PART 1 - GENERAL

1.1 RELATED SECTIONS:

Refer to Section 330500 for requirements regarding the identification of underground utilities and piping described in Division 33.

Refer to Section 260553 for requirements regarding the identification of Division 26 items, including underground piping described in Division 26.

Refer to Telecommunication Standard Section 16740 for information regarding emergency call box system and blue light phones.

1.2 SCOPE OF SECTION:

This section contains items that are common to more than one section of Divisions 16.

1.3 RACEWAYS:

A. GENERAL:

1. When part of the Distribution and Transmission system, raceways shall be galvanized rigid conduit or a minimum Schedule 40 PVC encased in steel-reinforced concrete with red dye on top.

All electrical ductbanks shall contain reinforcing steel run parallel with the conduits. The number, size, and locations of rebar incorporated into the ductbank shall be sufficient to allow a minimum ten foot span of undermined ductbank to be self supporting. In no case shall any individual rebar be less than 3/8" in diameter. Wires to hold the rebar in place shall also be incorporated into the ductbank at appropriate spacings. These wires shall be of sufficient size to hold the rebar. Rebar shall be bonded to the system ground in each manhole.

Under-ground raceways should have 30" minimum cover, and should be arranged to drain in addition installation of warning tape. Refer to Section 260553.

2. Provide a minimum of one spare conduit per duct bank.

3. Chairs for steel-reinforced concrete raceways shall not be spaced over 6' apart.

4. Designer is responsible for specifying and/or shielding separation between raceways in ductbank configurations where power fiber and copper co-exist, to assure no EMI.
5. Interior surface-mounted raceways shall be metal "Wiremold" type, and should be painted to match wall surface.

B. **TYPICAL DEMAND LOADS:**

New 120 VAC 20 AMP circuits should be designed on the basis of two "desk" locations or one office per circuit at a maximum; or an allotment of 2 AMPS per convenience outlet. Convenience receptacles shall match circuit amperage per NEMA 5-20R. Dedicated circuits are required for equipment such as copiers, vending machines, servers, etc.

1.4 **TELECOMMUNICATION DESIGN**

The Designer for all telecommunication systems shall be a Registered Cable Distribution Designer (RCDD). The Designer shall provide appropriate documentation to the Project Manager to this effect.

1.5 **EMERGENCY CALL BOX SYSTEM OR BLUE LIGHT PHONES:**

Refer to Telecommunication Standards Section 16740 for information regarding emergency call box system and blue light phones.

END OF SECTION