

## **DIVISION 16 - ELECTRICAL**

### **Section 16430 - Metering**

#### **Introduction**

Metering shall be provided at the location where each building receives its service. In general the metering shall be located at the main switchboard for the building.

Metering shall consist of a separate meter for each building with local plain language annunciation at the switchboard.

Metering shall be through the use of potential transformers and 3 current transformers located in the main switch board at the building.

Metering shall have the capability of being tied into a separate system where all meters can be monitored from a separate remote control system.

For all new buildings the meters shall be tied into the existing Building Control System.

#### **Part 1 - General**

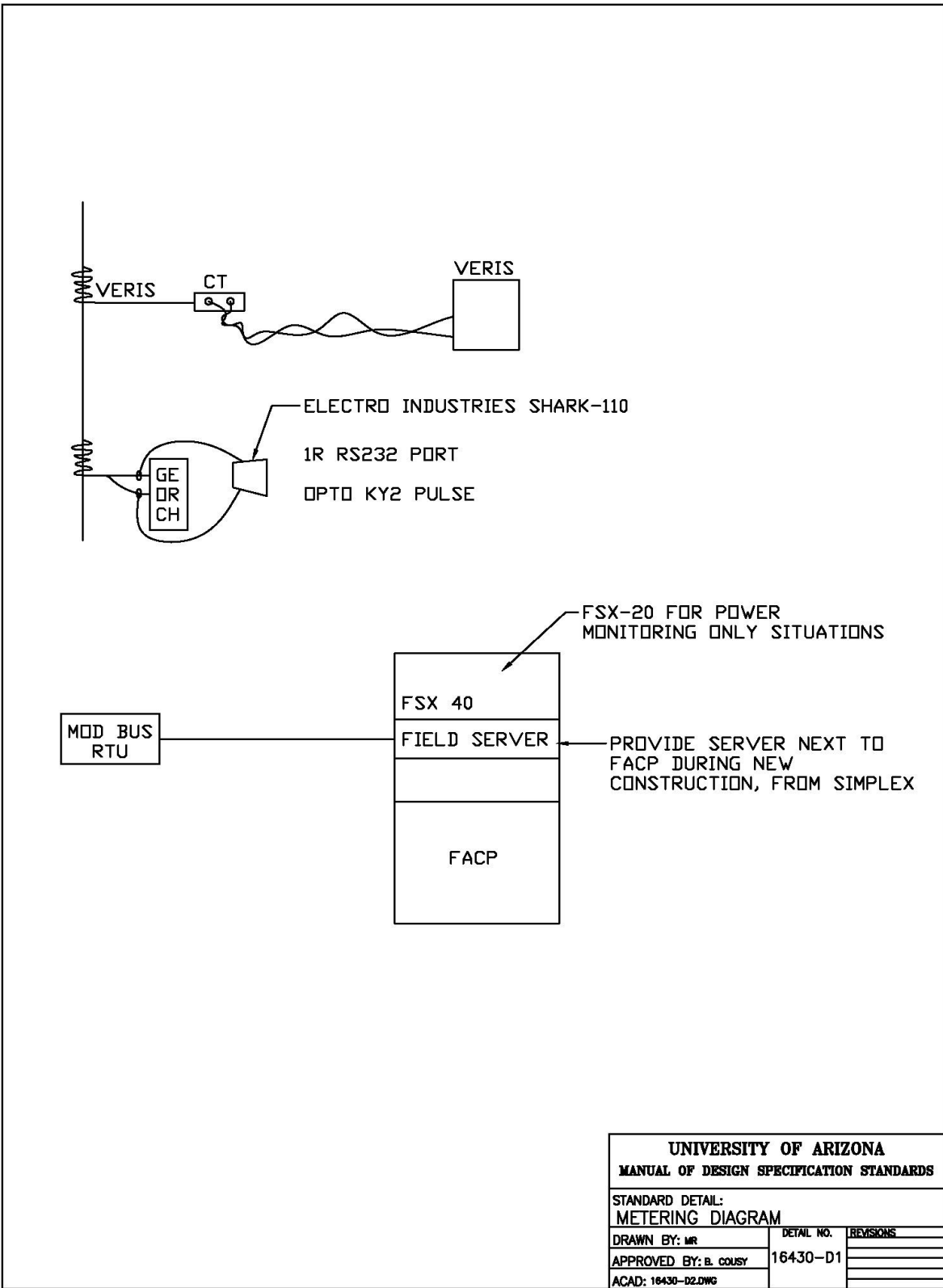
- Metering system shall have the capability of reading KWH, Max KW Demand, KVA, KVARs, Volts, Current, THD Voltage, THD Current frequency and power factor in the same system with the capability of transmitting that data to a central system where that data can be read at a central control station.

#### **Part 2 - Products**

- Provide a 1" conduit between the meter and MDF.
- New Switchboard Construction
  - New boards shall be equipped with cold sequence metering. Metering section shall utilize factory installed CT's, PT's and meter. Additionally, the board will be fitted with a VERIS INDUSTRIES meter, switchboard manufacturer installed. The factory metering compartment shall be factory fitted with VERIS INDUSTRIES Hawkeye 8163 Meter and H 8163-CB Communication Board and H8936/8932 Network Display. Contractor or approved equal shall provide rigid/emt raceway from metering compartment to the building MDF telephone terminal board and provide com cable between switchboard meter section and TTB. Provide new RS 485 jack at TTB. Meter compartment shall be dead-front with lugged swing out panel cover. Interior shall have mounting board in place.
- Other Construction
  - New and existing building services without switchboards shall be equipped with the VERIS system described for switchboard systems. Where existing space will allow, provide a CT com. On new construction provide a CT com.

#### **Part 3 - Execution**

- All programming for setup of meters shall be supplied and accomplished as a part of the contract. Set intervals so as to store 1 year of KW demand data.
- An identification tag shall indicate any and all multipliers at each meter. Tag shall be an engraved tag with minimum of 1/4" high letters and secured to switchboard using either screws or rivets.
- Incorporate the following diagram, 16430-D1, into the project drawings.



End of Section 16430