

**DIVISION 21 FIRE PROTECTION/DIVISION 22 PLUMBING**

**1. GENERAL**

- A. The following design development narrative describes the fire protection and plumbing requirements for the EHRM Infrastructure Upgrades project at Cincinnati and Ft. Thomas VA campuses based on our understanding of the project scope and applicable codes, criteria, and regulatory standards.

**2. DESIGN CONDITIONS AND APPLICABLE CODES**

- A. VA OIT - Infrastructure Standard for Telecommunications Spaces, Version 3.1
- B. ASHRAE 90.1, 2013
- C. NFPA 13 - Standard for the Installation of Sprinkler Systems
- D. NFPA 75 - Standard for the Fire Protection of Information Technology Equipment
- E. VA Fire Protection Design Manual, 8<sup>th</sup> Edition.

**3. DEMOLITION SCOPE**

- A. All existing sprinkler piping and heads currently serving the space that will become a new Telecommunications Room shall be demolished/reworked as required for the new room layout.
- B. All existing plumbing and medical gas and vacuum piping that is just passing above the new TR space is to remain and will not be re-routed.
- C. All existing plumbing fixtures currently located in the new Telecommunications Room shall be demolished as shown on the drawings.
- D. Existing FM-200 Clean Agent system shall be demolished in its entirety.

**4. NEW SCOPE**

- A. Install new sprinkler heads for each new TR room that complies with NFPA #13 and VA fire suppression requirements. Piping to be reworked as required for the new room layout.
- B. New Tele Rooms in the TE and TB Trailers, along with Building 8 and the Parking Garage will not be provided with a wet type sprinkler system as these building do not have a sprinkler system.
- C. Install a new clean agent fire suppression system for the 4<sup>th</sup> floor Data Room, A437C. Install new wet fire suppression system for the Data Room with shutoff valve and flow switch. Duct penetrations through data room shall require motorized dampers. Emergency lighting and emergency power off switches shall be provided. The CRAC units shall be capable of being shut off prior to the activation of the clean agent system.
- D. Drip pans shall be provided for wet piping remaining in the new Telecom Rooms and Data Room.
- E. Floor drain shall be provided in the floor of the data room with trap seal primer connection.
- F. Water sensors shall be provided for all drip pans and the below the raised floor of the new data room.