

BURLINGTON MEMORIAL SCHOOL

TECHNOLOGY SCHEMATIC SYSTEMS DESCRIPTION

Revised February 23, 2009

The following is a description of the technology related infrastructure and systems to be included in the work of the general contract.

Utility Connections and Interfaces:

- The site utility contractor will provide conduit from the utility poles/service points to the building for:
 - Telephone company service;
 - Cable company service;
 - Fiber optic district-wide backbone access, if appropriate, and;
 - Spare.
- The utility company will bring the service feed cables into the building. The utility feeds will terminate in a termination/demarcation space that will be allocated for the utilities, within the Main Distribution Frame located in the Primary Communication Room (PCR). The communications raceway is to be routed into the MDF unless a building code violation or construction conditions prevent the MDF location;

Cabling Within the School:

- Fiber optic distribution cables will run from the main equipment room to each of the technology wiring rooms (PCR's). The backbone cables will be 50/125 micron laser optimized multi-mode construction;
- Multi pair copper backbone cable will be run from the MDF to each of the technology wiring rooms, (PCR's) to support miscellaneous communications circuits;
- Copper station cable, Category 6, will be run from the serving/wiring room (PCR) to each outlet. The same Category 6 type cable will be installed for each type of outlet; voice, data, wireless;
- A typical classroom-cabling configuration will be defined through the design process. It will consist of a teacher position, student computer connection locations and one location for a printer. The wireless antenna and projector outlet locations are in addition to the previously mentioned locations;

Public Address:

- A public address system will be installed throughout the facility. Individual speakers will be located in classrooms, closed rooms and public areas including corridors and gathering spaces;

- The public address system will be equipped and configured in zones to allow paging and announcements to occur in specific rooms, areas or in groups of areas;
- The public address system will be equipped with an interface to the telephone system. This interface will allow authorized users (with access codes) to access the paging system and initiate pages from any telephone throughout the school. This will ensure that appropriate personnel may make emergency announcements from anywhere within the facility;
- The master clock synchronization time input will be delivered to the public address system so that if class change tones are used, they will be synchronized with the clock system.

Master Clock System:

- A master clock system will be implemented throughout the school;
- The master clock system will synchronize with the GPS, Navy clock or other time standard source;
- The master clock system will provide time corrections/synchronization outputs to the public address system and to other systems as required.

Telephone System:

- The telephone system will be defined through meetings with district, and will be included in the project;
- Classroom wall mounted telephone sets are to be located near the door. Cabling to these locations will be provided through the base building contract.

Video Distribution:

- Video distribution, including the CATV, will be digital and will run as an application on the LAN infrastructure;

Audio Visual:

- Dedicated sound systems will be provided in the gymnasium and in the cafeteria/group space. Each system will support local inputs such as CD players, iPods and microphones;
- Each system will receive an input from the public address system which will override the local sound system in the event of an emergency announcement.

Security:

- Access control will be provided at the main entrance, secondary entrances and at the facilities delivery entrance;
- Intrusion detection will be implemented throughout the school and zoned to allow portions of the school to be “open” while still monitoring other areas of the school;

- CCTV capability will be provided at the controlled doors and at limited areas throughout the school to assist in the protection of people and assets.

End