



10.5.1 Contractor Supplied Materials

Following specifications 651.2 and 670.2, all products supplied by the contractor should conform to specification requirements on the department's approved product list. For materials not on the approved list, refer to Standard Specification 670.3.3.1.

10.5.2 Communication Requirements

System Detector Stations (SDS) require communications to bring the data collected into the system. The communication medium selected for SDS sites is open to the following communication types as described in Chapter 8, Communication System.

- Leased Communications - Either leased fiber optics or leased high-speed data lines (ISDN, 56k).
- State-Owned Communications - Fiber optic communications.
- Wireless Ethernet Radio - capable of bandwidth between 3MB to 20 MB.

10.5.3 Power Requirements

A 100 Amp, 120/240 volt, single phase, and three wire underground electrical service is required for electrical service installation. Two 2070 controller cabinets can be powered by a single 100-amp service. The electrical service will be furnished and installed by the Wisconsin Electric Power Company up to a demarcation point, which consists of a electrical service. The electrical service must conform to the requirements as found in the Electric Service and Metering Manual as issued by Wisconsin Electric. The location of the electrical service must receive approval from the utility company. The electrical service will include two 50-amp circuit breakers rated at 22,000 AIC. The requirements for power cable between the electrical service and controller cabinet can be found under the Cable Routing section of this chapter.

At locations which require a remotely located electrical service, a 100 Amp outside rated breaker box with space for 6 circuits, but no main breaker, will be attached to the side of the cabinet. Also, a 50 Amp single circuit breaker rated at 22,000 AIC will be installed within the breaker box to serve as a local electrical service disconnect point.

10.5.4 System Detector Stations Construction Standards

Construction details, Standard Detail Drawings, and Special Provisions can be found in Appendix 70.