

## **SECTION D - SUPPLEMENTARY CONDITIONS**

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### 1.01      **DEFINITIONS**

- A.      "Furnish" shall be understood to mean obtain, deliver to the installation site, and handle and protect from damage until time of installation.
- B.      "Install" shall be understood to mean place in proper and final location, completely attached, connected, tested out, and performing or ready to perform the intended function.
- C.      "Provide" shall be understood to mean furnish and install.
- D.      "Wiring" shall be understood to mean wires or cables with conduit, fittings, boxes, etc., installed complete.
- E.      The words "Contractor Shall" are implied and shall be so understood wherever a direction or instruction is stated in the imperative mood wherever the direction "Provide" is used.
- F.      "Directed", "Required", "Instructed", and words of similar meaning, shall be understood to mean that the designation, requirements, or prescription of the Engineer is intended.

- G. "Approved", "Acceptable", "Satisfactory", "Similar" and "Equal" and words of similar meaning, shall be understood to mean that approval by, acceptability to, and satisfaction of the Engineer is intended, unless another meaning is plainly stated or shown in the Specifications or on the Contract Drawings.
- H. "As Shown", "As Indicated" shall be understood to mean reference to information or directions indicated or shown on the Contract Drawings or in the Specifications.
- I. "Existing" shall be understood to mean work, material or equipment in existence prior to the date of these Specifications and Contract Drawings.
- J. Materials or methods described in words, which, so applied, have accepted technical or trade meanings shall be interpreted as referring to such recognized definitions.
- K. "Piping" shall be understood to mean all pipes, fittings, nipples, valves and all accessories connected thereto.

#### 1.02 INTENT OF DOCUMENTS

- A. The Contractor shall furnish all labor, supervision, materials, tools, transportation, equipment permits, insurance, and temporary protection necessary for the installation of this work as indicated or described in the Contract Drawings and/or in the Specifications.
- B. It is understood and agreed by the Contractor that the work as indicated and described on the Drawings and/or in the Specifications shall be complete and shall include all equipment necessary for the proper functioning of the systems, even though every item involved is not specifically shown or mentioned.  
  
The Contractor shall be held to provide all labor and materials necessary for the entire completion of the work intended to be indicated or described and shall not avail himself of any manifestly unintentional error or omissions, should such exist.
- C. The Contractor shall be particularly careful not to affect in any way the basic design of any system. Radical changes in arrangements and/or sizes of piping, ductwork, conduit, panels, apparatus, etc., shall not be done without the prior written approval of the Engineer.

#### 1.03 LAWS AND RULES

- A. All materials furnished, and all work installed shall comply with all applicable rules and regulations of the National Building Code, the National Board of Fire Underwriters, with all requirements of local Utility Companies and Fire

Department, State, Municipal and Local Codes, with the requirements of the National Electrical Code, code for pressure piping (A.S.M.E.) and all requirements of other authorities having jurisdiction.

- B. Where a conflict occurs between the requirements of the Specifications an/or the Contract Drawings and any such applicable laws, ordinances, rules and regulations, including requirements for additional materials or apparatus, the more stringent requirements shall govern all work and shall be installed without extra cost to the Owner as directed by the Engineer.
- C. The Contractor shall give all notices, obtain all required permits, perform all tests, and pay for all local, state, and federal taxes, fees, royalties, and other costs. File all necessary Drawings and obtain all approvals of all municipal and state authorities having lawful jurisdiction. Obtain all required Certificates of Inspection. Furnish the Owner with the final certificates before final payment of the Contract.

#### 1.04 MATERIALS

- A. All materials and appliances shall have listing of Underwriters Laboratories and be so labeled, or shall conform to their requirements, in which case certified statements to the effect shall be furnished by the manufacturer with a copy of an examination report by a recognized independent testing laboratory acceptable to the Engineer. Use new materials and appliances throughout. Materials shall be delivered, stored, and handled with proper equipment and in a manner to protect them from damage.

#### 1.05 CERTIFICATES

- A. The certificates and documents listed below are required from the Contractor under this Specification.
- B. Previous to final payment, the Contractor shall deliver copies of all such certificates and documents to the Engineer for approval. Number of copies shall be as specified or as directed by the Engineer.
  - 1. All test data specified to be submitted under "Tests".
  - 2. Shop drawings (all approved, corrected, and bound).
  - 3. Operating and maintenance instructions.
  - 4. Certificate of Approval of the electrical installations by the Inspection Bureau of the New York Board of Fire Underwriters and all other agencies having jurisdiction.



