

**SECTION 01 50 00**  
**TEMPORARY UTILITIES**

**PART 1 – GENERAL**

**1.1 STIPULATIONS**

- A. The specifications sections “General Conditions of the Construction Contract,” “Special Conditions,” and “Division 1 - General Requirements” form a part of this Section by this reference thereto, and shall have the same force and effect as if printed herewith in full.

**1.2 TEMPORARY SERVICES DURING CONSTRUCTION**

- A. The designated Contractor shall install, operate, protect, and maintain the temporary services, as hereinafter specified, during the construction of the entire Project.
- B. Temporary connections to new and/or existing permanent service lines shall be made at the appropriate locations as determined by the designated Contractor, and coordinated with the Department, in conjunction with the Client Agency (as applicable). When the temporary service lines are no longer required, they shall be removed by the Contractor. Any part or parts of the permanent service lines, grounds, and building disturbed and damaged by the installation and/or removal of the temporary service lines, shall be restored to their original condition by the Contractor responsible for the temporary installation.
- C. If the Contractor fails to carry out its responsibility in supplying temporary services as set forth in this Contract, it is responsible for such failure, and the Department may take such action as it deems proper for the protection and conduct of the work, and shall deduct the cost involved from the amount due the Contractor. Only those temporary utilities required for construction need to be extended to the work area(s).
- D. Temporary utilities for Prime Contractors’ office trailers shall be arranged and paid for by each responsible Prime Contractor. The Lead Contractor shall arrange, provide, install, and pay for all temporary utilities required for the DGS Construction Project Manager’s office/ trailer.

**1.3 TEMPORARY WATER SUPPLY**

- A. The Plumbing Contractor shall install, operate, protect, and maintain an adequate water supply during the period of construction, either by means of the permanent water supply line, or by the installation of a temporary water supply. The temporary water supply shall be in place within fifteen (15) days of any Prime Contractor’s written request for such services.
- B. The Plumbing Contractor will be required to bring the temporary water supply to a point approximately ten (10) feet from the work area(s) and to provide a meter and RPZ back-flow preventer.
- C. The Lead Contractor shall pay all charges for water consumption, except for testing, as specified in Section 010400.

**1.4 TEMPORARY HEAT**

- A. The temporary heat requirements on this Project are divided into two (2) categories: (1) temporary heat required prior to the enclosure of the building, buildings, or portions thereof; and (2) temporary heat required subsequent to the enclosure of the building, buildings, or portions thereof.
- B. A building or portion thereof shall be considered to be enclosed when (a) the roof is not exposed and is weather tight; (b) the exterior walls have been completed; and (c) when

openings, doors and windows are closed with permanent closures, or with substantial temporary closures which will affect the retention of heat within the building or portion thereof.

- C. Prior to enclosure of building, buildings, or portions thereof, and when official local weather predictions indicate below freezing temperatures or temperatures that may damage the work, The Lead Contractor shall provide, maintain, operate, and pay all costs, including fuel, for a sufficient number of approved portable heaters, so that the progress of its work is not impeded, and proper protection of its work from freezing is maintained. Self-contained oil/gas/propane-fired portable heaters, if used, must be vented to the outside of the enclosed structure. Unvented fuel-fired portable heaters may be used only when the building is not enclosed.
- D. After the building, buildings or portions thereof are enclosed, and temporary heat is required for proper construction, The Lead Contractor, at its own cost and expense, shall provide equipment and heating personnel for the temporary heat. At no time shall the new heating system be used for temporary heating throughout the duration of the project.
- E. Temporary heating system, as hereinafter noted, shall be of sufficient capacity to heat the interior of the building to 60°F when outside temperature is 0°F. The interior temperature must be 60°F or above at all times. This service shall be continued until the entire Project is completed, except as hereinafter noted.
- F. Where electricians or plumbers are required to install, operate supervise or maintain equipment used in the provisions of temporary heat, the payment of the services of such material and personnel shall be the responsibility of The Lead Contractor. It will be the responsibility of the Electrical and Plumbing Contractors to coordinate with The Lead Contractor for temporary heat.
- G. The Lead Contractor shall pay for all fuel and electricity for the temporary heat in conjunction with the operation of heating equipment for enclosed buildings, or enclosed portions thereof, unless provided by the Client Agency as noted above.
- H. The Lead Contractor shall remove normal soot, smudges, and other deposits from walls, ceilings and exposed surfaces which are the result of the use of any temporary heating equipment after enclosure, including the use of the permanent heating system for temporary heating purposes. Finish work shall not start until all such surfaces are properly cleaned. Soot, etc. caused by equipment malfunction shall be removed by the responsible Contractor. Each Prime Contractor shall correct/replace any of their respective work that is identified by the Department or Professional as not meeting the project specifications as a result of the failure of any Prime Contractor to maintain or provide appropriate temporary heat, cooling, dehumidification, or ventilation in accordance with the contract requirements or the manufactures requirements. Each Prime Contractor will follow the requirements of the General Conditions regarding any disputes due to the Lead Contractor's failure to provide or maintain proper temporary heating, cooling, dehumidification, or ventilation of the conditioned space. Each Prime Contractor shall correct/replace any of their respective work that does not meet Contract requirements due to use of temporary heat.
- I. At no time shall the new heating system be used for temporary heat throughout the duration of the project unless approved by the Client Agency. Refer to specification 230500-3.12.
- J. The cost of temporary heat shall be made a part of the lump sum bid submitted by each Contractor, as applicable. The cost of temporary heat after enclosure shall be shown on the Contract Schedule of Values, to include the number of calendar days, cost per twenty-four (24) hour day and extended price. Any adjustment to the number of days of temporary heat, used or not used, may be based on this unit price. Each Contractor shall include 121 calendar days of temporary heat after building enclosure, in its bid.
- K. Temporary Ventilation and Temperature Control: The Lead Contractor shall provide electronic daily temperature/humidity readings equipment and log the conditions throughout the building to assure the proper and adequate temperature/humidity levels are recorded and maintained. The Lead Contractor shall provide the appropriate temporary ventilation, dehumidification,

