# ADDENDUM NUMBER 2

**DATE:** July 6, 2012

**RE:** Indefinite Delivery of Fire Alarm Contracting Services
Williams-Brice Nursing Building FA Upgrades
(H27-D162-JM)

**SUBMITTED BY:** University of South Carolina

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**ATTACHMENT:** Revised Specification Section 16750, page 8, paragraph 2.3.M,2

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The following items take precedence over referenced portions of the Contract Documents for the referenced project, Project Manual, dated May 2012, and Drawings, dated June 13, 2012, as well as Addendum Number 1 dated July 3, 2012, and, in executing a contract, shall become a part thereof.

Where any item called for in the documents is supplemented hereby, the original requirements shall remain in effect. All supplemental conditions shall be considered as added thereto.

Where any original item is amended, voided, or superseded hereby, the provision of such items not so specifically amended, voided, or superseded shall remain in effect.

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**Questions & Responses**

1. QUESTION: Specifications require the NAC circuits to be Class "B" on page 16750-6C and Class "A" on 16750-8 (M-2). Is it Class "A" or Class "B"?

   RESPONSE: All NAC circuits shall be Class "B" as required by Specification Section 16750, paragraph 2.3.C, 2, General Fire Alarm Note 20 on Sheet F-0, and General Notes 6 and 8 on Sheet FA-10. Specification Section 16750, paragraph 2.3.M,2 [16750-8 (M-2)] shall be corrected to require Class "B."

2. QUESTION: Are the electrical rooms 2 hour rated?

   RESPONSE: The walls/floors of the buildings are existing and aged. Their fire resistance rating (FRR) could not be reliably determined, and their integrity could not be reasonably verified. The FRR of wall/floor assemblies are provided for informational purposes only, and shall not be construed as the actual minimum FRR. Refer to Rate Wall Legend and Key Notes on Sheets for additional reference. The intent to provide wall/floor ratings on the drawings was: 1) to require all penetrations associated with the fire alarm design scope in the walls/floors identified as FRR on the drawings to be provided with a UL Listed or Approved firestopping assembly equal to the FRR of the wall/floor shown; 2) for pricing to comply with the intent, and; 3) for design and coordination purposes. Additionally refer to Specification Section 16750, paragraph 3.1, M, for firestopping requirement.

3. QUESTION: Reading section 3.2 C 2 it looks like it will be ok to install cable in raceway inside the electrical rooms if they are 2 hour fire rated. If the electrical rooms are not 2 hour fire rated it's ok to install circuit integrity cable in raceway in the electrical rooms. Is that correct?

   RESPONSE: Specification Section 16750, paragraph 3.2.C,2, permits the use of Fire-Rated Cables (i.e. Circuit Integrity (CI) cable) at locations where FRR protection is required for survivability compliance.

4. QUESTION: Is it ok to use 14 AWG twisted pair unshielded cable for SLC if manufacturer recommended (16750-13 2.13)?

   RESPONSE: No. Specification Section 16750, paragraph 2.13,B, requires Twisted, shielded pair (TSP), not less than 14AWG.

5. QUESTION: If manufacturer approved can the SLC and NAC circuits be installed in the same conduit (16750-14 C-3)?

   RESPONSE: No. Specification Section 16750, paragraph 3.2.C,3, prohibits other system cable installation in the same cable or raceway as signaling line circuits.

6. QUESTION: Is it acceptable to install circuit integrity cable for riser cables in different conduits in the same electrical room?

   RESPONSE: Yes.

7. QUESTION: I assume this building is being viewed as a high rise. Is that correct?

   RESPONSE: No. The building is not a high rise.

8. QUESTION: Is Genesis wire and cable acceptable (FPLR)?

   RESPONSE: No. Specification Section 16750, paragraph 2.1.A.2, requires either Comtran Corporation, Helix/HiTemp Cables, Inc.; a Draka USA Company, or West Penn Wire/CDT; a division of Cable Design Technoligies.

9. QUESTION: On page 16750-15 it reads as if the two separate cable risers are required to minimize the loss of additional signals should there be a short on one of the riser cables. There is an isolation module available that will isolate shorts from the remainder of the riser and allow for the remainder of the riser to send signals should there be a short on one floor. Is this type of circuit survival ability acceptable?

   RESPONSE: No.

**Specifications:**

1. Section 16750, paragraph 2.3.M,2: DELETE Class “A”, and REPLACE with Class “B.”

END OF ADDENDUM NUMBER 2

activates an "alarm silence" light. Display of identity of the alarm zone or device is retained.

2. Subsequent alarm signals from other devices or zones reactivate notification appliances until silencing switch is operated again.
3. When alarm-initiating devices return to normal and system reset switch is operated, notification appliances operate again until alarm silence switch is reset.

J. Walk Test: A test mode to allow one person to test alarm and supervisory features of initiating devices. Enabling of this mode shall require the entry of a password. The FACU and annunciators shall display a test indication while the test is underway. If testing ceases while in walk-test mode, after a preset delay, the system shall automatically return to normal.

K. Remote Smoke-Detector Sensitivity Adjustment: Controls shall select specific addressable smoke detectors for adjustment, display their current status and sensitivity settings, and control of changes in those settings. Allow controls to be used to program repetitive, time-scheduled, and automated changes in sensitivity of specific detector groups. Record sensitivity adjustments and sensitivity-adjustment schedule changes in system memory.

L. Transmission to Remote Alarm Receiving Station: Automatically transmit alarm, trouble, and supervisory signals to a remote alarm station through a digital alarm communicator transmitter and telephone lines to USC Fire Safety / Campus Security.

M. Voice/Alarm Signaling Service: A central emergency communication system with redundant microphones, preamplifiers, amplifiers, and tone generators provided as a special module that is part of the FACU.

1. Indicated number of alarm channels for automatic, simultaneous transmission of different announcements to different zones, or for manual transmission of announcements by use of the central-control microphone. Amplifiers shall be UL 1711 listed.
    a. Allow the application of and evacuation signal to indicated number of zones and, at the same time, allow voice paging to the other zones selectively or in any combination.
    b. Programmable tone and message sequence selection.
    c. Standard digitally recorded messages for "Evacuation" and "All Clear."
    d. Generate tones to be sequenced with audio messages of the type recommended by NFPA 72 and that are compatible with tone patterns of the notification-appliance circuits of the FACU.
2. Notification-Appliance Circuits: NFPA 72, Class B.
3. Status Annunciator: Indicate the status of various voice/alarm speaker zones.
4. Preamplifiers, amplifiers, and tone generators shall automatically transfer to backup units, on primary equipment failure.

N. Service Modem: Ports shall be RS-232 for system printer if/when provided and for connection to a dial-in terminal unit.

1. The dial-in port shall allow remote access to the FACU for programming changes and system diagnostic routines. Access by a remote terminal shall be by encrypted password algorithm.