

# **KEMETCH QPDUP PROJECT SUMMARY**

## **ABSTRACT OF THE OPPORTUNITY**

NETCO (CONTRACTOR) have been contracted by Mobil Producing Nigeria Unlimited (MPN) (COMPANY) to provide Engineering, Procurement and Construction Management (EPCM) services, on a term period basis, for a number of Projects covering revamp and upgrade of MPN's current operating facilities. The contract is called the Major Integrity Projects (MIPs) contract or the EPCM2 contract.

NETCO (CONTRACTOR) awarded KEMTECH ENGINEERING SERVICES LIMITED (SUBCONTRACTOR) the contract to execute all E&I, Civil Construction Works concerning the QIT Power Distribution Upgrade Project (QPDUP) which is one of the specific individual projects sanctioned under the MIP's contract. This project housed 75 of Kemtech personnel's, ranging from skilled to unskilled.

## **CONTRACT SUMMARY**

This is a Service contract covering the Electrical and civil works pertaining the upgrade of the Qua Iboe Terminal Power distribution to improve the integrity of the electrical equipment, prolong its service life, increase reliability and decrease Health Safety and Environmental risk. Kemtech scope was to Install an Assembled Powered module APM, Take power from this APM with a 15kv MV okonite cable that will installed Direct buried and on cable tray, through a distance of about 11KM, create duct banks and road crossing where necessary. Install a 15KVA Distribution transformer at the Relief to relief load center, Decommission Existing 300KVA transformer, Tie in the power from the APM to the new transformer, Install NEW MCC and LIS, Install all accessories and miscellaneous equipments, test and commission. Break down of scope is as follows

### **Scope of work**

- **TOPOGRAPHICAL SURVEY**
- **ELECTRICAL CONSTRUCTION WORKS**
- **. INSTALLATION OF DISTRIBUTION TRANSFORMERS**
- **MV LOAD INTERRUPTER SWITCH AND LV MOTOR CONTROL CENTER**
- **MISCELLANEOUS EQUIPMENT; CIRCUIT BREAKERS, SMALL POWER, LIGHTING FIXTURES, LOCAL CONTROL STATION**
- **INSTALLATION OF DIRECT BURIED CABLES**
- **INSTALLATION OF CABLE TRAYS**
- **INSTALLATION OF PVC CONDUIT**

- **INSTALLATION OF MV AND LV CABLES AND ACCESSORIES**
  - **INSTALLATION OF CABLE MARKERS**
  - **CABLE SPLICING AND TERMINATION**
  - **. GROUNDING**
  - **CIVIL WORK ATTACHED TO E&I**
  - **FABRICATION OF STEEL STANCHIONS FOR LOAD CENTER BUILDING**
  - **INSTALLATION OF ACTUATORS**
  - **PIPE INSULATION**
  - **PAINTING AND BLASTING**
- 
- **TESTING AND COMMISSIONING**
  - **HIPOT TESTING**
  - **DEMOLITION**
  - **DEMOBILISATION**