5. Receipt from Owner acknowledging receipt of special maintenance tools and spare parts (i.e., special wrenches, loose keys, etc.) as specified.
6. Certificate of one-year service contract for maintenance of systems and equipment as specified.

1.06 EXAMINATION OF SITE

- A. It shall be assumed that the Contractor has examined the site of the proposed construction, and by making this proposal he shall, in effect, give evidence of this examination.
- B. The Contractor is cautioned that existing utilities or service facilities must be fully maintained during the duration of this project at no additional cost to the Owner. Facilities already existing on the site must be moved or replaced so as not to disrupt their full and complete use at all times. The Contractor is cautioned as to the existence of utilities in the ground and shall be fully responsible for any damage caused such utilities by the construction operations.

1.07 ACCESSIBILITY

- A. The Contractor shall inform himself fully regarding peculiarities and limitations of space available for the installation of all materials under his contract.
- B. The Contractor shall see that all his equipment, apparatus as may be necessary to be reached from time to time for operation and maintenance are made easily accessible.
- C. The Contractor shall investigate spaces, doors, and passages into and through which equipment must be moved and shall make arrangements for installing large pieces of equipment. Equipment shall be shipped from manufacturer in sections of size suit-able for moving through restricted spaces and openings, or shall be disassembled and re-assembled in place, as required.

1.08 JOB MEETINGS

- A. The Contractor, or his superintendent, shall attend job meetings with the Owner's representative and the Engineer for the purpose of discussing expedition, execution, and coordination of the work. Job meetings will be scheduled periodically at a time and place designated by the Engineer.

1.09 SUPERVISION

- A. The Contractor shall have a competent foreman in responsible charge of the work who will be on the site during the erection of the material furnished under these Specifications until same has been put into complete operative condition and accepted by the Engineer, and Owner's Agent. Foreman shall be steady and same individual throughout duration of project, all within limits.

1.10 REMOVAL OF EXISTING EQUIPMENT (DEMOLITION)

- A. The Contractor shall make an accurate take-off of all existing equipment, piping, conduit, and other accessories being removed during demolition and shall include the cost for disconnecting and removal of said equipment, etc., into his bid.
- B. Where these removals take place, are required, specified or indicated on the Drawings, the Contractor shall include within his Bid the cost for transportation from the site, and disposal of same, in a proper manner.

1.11 PAINTING

- A. All items furnished with factory finish shall be touched-up after installation wherever scratched or otherwise damaged. Leave same in a finished condition.
- B. Finish painting of boiler plant and equipment shall be as specified

1.12 NAMEPLATES, CHARTS, AND TAGS

- A. Furnish and install laminated Bakelite nameplates, screwed onto or close by every motor starter, automatic valve, pilot light, remote push button, and any other controllers furnished. Also provide a nameplate for each feeder switch, panelboard, disconnect switch, control panel, and other equipment enclosures.
- B. Nameplates shall not be less than 2-1/2" x 3/4" x 1/8" thick, with white upper case, cored letters on black background, with beveled edges. Nameplates shall clearly identify each item of equipment.
- C. Furnish and install on each new valve a numbered 1" brass tag, secured to handwheel with metal chain link. Use square tags for plumbing work and round tags for heating work.
- D. Furnish and install, where directed, for each trade, two framed, glass covered, valve charts listing each valve by system, function, and number.

- E. All charts shall be submitted in draft form for approval prior to final issue.
- F. In exposed locations, including accessible pipe spaces, stencil each piping service every 20 ft. with name of service, and nominal pipe size, and indicate direction of flow with 5" long arrows, spaced every 20 ft., one arrow on flow, two arrows on return lines. Apply one coat clear varnish or lacquer over stenciling. Use black on a white background. At Contractor's option, piping may be marked with Seton "Set-mark" or Brady pipe markers.

