

NOTICE

SOLICITATION # 95015

PA STATE POLICE

12,408 Usable Square Feet

Due Date: 3:00 PM 7/19/19

Communication Room Specifications

Details for the Communication Room Specifications are added via this addendum. Details are; Ebensburg Station Communications Specifications Date 7/11/19 V.U. and Ebensburg Station Communications/Dispatch Room Drawing 7/11/2019 V.U..

This is the only notice you will receive pertaining to the above information. This identical notice is being sent to all those originally receiving a solicitation proposal package.

Any questions regarding the above should be directed to Scott Shelton at scshelton@pa.gov, or 717-787-5546.

BUREAU OF REAL ESTATE
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Ebensburg Station Communications Specifications Date - 07/11/19 V.U.

GENERAL

- The EMDF will provide a distribution point for the electrical power supporting the communications equipment at the station. See attached drawing (or drawings will be provided at preconstruction meetings) for details relating to EMDF specification within the communications room.
- 2. Special Communications/Dispatch Room requirements, not necessarily specified herein, shall be coordinated and approved by the BCIS representative at the preconstruction meeting. It is required that a BCIS representative verifies the conduit layout before the pouring of concrete in the communications/dispatch room. Therefore, the contractor shall notify the BCIS representative at least three working days in advance to arrange a date for on-site inspection.
- 3. A knee wall will be constructed on the back of the dispatch desks to contain the power and data cables. The knee wall will contain one 4 inch conduit that will be run to the server room. All pipes will have gradual bends to allow easy wire installation.
- 4. All conduits shall meet the National Electrical Code (NEC) standard for the particular application being installed.
- 5. Builder will provide BCIS with Geotechnical report in electronic format.
- 6. The Emergency Generator should be whole house.
- 7. Communications/Dispatch Room lights should be dimmable.
- 8. Spacing in the Communications/Dispatch Room should be a MINIMUM of 4.5' applicable to the areas indicated on the Communications Room drawing.



Communications/Dispatch Room Requirements

EMDF:

The EMDF shall accommodate all electrical outlets for the communications room.

- The EMDF panel shall have the capacity for at least twenty 20 AMP circuit breakers.
 The panel housing shall be flush mounted and shall be provided with a hinged cover.
 All circuit breakers shall be legibly identified.
- 2. Refer to the attached communications/dispatch room drawing for location and additional specifications on receptacles.
- 3. The EMDF panel shall be connected to the telephone/utility room via conduit.
- 4. All Communications/Dispatch Room circuits should be connected to the emergency power provided by the EMDF panel.

CMDF:

The CMDF panel will provide a distribution point for all communications cabling and wiring within the communications/dispatch room.

- 1. Two 4" conduit(s) shall be provided between the CMDF panel run to above the ceiling.
- 2. The CMDF panel shall be a 30" x 20" x 6" empty distribution panel with a flush-mount hinged cover. This panel is contained in a metal enclosure similar to a Square D Cabinet Box # 24366B and a Front Cover # 2436TF. The rear surface of the panel shall be a $\frac{3}{4}$ " plywood backboard painted flat black.
- 3. Refer to the communications/dispatch room drawings for location and additional specifications on CMDF receptacles within the communications/dispatch room.
- 4. The CMDF panel shall be connected to the telephone/utility room via conduit.



Radio Requirements

- 1. A radio tower will be installed at each station by the state radio vendor where allowed by code. Land owner will be responsible for completing all permits as required. Radio section will determine the area required for the concrete pad. The concrete pad ideally should be adjacent to the telephone/server room exterior wall. Radio lines will be run out the top of the wall, under an ice bridge, and to the tower. Underground pipes will normally not be used for coax or power runs unless the tower is not adjacent to the building.
- 2. If there is no tower at this station, two antenna mounts must be installed opposite ends of the building. Each mount will consist of a 3" OD thick walled galvanized pipe with a minimum length of 72" long. The pipe must be mounted to a roof truss or a brick wall to support the weight of the antenna. A 2" PVC conduit will pass through the wall within one foot of each mounted pipe and terminate in a 90 degree elbow outside (turned downward to prevent water intrusion) with a weatherproof seal. An alternative to the 90 degree elbow would be to put an electrical box similar to the Cantex model 5133708 (or equivalent) 8x8x7 Plastic New Work Electrical box mounted on the wall within one foot of the 72" pole with a 2 inch PVC pipe through the wall.
- 3. The antenna mounts must be attached to the building electrical ground system.
- 4. Contact the PSP radio maintenance service provider for appropriate locations of the antenna mounts.



