of their facilities and the working schedule of the companies for removal or adjustment, where required. In the event an unexpected utility interference is encountered during construction, the Contractor shall immediately notify the utility company of jurisdiction. The Owner's Representative and/or the Resident Engineer shall also be immediately notified. Any damage to such mains and services shall be restored to service at once and paid for by the Contractor at no additional cost to the Contract. All utility cables and lines shall be located by the respective utility. **Contact JULIE (Joint Utility Location Information for Excavators) for utility information, phone: 1-800-892-0123.** Contact the FAA (Federal Aviation Administration) for assistance in locating FAA cables and utilities. Location of FAA power, control, and communication cables shall be coordinated with and/or located by the FAA. Also contact Airport Director/Manager and Airport Personnel for assistance in locating underground Airport cables and/or utilities. Also coordinate work with all aboveground utilities.

**Page 15, BASIS OF PAYMENT:**

Add to this section:

The cost of the work included in this addendum shall be considered incidental to Item AR800523 - Hangar Demolition.