**SECTION 28 33 00**

**VIDEO SURVEILLANCE SYSTEM**

**PART 1 GENERAL**

1. SECTION INCLUDES
   1. Distribution cabinet
   2. Conduit and boxes
   3. Power wiring
2. SYSTEM DESCRIPTION
   1. Video surveillance system shall include the furnishing and installation of conduit system, mounting hardware, and power feeds.
3. SUBMITTALS
   1. Submit under the provisions of Section 01 33 00.
   2. Shop Drawings: Indicate layout, raceway diagrams, and equipment dimensions.
   3. Product Data: Provide data sheets for each item of equipment, depicting equipment capacity.
4. RECORD DRAWINGS
   1. Submit under the provisions of Section 01 77 00.
   2. Accurately indicate actual locations of cabinets, boxes, and conduit runs.

**PART 2 PRODUCTS**

1. CONDUIT AND BOXES

* 1. Provide & install feed conduits from each IDF/MDF rooms to feed the mounting boxes designated for the area, size each of the separate feeds as follows:
     1. 3/4" for a maximum of 2 mounting boxes
     2. 1" for a maximum of 4 mounting boxes
     3. 1¼" for a maximum of 6 mounting boxes
     4. 1½" for a maximum of 8 mounting boxes
     5. Do not provide ½” conduits, minimum conduit size shall be ¾”.
  2. Provide & install 4-11/16" x 4-11/16" x 2⅛" mounting boxes with covers at designated interior locations.
     1. If the area location has removable ceiling tile, the box shall be located above the tile.
     2. If the location has a structure of fixed ceiling material, then flush mount the box with a double gang mud ring & cover.
  3. Provide & install 4-11/16" x 4-11/16" x 2⅛" flush mounted mounting boxes with double gang mud ring and weatherproof covers; mounted with the opening vertical, at all designated exterior locations fed from additional 4-11/16" x 4-11/16" x 2⅛" boxes at the interior feed penetrations through the exterior walls.
  4. Provide and install a 2" conduit from the IDF/MDF rooms to a brooks box located at the designated entry gates.
     1. The exact location determined at plan review by the School Police.
  5. Provide and install an additional 4-11/16" x 4-11/16" x 2⅛" box above suspended ceiling directly above each wall video-mounting box.
     1. Locate j-box no higher than 36” above the ceiling in the same room as the wall-mounted box.

**PART 3 EXECUTION**

1. INSTALLATION
   1. Install system in accordance with NECA "Standard of Installation", Section 26 05 33.
   2. Cables shall be orange color, CAT 6 or greater.
   3. Obtain a detail book from the SDPBC School Police Department Security Section for system specifics.
   4. Permanently label all conduits as to plan room number destination, at all junction boxes.
   5. Paint all Video surveillance system junction box covers gold.
   6. If camera is located on a metal walkway or the surface is conductive in nature then isolation will be needed.
   7. Install ½" (gold round indicators) of paper construction on ceiling tile grid work at all locations where video surveillance system boxes are located above the drop ceiling.
   8. Install 200 lb strength pull string throughout the raceway system.
   9. Mount all junction boxes mounted above ceiling with the opening facing down, and provide a reasonable immediate access pathway.
      1. Note: The requirement of removing a light fixture or other similar ceiling equipment is not a reasonable access pathway.
   10. Provide and install 6 additional 4-11/16" x 4-11/16" x 2⅛" mounting boxes with flush single gang ring and single gang cover; with the opening mounting vertical with 3/4" conduit run to the nearest IDF/MDF rooms or junction box.
       1. (Allow 100’ of conduit for each run) Mounting locations field directed during construction/installation, prior to final above ceiling final inspection.
2. LOCATION
   1. Provide video junction boxes in the following locations.
      1. At all card reader locations
      2. Safes/Drop boxes
      3. Cafeteria main dining room
      4. Cafeteria/Custodial Receiving
      5. Courtyard
      6. Bus loop
      7. Main office reception area
      8. Main Entry/Single Point of Entry
      9. In all corridors/Walkways
      10. Student pick-up/drop off
      11. Parking areas
      12. Gymnasium/Play Areas
      13. Field/Stadium
      14. Auditorium
      15. Other areas as defined in the project specific review process, by the SDPBC
3. DEMONSTRATION AND TRAINING
   1. Training of the Owner’s operation and maintenance personnel is required in cooperation with the Owner's Representative.
      1. Provide competent, factory authorized personnel to provide instruction to operation and maintenance personnel concerning the location, operation, and troubleshooting of the installed systems.
      2. Schedule the instruction in coordination with the Owner's Representative after submission and approval of formal training plans.
      3. Refer to Section 01 91 00, Commissioning, for further contractor training requirements.
   2. Provide demonstration and training for all types of video surveillance systems installed in this project.

END OF SECTION