

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Work included: Provide temporary facilities and controls needed for the work including, but not necessarily limited to:
 - 1. Temporary utilities such as heat, water, electricity, and telephone;
 - 2. Field office for the Contractor's personnel;
 - 3. Sanitary facilities;
 - 4. Enclosures such as tarpaulins, barricades, and canopies;
 - 5. Fire protective measures;
 - 6. Staging and scaffolding.

- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

 - 2. Except that equipment furnished by subcontractors shall comply with requirements of pertinent safety regulations, such equipment normally furnished by the individual trades in execution of their own portions of the work are not part of this Section.

 - 3. Permanent installation and hookup of the various utility lines are described in other Sections.

1.02 PRODUCT HANDLING

- A. Maintain temporary facilities and controls in proper and safe condition throughout progress of the work.

PART 2 - PRODUCTS

2.01 UTILITIES

- A. Temporary Toilet Facilities
 - 1. Provide suitable toilet facilities, conforming with all code requirements, for use by his staff, representatives of the Owner and the Architect, and for all workmen on the job. Keep in neat and sanitary condition and provide reasonable heat during the winter months.

B. Temporary Services

1. Water:

- a) Make all necessary arrangements, with the responsible local authorities, and with the building Owner (if leased space), for all temporary water services for the construction operations as required for his use and the use of all trades.
- b) Obtain and pay for all permits or other sanctions required to furnish temporary water on the job site. The cost of all water use on the job shall be borne by the Contractor.
- c) Make all connections, furnish and install all pipes and fittings, including meter, and remove all temporary materials when this service is no longer required.
- d) Use due care to prevent waste of water, maintain in perfect condition at all times; pipes, hoses, valves, and connections.
- e) Provide adequate drinking water satisfactorily cooled for all workmen on the job; water units shall be strategically located throughout the job.

2. Temporary Electricity:

- a) Make arrangements with local electric company for temporary electric service, pay expenses in connection with installation, operation and removal thereof and pay cost of energy consumed by all trades.
- b) Provide power distribution as required throughout structure 120/208 - volt, 3-phase, 60 cycle, AC. Termination or power distribution shall be one location on each floor or each major wing or section of building. Termination shall be provided complete with circuit breakers, disconnect switches and other electrical devices as required to protect power supply system.
- c) Temporary lighting systems shall be furnished, installed and maintained by Contractor as required to satisfy minimum requirements of safety and security. Temporary lighting to illuminate staging, stockpiles, trenches, projections, etc., to the satisfaction of the Architect and general illumination throughout, adequate for watchmen and emergency personnel.
- d) Temporary equipment and wiring for power and lighting shall be in accordance with applicable provisions of governing codes. Temporary wiring shall be maintained in safe manner and utilized so as not to constitute a hazard to persons or property.
- e) When permanent electrical power and lighting systems are in operating condition, they may be used for temporary power lighting for construction purposes,

provided that Contractor obtains written approval of Architect and Owner, assumed full responsibility for entire power and lighting systems, and pays costs for operation and restoration of systems.

- f) At completion of construction work or at such time as Contractor makes use of permanent electrical installation, temporary wiring, lighting and other temporary electrical equipment and devices shall be properly removed by Contractor.

3. Temporary Heat:

- a) Provide all heat as may be necessary for thawing out and heating the ground or materials, and for the proper execution, protection and drying out of his and his Subcontractor's work before permanent apparatus is installed.
- b) Temporary heaters shall be smokeless, portable unit heaters, (Underwriter's Laboratories, Factory Mutual, and Fire Marshall approved).
- c) After the building or portion thereof has been enclosed, either temporary or permanently, provide temporary heat and maintain continuously at a temperature of not less than 60 degrees nor more than 75 degrees until final acceptance of the work. Comply with requirements under Division 15, Heating, Ventilating, and Air Conditioning for use of permanent heating system for temporary heat.
- d) Provide heat as required for temporary structures of a type approved by the Architect.
- e) Include all costs of temporary heat in his proposal.
- f) When permanent heating system, or suitable portion thereof, is in operating condition, such system may be used for temporary heating, provided that Contractor obtains written approval of Architect and Owner, assumes full responsibility for new heating system and pays costs for operation and maintenance and restoration of system.
- g) Furnish an acceptable operator for the new heating plant during the period when temporary heat is required.
- h) Upon conclusion of temporary heating period, remove temporary piping, temporary radiators, other equipment and pay costs in connection with repairing damage caused by installation or removal of temporary heating equipment and shall thoroughly clean and recondition those parts of permanent heating system used for temporary service.

