

## Scope of Work

Work under this contract consist of furnishing labour, materials, equipment and appliances necessary and required to completely do all works relating to the fire protection system as describe here-in-after and shown and the drawings , consisting of :

### Supply, installation, testing and commissioning of:

- Fire hydrant down comer system including fire Terrace pumps and ancillary equipments.
- Hand appliances.
- Preparation of plans based on the drawings. /actual work at site and getting approval/NOC by the Local Fire Authority.
- Getting tested by and approval of the installation by the Local Fire Authority during the fabrication /construction stage as well as after completion.
- Supply of necessary spare parts during the commissioning stage.
- Supply of any other item or services not specifically mentioned anywhere but required by the Local Fire Authority or essential for the operation.

### Interpretation

In interpretation of specification, the following order is followed:

- a) Schedule of quantities
- b) General Technical specifications
- c) List of approved make of materials
- d) General rules and conditions /Special Conditions

### Drawings

- Contractor drawings are diagrammatic but shall be followed as actual construction Permits. Any deviations made shall be in conformity with the architectural and other services drawings.
- Architectural drawings shall take precedence over contract or other services drawings as to all dimensions.
- We verify all dimensions at site and bring the notice of the owner any or all discrepancy or deviations notices.
- All drawings issued by the consultants for the work are the property of the consultants and shall not be lent, reproduced or used on any other works than intended, without the written permission of the consultants.

### Materials

- All materials used on this work shall be new, conforming to the specifications.
- Materials shall conform to the NBCI/NFPA specifications as amended up to date and carry certification mark, wherever so required.

### Completion drawings

- On completion of works, we submit one complete set of original tracings and two prints of "As Built" drawings to the owner. These drawings shall have the following information.
- Run of all piping, with diameters on all floors and vertical stacks.
- Run of all fire lines with diameters, location of control valves, access panels.
- Location of all mechanical equipment with layout and piping connections.
- Run of control wiring and circuit diagrams of motor control panels.

### Testing

- Piping system shall be tested as specified under the relevant clause of the TAC Regulations / Specifications and shall be performed in the present of the owner/local fire inspector.
- All materials and equipment found defective shall be replaced and the whole work again tested to meet the

requirements of specifications, at the cost of the contractor.

### **Welding**

- The welding procedure, types of electrodes etc. Shall be in accordance with the following IS Specifications.
- Welding Procedures IS : 823
- Welding Electrodes IS : 814, but of approved makes only
- Testing of Welders IS : 817
- Only welders filling the requirements of IS: 817 and approved by the Owned shall be employed by the contractor.

### **Jointing of pipes**

Pipes and fittings shall be joined with electrical resistance welding in approved manner.

### **Painting**

Painting is done only after completion of fabrication work and testing.

### **Coating wrapping for underground pipes**

- All underground piping is protected by coating and wrapping as per the following Procedure.
- Paste Application - PYPKOTE - AW Paste / CORPORATE paste shall be applied to fill up uneven surfaces in order to ensure smoothness for subsequent wrapping with multi - layer tape.

### **General Requirements**

- All materials shall be of the best quality conforming to the specifications and subject To the approval of the employer.
  - Pipes and fittings shall be fixed truly vertical, horizontal or in slopes as required in A neat workman like manner.
  - Pipes shall be fixed in a manner as to provide easy accessibility for repair and Maintenance and shall not cause obstruction in shafts, passages, etc.
  - Pipes shall be securely fixed to walls and ceilings by suitable clamps at intervals Specified. Only approved type of anchor fasteners shall be used for RCC ceilings and walls.
  - Valves and other appurtenances shall be so located that they are easily accessible for Operations, repairs and maintenance.
- Pipes and fitting.

### **Commissioning of the systems:**

- Testing of all pipes, accessories, pumping set, fire alarms, etc.
- Checking electrical connection has been made and direction of motors rotation.
- Water supply is available in adequate quantity in the underground tank.
- Basement drainage pumps are fully commissioned.