

One of the most essential components of any infrastructure project is the MEP activities. UNIMAC has the capability of designing, procuring, and executing all MEP scopes required from its clients in the public and private sectors. The MEP Division Consists of Engineering, Procurement, Construction & Commissioning of Electrical, Mechanical, Plumbing & Firefighting. The Scope of works consist of the following activities:

A - Power Networks, Infrastructure:

- 1. Medium Voltage Networks:
 - 13.8/33.0KV Medium Voltage Switchgear Metal Clad/ Enclosed with relevant AC/DC Power for control
 - Substations, Compact/ Unit transformers/Pole mounted
 Transformers/ oil type transformers for outdoor/ Dry-type
 transformers for indoor installation, inclusive of RMUs, Transformers
 and Low Voltage distribution
 - MV Network cables 3C with relevant testing, Megger/ Hi-pot
 - Coordination study in collaboration with SEC, prior to Relays Setting and start-up
- 2. Low Voltage Networks110/220V, 220/380V, 3Ph, 4Wires, 60Hz:
 - Low voltage distribution main switchboards, panel boards
 - Networks cables, Single/ Multicores with relevant testing
- 3. Street Lighting Networks:
 - Light pole installation and testing
 - · Panelboards, main, sub-main and distribution
 - LV cable networks from Source station to pole with testing, termination, labelling and commissioning
- Lux level calculation of concerned illuminated areas to coincide with the design requirements
- 4. Standby Power Networks:
 - Standby generators farm with required capacities to support the load in the event of power failure
 - ATS/ MTS as required with relevant connection, termination with mains power
- Noise treatment to ensure a quiet environment and an acceptable dB level nearby unit

B - Mechanical:

- 1. Potable water Networks
 - Ductile Iron, PVC, HDPE network
 - Water storage tanks with pumps
 - Manholes, connection to the existing water network





- 2. Sewage Networks
 - Vitrified Clay pipes, PVC network
 - Pumping stations, manholes, connections to the existing sewage network, etc...
- 3. Storm line network
 - Concrete pipes, PVC, GRP networks
 - Pumping stations, manholes, connection to existing network
- 4. Pumping stations, for firefighting & irrigation.
 - Fire suppression systems, FM200/ NOVEC for Electrical rooms & Data Centers
 - · Firefighting water system

C - Execution and Civil Works:

- 1. Dedicated team to performing the engineering, procurement, installation of networks with the proper coordination prior to testing, commissioning and start-up with the required documentation.
- 2. Works are executed in accordance with the following:
 - Coordinated drawings with all trades
 - Specifications of the project
 - Method statement highlighting the details of installation
 - Adopted standard of the relevant installation
- Requirements of local authorities, such: Civil Defense, Saudi electricity Company, Saudi Telecom Company where applicable.
- 3. Construction of power building to accommodate main MV switch gears inclusive of trenching for incoming cables from SEC to main incomers, outgoing cables to loops as required, inclusive of all utilities as per SEC Standards and complying with the civil Defense codes
- 4. Construction of unit transformer building accommodating, transformer & RMU with protection louvred doors complying with SEC standard of power distribution inclusive plastering, and painting
- 5. Concrete foundation for substations, panel boards, light poles
- 6. Excavation, compaction, sand laying, cable laying, warning tape, Plastic or Detectable as required, backfilling with layers to the final level, finishing as required.
- 7. Fencing to generator farm with the required finishing





WHEN WORKING WITH UNIMAC, YOU'RE WORKING WITH A PARTNER.



UNITED MAINTENANCE AND CONTRACTING COMPANYBUILDING HIGHWAYS AND AIRPORTS SINCE 1979

ISO 9001:2015

www.unimaccompany.com