All cabling, tubing and terminal boxes shall be marked clearly in a consistent manner with durable markers.

Terminals in the cabinets shall be numbered consecutively in accordance with the relevant cable connection diagrams.

All the cores of the field cables shall be terminated on the terminal strip. All the spare I/O channels shall also be terminated on the terminal strip. 25% spare capacity shall be provided in the panel after complete wiring for future additions.

Use shall be made of exclusively new and modern materials suitable for the intended purpose.

Only first class modern trade practices shall be used and all work shall be carried out to the satisfaction of the ADWEA/ENGINEER.

Wiring to equipment mounted on hinged doors shall be carried out through flexible conduits or spiral wrap.

Wiring terminal block shall be arranged and positioned to afford easy access for carrying out external cabling, testing, inspection and maintenance. All internal wiring to be ferruled at both ends.

Provision shall be made for bottom entry cables and suitable removable gland plate shall be provided.

Wires shall be laid in flame retardant PVC trunking.

## 7.1 System/Remote I/O Cabinets

The system cabinets shall be freestanding type. Cable entry shall be from the bottom. Extra openings shall be blanked. The cabinets of remote I/Os shall have IP 65 enclosure. The size shall be decided by the CONTRACTOR subject to ADWEA/ENGINEER approval.

Separate remote I/O Cabinets shall be supplied and installed for individual pump, reservoir level, MCC, LDC... etc.

## 7.2 Field Mounted Panels

Field mounted panels shall conform the following requirements:

- Panel shall be non-corroding.
- Weatherproof construction shall be used, IP65 minimum.
- Exposed devices on the panel shall be weatherproof to IP65.
- A sunshade/rain shall be provided with front and rear overhang.

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