

SCOPE OF WORK FOR REFURBISHMENT OF CABLING AND STRINGING IN SUBSTATIONS SERVICES CONTRACT FOR A PERIOD OF 3 YEARS

REFURBISHMENT AND NEW INSTALLATION OF SUBSTATION BAYS.

Introduction:

Eskom have embarked on refurbishing and replacement of feeders, incoming bays, coupler, bus zone panels and capacitor bays with new equipment.

Purpose:

For refurbishing and replacing of feeder bays, incoming feeders, buss coupler bays, cap bank bays, control panels and testing/repair of earth mats.


Functional specifications;

- Installation of new cabling from control room panels to JB. See drawing no. 0.08/20514 sheet 64 as an example.
- Installation of cables from JB to bay equipment. See drawing no. 0.08/20514 sheet 64 as an example.
- Installation of glands on all cables.
- Numbering of cable cores as per Eskom drawings no. 0.18/33292 sheet 44 as an example.
- Crimping of lugs on cable ends. (all lugs to be double grip as per Eskom spec)
- Installation on cable identification tags on all cable ends. (all tags to be copper, 12 mm wide and 2 mm thick)
- Looming of cable ends to the correct termination points.
- Removal and installing of CTs, VTs, Surge arrestors, Line traps, post insulators.
- Removal and installation of control panels in control room.
- Testing of earth mats in HV yards, control rooms, fencing, guard rooms. See drawing No. 0-NT-106 sheet 15A as an example.
- Repairing of earth mats. See drawing No. 0-NT-106 sheet 15A as an example.
- Trenching must be opened and closed for cable installation.
- Digging of trenches for new cables to new equipment in bay.
- Removal of all old equipment, cabling, panels.
- Installation and removal of JB foundations by subcontractor. See Drawing no. 0.54/3568 and 0.54/4713 as an example.
- Installation of chemical anchor bolts for structures. See Works instruction ESTSTI040.
- Installation of conductor to be done with bucket truck. See drawing no. 0-NT-106 sheet 15 as an example.
- Crane truck to be used for moving of cable drums and putting drums on cable stands.
- Installation of Breaker foundation as per drawing as per example, D-DT-5200 set 2, sheet1.
- Installation of trenching, see drawings, 0.54/390, sheet 15, 16B, 19, 22, 29B, 37 as examples.

- Installation of by passes, see design doc for marathon bypass as an example.
- Installation and removal of medium equipment support structures, see drawing no's 0.54/304, 0.54/673, o.54/779
- Back fill and compact all excavations, supply and spread yard stone where needed.
- Disposal of all rubble and excavated surplus soil. All equipment and structures will be scraped and disposed of by the client.
- Earth mat test and repair.
- Installation and removal of small and medium equipment plinths.
- Rehabilitation of excavations.
- Removal of rubble as per Eskom Procedure.

Delivery requirements.

- All bay equipment to be delivered to site by OEM.
- Client to arrange for all cable deliveries.
- Client to ensure all clamps are correct and on site.
- Client to arrange for all control panels to be delivered to site.
- Client to supply all copper for earthing requirements.

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