QPDUP Pictures of work site in the project

#### **DIRECT CABLE PULLING**



**500KVA DISTRIBUTION TRANSFORMER INSTALLATION**



**TRANSFORMER TESTING**



## MCC INSTALLATION



## LIFTING OF MCC



## SPLICING AND TERMINATION





### CABLE TESTING



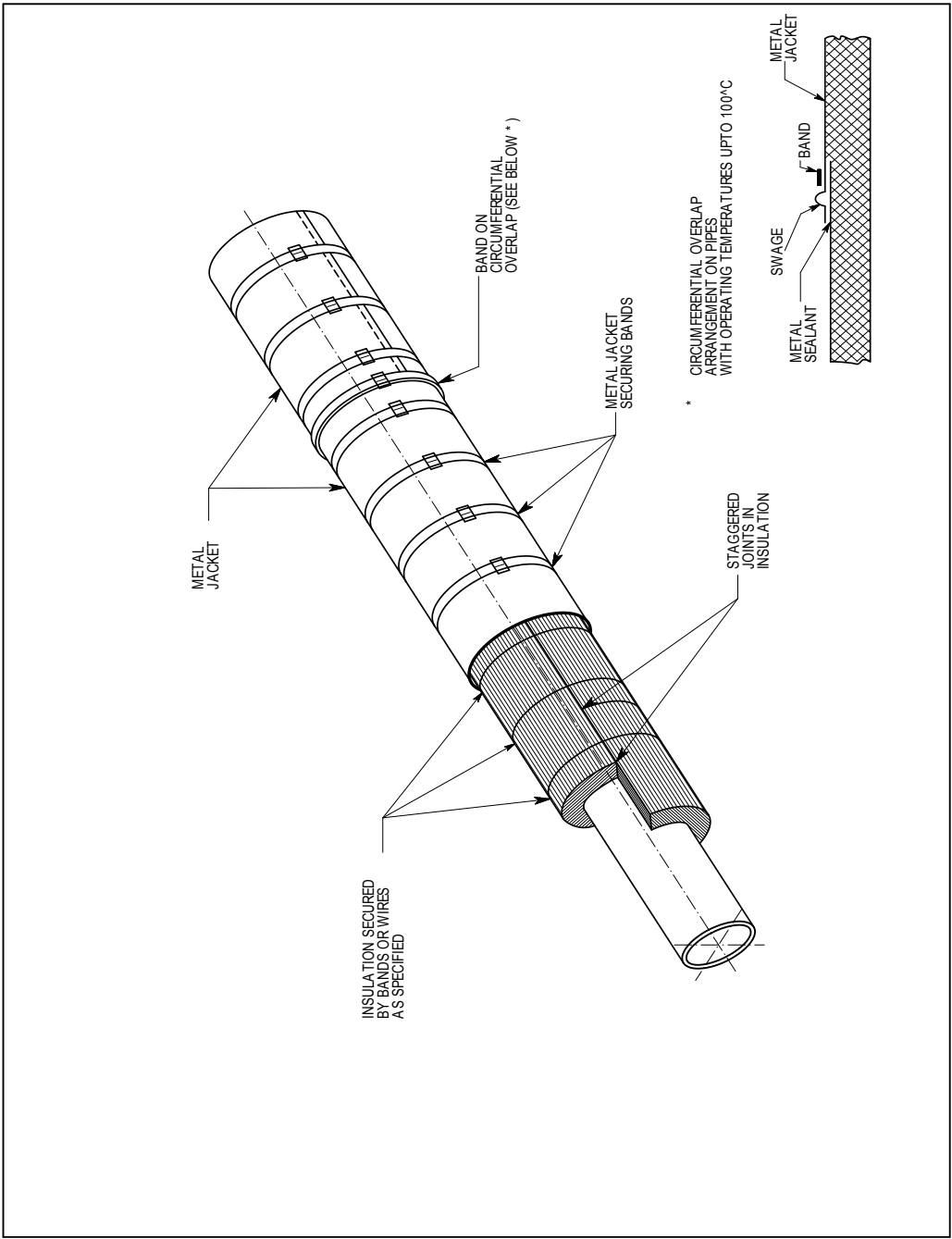
## ACTUATOR INSTALLATION

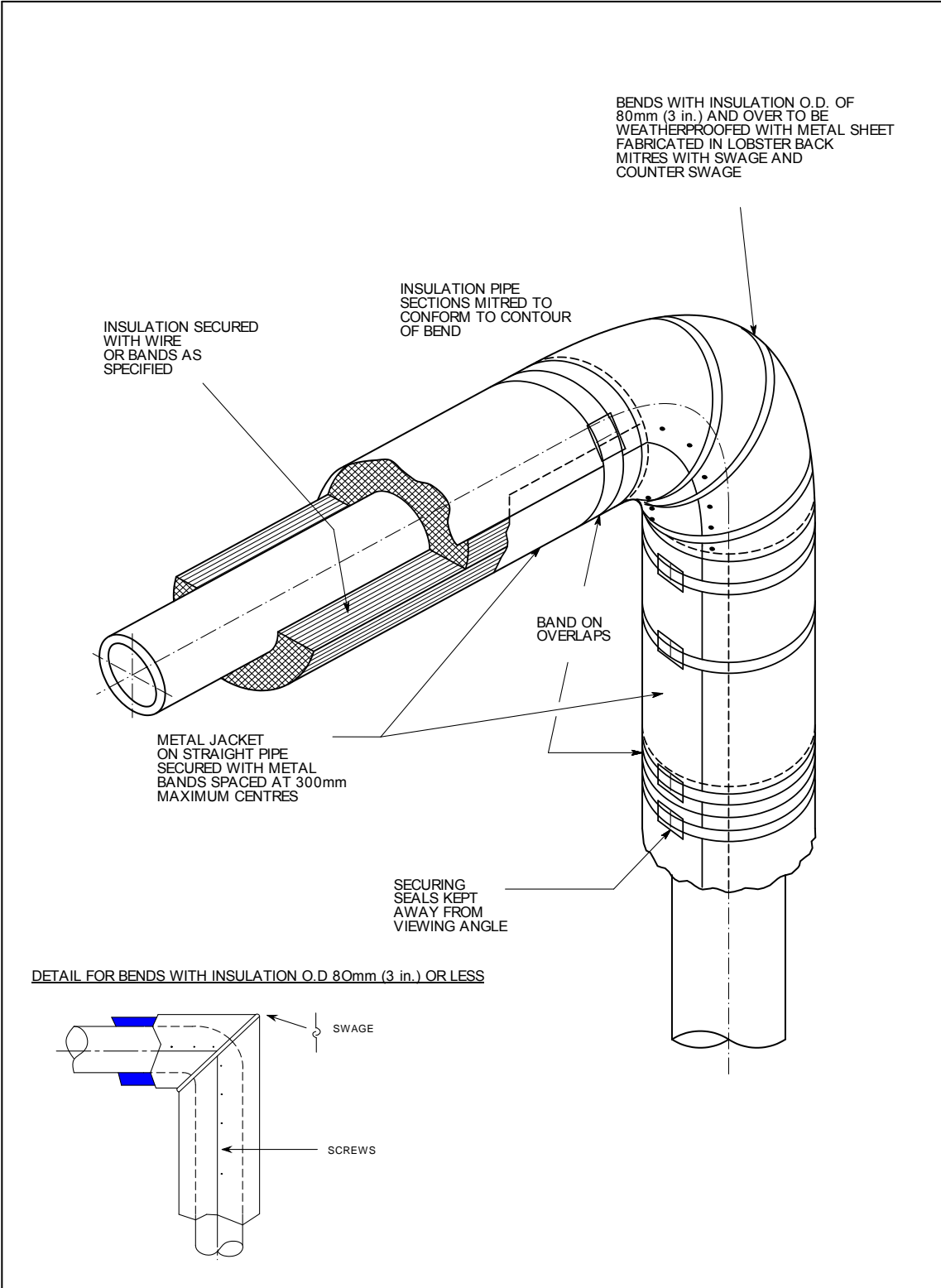


## DRILLING OF EARTH TEST WELL



## PIPING INSULATION WORKS







EXPLORATORY TRENCHING /TOPOGRAPHIC& GEO TECHNICAL SURVEY TEAM USING LATEST ULTRASONIC EQUIPMENT UE6000 AND UNDERGROUND SCANNER

Scan through the entire cable route and LC locations using an approved **GPR (Ground Penetrating Radar Technology)** and record points of metal existence using pegs. Approximate cable route length is 463m and approximate route width is 2m



deployment team

# CIRCUIT BREAKER MICRO LOGIC SETTING