#### 1.13 OPERATING AND MAINTENANCE INSTRUCTIONS AND SEMINAR

- A. The Contractor shall supply to the Owner or his representative four (4) sets of system and equipment operating instructions, maintenance instructions, spare parts and spare parts lists, for all systems and equipment furnished under his Contract.
- B. All instructions shall be clear and concise for the operations, adjustments, lubrication, and other maintenance of the equipment, shall be typewritten and shall be neatly bound in hard cover booklets.
- C. Operating instructions for motorized systems shall describe the starting, running, stopping, and shutting down (for any appreciable time period) of the system.
- D. The operating instructions and maintenance instructions and parts lists shall be prepared for the specified equipment furnished and installed and shall not refer to other sizes, types, or models of similar equipment.
- E. All instructions shall be submitted to the Engineer in draft, for approval, prior to final issue.
- F. Manufacturer's advertising literature or advertising catalogs will not be acceptable for operating and maintenance instructions.
- G. In addition to the above and to various other instructions called for in the Specifications, this Contractor shall make arrangements for a formal lecture type seminar, where the Owner or his representatives, such as maintenance and administrative personnel, will receive detailed verbal and written instructions in the proper care and operation of all work furnished by this Contractor and his various Sub-Contractors, material and equipment suppliers, and at which time all final and approved instruction brochures will be turned over to the Owner.



#### 1.14 GUARANTEES AND RESPONSIBILITIES

- A. The Contractor shall guarantee that all work done under this Contract is free from all defects resulting from the use of inferior material, equipment, or workmanship. Should any defects, which cannot be proved to have been caused by improper use, develop within one year from the date of acceptance of the work as certified in Certificate for Final Payment, such defect shall be made good by the Contractor, free of cost to the Owner and to the satisfaction of the Engineer.
- B. The Contractor shall be responsible for his work and all material until its final completion and acceptance. He shall replace any of the same, which may be damaged, lost, or stolen without additional cost to the Owner.

#### 1.15 TEMPORARY SERVICES

- A. Temporary electric power for use during construction will be available at the Owner's existing panels. The Contractor will be responsible for providing his own extension cords or other temporary wiring or lighting as required for his work. All temporary electric must be connected in accordance with acceptable practices as governed by the BFU and Governing Agencies. The Owner will pay for all power for use during construction.
- B. Temporary Water: The Contractor shall provide all hoses, connectors, nozzles etc., as required, which shall be connected to the nearest available existing hose bibb.

The Owner will pay for all water used during construction.

#### 1.16 CLEANING-UP

- A. The Contractor shall keep the premises cleared of scrap waste, empty containers, direct rubbish, all as a result of his operation. This shall be done at least once a week, or more often if it interferes with building occupancy, or presents a fire or safety hazard as determined by the Engineer, or Owner.
- B. The Contractor shall clean all material, equipment, and accessories installed by him, removing all dust, plaster, cement, paint, markings, stickers, rust stains, and other foreign matter or discolorations. He shall also clean dust, etc., from property of the Owner, when caused by his employees. This work shall be done periodically as the job progresses, and as directed.

1.17      PHASING OF WORK AND MAINTAINING SERVICES

- A.      The building will be in total occupancy during construction. The Contractor shall coordinate with the Building Superintendent with regard to scheduling of work affecting Mechanical, Plumbing and Electrical in normally occupied areas of the building.
- B.      Proposed working areas shall be reviewed with the Superintendent at least two weeks in advance of the commencement of work, and the Contractor shall rearrange his proposed scheduling to accommodate the Owner as required.
- C.      A careful review of proposed work areas shall be made, and consideration shall be given to existing means of egress. The Contractor shall make provisions, as required, to ensure that the life safety aspects of the building are maintained during alteration work.

1.18      CONDUCT OF OPERATIONS

- A.      Operations or work schedules shall be so conducted as to cause a minimum of disturbances and/or inconvenience to normal business functions in the building and the immediate area.
- B.      The Contractor shall be restricted in the use of the site and buildings to those areas where work is in progress and elsewhere as directed. He shall come and go, and store materials only where directed and agreed; all other areas shall be off limits for the Contractor and he shall rigidly enforce this requirement.
- C.      Materials may be stored within buildings only with direct permission of the Owner. Any storage which may be permitted shall in no way limit the use of the building or impede the completion of work. Store all material in a neat and orderly manner.
- D.      The Contractor shall review the following items with the **Superintendent before** proceeding with any work.
  - 1.      The Contractor shall report on any existing leaks, etc., in areas of proposed new construction for resolution **prior** to new installations. (Do not include price for this work within Base Bid)
  - 2.      All scheduled shutdowns for any systems as required for final tie-in connections, etc., shall be strictly coordinated with the Superintendent.
  - 3.      Location of exterior refuse containers (dumpsters) or exterior lockable storage containers shall be coordinated with the Superintendent.



4. Toilet facilities will be provided on the site. The Contractor shall strictly limit use to those facilities specified.

End of Section SCME