

SCOPE OF WORK AND SPECIFICATIONS FOR THE INSTALLATION OF TRANSFORMER AND ACCESSORIES INCLUDING METERING SYSTEM FOR BOY SCOUT BUILDING, DEPED COMPOUND, SILAY CITY

PART 1.0 GENERAL

- 1.1 **SCOPE / WORK INCLUDED.** Work in this section covers the requirements for a complete electrical installation, including furnishing of all labor, materials, equipment, tools, transportation, storage, incidentals and superintendence necessary to accomplish the electrical installation. The work includes the erection of Electrical Posts and accessories, cable laying, distribution transformer installation and terminations of primary and secondary lines.
- 1.2 **QUALITY ASSURANCE.**
- a. **REFERENCE STANDARDS.** Electrical Equipment, materials and procedures shall conform to the applicable requirements of the latest edition of the following: Underwriter's Laboratories (UL), National Fire Protection Association (NFPA), National Electrical Manufacturer's Association (NEMA) and other related publications.
 - b. **WORKMANSHIP.** All equipment and materials shall be installed in a neat and workmanlike manner.
- 1.3 **COMPLIANCE TO APPLICABLE CODES AND REGULATIONS.** All installation procedures, materials and equipment shall comply with the following as applicable:
- a. Philippine Electrical Code
 - b. National Electrical Safety Code, latest edition
 - c. Power Company Regulations
 - d. National Fire Protection Association
 - e. Bureau of Labor Standards
 - f. Local laws and ordinances

PART 2.0 MATERIALS. The Contractor shall provide all the electrical materials with the following specifications:

- 2.1 **WIRES AND CABLES.** Wires and Cables shall be Lead free cables with 98% conductivity and shall conform to the standards stated in this specifications.

- 2.2 TRANSFORMER. 25 kVA, Single Phase, 2HV Bushing, 13200 ground Y/7620 - 120/240 volts, 60Hz, Additive, BIL 95kV at HV & 30kV at LV, %imp w/in -2.0+/-10% tolerance at 85°C no-load, Max. -80W at 30°C Load loss, Max. -290W at 85°C. with external rotary tap changer, copper primary and secondary winding
- 2.3 KWH METER. Transformer rated (CT Rated), socket type, 1Ph, 3-wire, CL20, 120-480V, 60Hz, form 4S, KH 0.6, Digital with 5 years warranty battery, Modem ready with the following soft switches: (1) TOU (T Switch); (2) KVAR (K Switch); (3) Event Log (E Switch); (4) Basic Recording (R Switch), Brand New with ERC seal and certificate with 1 year warranty. (to be endorsed to CENECO)
- 2.4 CURRENT TRANSFORMER. 100:5, ABB Type, RF=2.5, 600 Volts.
- 2.5 OTHER MISCELLANEOUS EQUIPMENTS. This includes clamp connectors, insulator spools, electrical tapes, and shall conform to the standards stated in this specifications.

Prepared by:


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