Telephone/Server Room Requirements

1. In order to facilitate installation of telephone and alarm control equipment, The telephone/server room walls shall be covered with 8' x 4' x 3/4" plywood panels, painted with flat fire resistant paint on three walls. A minimum of two (2) duplex electrical outlet boxes shall be mounted at the top of the wall, 2 feet from the left and right edge. In addition to the standard electrical requirements listed in the specifications two (2) additional electrical quad outlets shall be mounted along the bottom edge of the panel, 2 feet from the left and right edge, to be used for the station phone system and equipment and telephone company equipment. All electrical boxes mounted on this room shall be wired to the Emergency Generator. Conduit from the floor of the telephone/server room shall extend at least six inches from floor level.

A #2 AWG bare copper conductor shall be connected to the grounding system on one end and terminate on a copper buss bar inside the server room. The internal building grounding system and the external perimeter grounding system will be connected via this copper buss bar. This will serve as the single-point connection between the two grounding systems. The Department's radio maintenance contractor shall provide the external perimeter grounding system; as well as, any required radio tower and associated material for tower erection. Every new station will have a tower. This is essential for mounting the six to eight antennas that are now required for the P25 system. The area required for the concrete tower pad can vary from station to station. BCIS will be consulted after site selection to determine the required tower size. Building contractor will be responsible for all tower permits.

2. Three 20A circuits will run into the server rack and four 20A circuits to two quad outlets will be run for radios and radio console equipment.



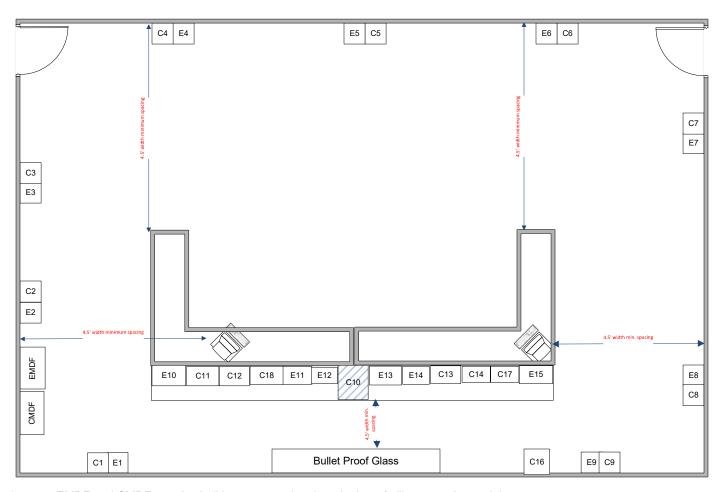
Communication Room Required Cabling and Outlet box Locations

- 1. 20 CAT-6 cables (or equivalent) via 4" conduit from CMDF to telephone/LAN room to be used as feed cables. Terminate on one 110 block at the CMDF and one 110 block at the telephone/LAN room. Must be labeled FEED CABLES.
- 2. All cables must be tested and properly numerically labeled and documented on the wiring print prior to the scheduled move day.



Ebensburg Station Communications/Dispatch Room Drawing

Date 07/11/2019 V.U.



- 1. EMDF and CMDF panels shall be connected to the telephone/utility room via conduit.
- Receptacles E1 through E9 shall be dual socket.
- 3. C1 through C9 shall be 3/4" conduit as described in the BIT specifications, C10 shall be 3" conduit to the CMDF
- 4. E10 through E18 shall be a quad socket wall style outlet, one 20A circuit breakers per quad powered by the EMDF panel. C12 through C14 will be 6 outlet RJ-45 outlets or as described by BIT.
- 5. E10 through E15 inclusive and C10 through C14 inclusive shall be inside a 16' long wall, 42" high. Wall will have removable back (side facing towards window) for rewiring access.
- 6. C16 shall be a thru wall conduit for lobby telephone/intercom.
- 7. C17 and C18 will be dual RJ45 jacks marked Radio Only and wired to the 110 block in the CMDF.
- 8. All Communication Room power outlets, lobby exit lights, vestibule lights, and overhead lights in the Communications Room shall be connected to the emergency power provided by the EMDF panel.
- 9. Spacing should be at a 4.5' minimum applicable to the areas indicated for ADA accommodations and compliance.