SECTION 16450

GROUNDING

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Work Included: Provide and install all grounding and appurtenances as shown on the Drawings and as specified herein.
- B. Related Work Specified Elsewhere (When Applicable):
 - 1. Instrumentation equipment specified in Division 13.
 - 2. Heating and ventilating equipment specified in Division 15.
 - 3. Mechanical process equipment as specified in Division 11.
 - 4. "Electrical General" is specified in the appropriate Section in this Division.

1.2 SUBMITTALS TO THE ENGINEER

A. Shop drawings are not required under this Section.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Provide equipment grounding as shown on the Drawings. Connect to existing grounding electrode conductors in each building.
- B. Do not use conduit as the ground and/or bonding conductor.
- C. Bond ground terminal of receptacles to outlet boxes with #12 AWG green insulated wire.
- D. Flexible metallic conduit to be suitable for grounding service.
- E. Ground conduit system and neutral conductor of wiring system with a connection at the main electrical service equipment.

PART 3 - EXECUTION

3.1 <u>INSTALLATION</u>

- A. Ensure that a ground loop is not formed between equipment ground in electrical conduit and grounding electrode conductors directly connected to ground electrodes.
- B. Equip exposed "pigtails" or grounding electrode conductors with an armored sheath.
- C. Group and bond ground wires to panel boxes, light fixtures, receptacles, etc., not to system neutral.
- D. Bond and ground all conduit systems.

3.2 <u>TESTS</u>

A. The entire grounding network resistance to be meggered and certified results provided. Resistance should not exceed 25 ohms.

END OF SECTION