El Paso Leadership Academy
RFP #2021-004 – Security Systems Contractor
EXHIBIT G – Cabling Guidelines and Specifications

1. **MATERIALS**
   a. Surveillance Cameras
      i. All surveillance equipment shall be **Avigilon Surveillance System**
      ii. Indoor – Fixed dome, network POE camera providing HD capability. Minimum 5 MP.
      iii. Exterior – Outdoor IP66 protected, wide-angle fixed dome, network POE camera providing HD capability. Minimum 5 MP. Mount at 12' A.F.F. unless noted otherwise.
      iv. Include all manufacturer <u>required</u> device components, software, and licenses to ensure complete operation

   b. Network Video Recorder (NVR)
      i. All surveillance equipment shall be **Avigilon Surveillance System**
      ii. 16 Channel POE
      iii. Solid State Drive (SSD) not less than 256GB
      iv. Hard Disk Drive (HDD) not less than 12 TB
      v. Redundant power supplies shall be included on server configuration
      vi. Include all manufacturer <u>required</u> device components, software, and licenses to ensure complete operation

   c. Access Control System
      i. Multi-level access control system with expandable card access
      ii. Door grouping and/or access area capability
      iii. Detailed time specifications including scheduling capability, expiration, and lock-down functionality
      iv. Card enrollment reader support
      v. Integrate with building fire alarm as required by code
      vi. Coordinate and install Magnetic (Mag) Locks as required by code. Each Mag Lock to have a minimum force of 600 lbs. Coordinate installation with FA contractor.
      vii. Include all manufacturer <u>required</u> device components, software, and licenses to ensure complete operation

   d. Card Readers
      i. Compatible single proximity card reader at each location identified on EXHIBIT H – Project Documents.
      ii. Integrate with building fire alarm as required by code
      iii. Coordinate and install Magnetic (Mag) Locks as required by code. Each Mag Lock to have a minimum force of 600 lbs. Coordinate installation with FA contractor.
      iv. Include all manufacturer <u>required</u> device components, software, and licenses to ensure complete operation

   e. Intercom System
      i. All intercom systems shall be **Aiphone**
      ii. Hands-free intercom with door station

   f. Cable
      i. Cat6 plenum rated cable

      g.   Sleeves for Firewalls
          i.   3M Fire Barrier putty sleeve kits, DT100, DT200 and DT400 are approved for firewall penetrations. For smoke and other penetrations EMT is acceptable.

2. **GUIDELINES**

    a.   No cable ties or zip ties will be used. Velcro (hook and loop) required.

    b.   Use of staples is strictly forbidden.

    c.   Service loops of at least 10' in closet and 6' patch cords at each drop.

    d.   Horizontal cable managers should be placed above and below switches and fiber optic LIU with 1U of clearance above and below.

    e.   Labeling of Cat6 drop on cable jacket with permanent marker highly recommended. If this is followed, labeling should be done 6" from end of cable at both ends.

    f.   Cable trays will be used where available. In the event cable tray is unavailable, J-Hooks are required.

    g.   Conduits cannot be filled beyond 40% capacity. Where permissible by fire code, box eliminators can be used (MP1 by CPI or BB10 by B-Line).

    h.   Contractor will provide As-Built and Record Drawings to EPLA showing cabling paths, locations (with location ID) and penetrations.

    i.   When cable tray is not used J-hooks should be placed no more than 6' apart with J-Hooks appropriately sized for the number of cables that are to be installed with 50% growth capability.

    j.   Penetrations not provided by Design-Builder will require sleeves (sized as needed with room for 50% growth).

    k.   All penetrations need to be properly fire/smoke sealed, as required.

    l.   Warranty for installation needs to be provided.