2.02 STAGING AND SCAFFOLDING

- A. Furnish, erect, and maintain all staging and scaffolding (exterior and interior) eight (8) feet or over in height for all trades for such use. Furnish, erect and maintain all staging and

scaffolding (exterior and interior) for his own use during construction of the building. Staging and scaffolding shall be of approved design, erected and removed by experienced stage builders and shall have all accident prevention devices required by Federal, State, and Local Laws.

- B. Erect such staging and scaffolding in sufficient time and in proper sequence so as not to delay work. Subcontractors shall schedule and commence their work so that building progress is not delayed or obstructed once staging and scaffolding come available.
- C. Each Subcontractor entering upon the work shall furnish, erect, and maintain all staging and scaffolding under 8 feet in height required for work under his subcontract, and where so indicated all other staging and scaffolding required for his work. On completion of his work, each Subcontractor shall dismantle and remove such staging and scaffolding.
- D. Erection of all staging, scaffolding, rigging, etc., shall be supervised and directed by a Licensed Rigger and inspected by a Registered Engineer. A certified affidavit shall be submitted to the Architect by this Engineer stating that all staging, scaffolding, rigging, etc., has been safely erected and conforms in all respects to State and Local Codes. The General Contractor shall pay for all services in connection with the erection and inspection of all staging, scaffolding, and rigging, etc.
- E. Above facilities shall be constructed and maintained in accordance with applicable requirements of "American Standard Safety Code of Building and Construction", published by USASI, and be removed after they have served their purpose or when directed by Architect.
- F. Permanent stairs shall be erected as soon as possible and Contractor shall provide suitable temporary treads, risers, etc., as required to protect permanent stair members, and provide temporary railing as required for safety.

2.03 FIELD OFFICE AND TELEPHONE

- A. The General Contractor shall maintain a field office for the duration of the project, where written, telephone, and faxed communications can be received.
- B. A job site telephone shall be installed within one week of commencing work.

2.04 TEMPORARY STRUCTURES

- A. The Contractor and Subcontractor shall construct and maintain, in locations approved by the Architect, all temporary structures, sheds, and similar needs for the storing of their respective materials for the duration of the Contract.
- B. All temporary structures shall be of substantial construction and weather tight. Temporary structures shall be removed from site when no longer needed by the Contractor or trade responsible for their erection.

PART 3 - EXECUTION

3.01 FIRE PROTECTIVE MEASURES

- A. The Contractor shall maintain a rubbish-free building and building site, and shall provide metal barrels into which all luncheon refuse shall be deposited. All such barrels shall have tight-fitting covers.
- B. Store materials so they do not create natural pockets for papers or other combustible materials.
- C. Construction debris shall not be thrown from the windows of the building but shall be removed through tight strong chutes, and all debris shall be wet down if necessary, or as directed by Architect.
- D. When building materials with combustible contents are stored in the building during construction, they shall be located within easy reach of fire protection equipment.
- E. An approved number of fire extinguishers shall be placed throughout work areas, temporary paint shop and within easy reach of mechanics who are operating plumber's furnaces, burning or welding apparatus. The number and location shall be approved from time to time by the local fire department.
- F. It shall be the duty and responsibility of the General Contractor or any subcontractor performing any cutting or welding, to comply with the safety provisions of the national Fire Protection Association's "National Fire Codes" pertaining to such work and the respective contractor shall be responsible for all damages resulting from a failure to do so comply.

3.02 POLICE, FIREMEN AND INSPECTORS

- A. Any police officer, fireman or inspector required by the local authorities having jurisdiction over the work, shall be employed by the Contractor and paid the standard rate or wage for the respective occupation of the work area. All personnel employed shall be covered by Workman's Compensation and Employer's Liability Insurance by the Contractor.

3.03 WINTER CONSTRUCTION

- A. Remove snow and ice which may impair progress of work, be detrimental to workmen, or impair trucking, delivery or moving of materials at job site or prevent adequate drainage at site or adjoining areas.
- B. Contractor shall take special precautions against damage to materials and work installed in freezing weather, by providing special heat and covering to prevent damage by elements, in manner approved by Architect. Ground surfaces under footings and under pipe lines, and masonry, concrete and other work subject to damage shall be protected against freezing.

3.04 MAINTENANCE AND REMOVAL

- A. Maintain temporary facilities and controls as long as needed for safe and proper completion of the work.
- B. Remove such temporary facilities and controls as rapidly as progress of the Work will permit, or as directed by the Architect.

END OF SECTION