humidification, or cooling equipment to assure the interior humidity/temperature levels are provided to meet all building finish requirements in accordance with the manufacture requirements.

## **1.5 CONSTRUCTION LIGHT AND POWER**

- A. The Electrical Contractor shall install, operate, protect, and maintain the temporary service for construction light and power. The Contractor shall extend the temporary wiring throughout the project work areas, properly insulated, and installed in accordance with Article 300 of the National Electrical Code. All wiring shall be installed by a licensed electrician.
- B. The Electrical Contractor shall furnish this service within fifteen (15) days of any Prime Contractor's written request for such services. The service shall be sized to satisfy project requirements, but shall not be less than 200 amp, single-phase, 3-wire 120/240 volts, with fused safety switch protection required. Additional capacity in the form of other independent services and panels shall be provided as needed at required location throughout the site to meet the requirements of this section.
- C. The Electrical Contractor shall extend electrical wiring into the building to provide adequate light and power, for the proper execution of the work. The Electrical Contractor shall also provide three-phase, 208 volt power service, if required. As construction progresses, it shall extend the temporary services to all areas where required, with a minimum of 100W incandescent equivalent light and duplex power outlets at 20 feet on center minimum, and at least in every room or space. The maximum size motor to be used at any power service shall be limited to 5 hp. Construction light and power provided shall fully comply with all provisions for this service of the National Electric Code and OSHA.
- D. Where a service of a type other than that as herein mentioned is required, each Contractor requiring same shall provide such service and necessary equipment at its own expense.
- E. The Electrical Contractor, prior to the installation of the permanent service, shall provide portable generators or shall extend a temporary service line to the site, and shall sign for the meter and pay all electrical connection costs.
- F. The Electrical Contractor shall provide all transformers necessary to provide temporary power.
- G. The Electrical Contractor shall provide all meters and/or submeters required and necessary to meter usage.
- H. The Lead Contractor shall pay all electric consumption and associated costs for its use and that of all Prime Contractors, until Closeout Inspection occurs, and all items of work are certified to be complete.

## **1.6 WELDING**

- A. Any Contractor using electrical power for welding on the site shall use self-contained engine generating units.
- B. Each Contractor shall provide necessary exhaust/ventilation/filtration to prevent accumulation of welding fumes and smoke generated by welding their operations.
- C. Each Contractor shall have all precautions and protection in place while welding to assure no sparks cause fire or smoke damage to all surrounding areas, during and after all welding activities.

## **1.7 FIRE EXTINGUISHERS**

- A. Each Contractor shall provide UL listed, NFPA approved fire extinguishers, ten (10) lb. minimum, at the construction site during operations, suitable for all types of fires in accordance with OSHA.

## **1.8 INTERRUPTION OF SERVICES**

- A. Each Prime Contractor shall have all needed equipment and material to complete planned work at the site, prior to shutting down any system.
- B. No additional compensation or time will be given to the Contractor if work must be performed on State or National Holidays or on weekends or on overtime. See paragraph on 'Working Hours' under Section 010400.
- C. Contractors are to follow all requirements stated in Articles 6.21 and 6.22 of the General Conditions and submit the "Utility Shutdown Checklist" form accessed through the eBuilder Forms Module for approval. Forms are located under the Project Menu along the left column of eBuilder. The "Utility Shutdown Checklist" form is listed under Workflow Forms within the "All Workflow and Static Forms" drop-down menu.

#### **1.9 SNOW/ICE REMOVAL**

- A. The Lead Contractor shall be responsible to provide snow removal and anti-skid material into to site and at the project site and indicated laydown areas (including construction trailer), unless directed otherwise.
- B. All related work shall be performed to provide proper and safe access throughout the site subsequent to each related workday. Any delay and potential related costs generated by failure to meet this requirement shall be the responsibility of the Lead Contractor.

#### **1.10 DEWATERING**

- A. Each Prime Contractor shall provide adequate attention, equipment, and manpower to the project to assure the work area is dewatered as required to eliminate ponding, excessive water, depressions, etc. as affected by and for their work activities. Such action shall occur no later than 24 hours after a rain or water producing event. This effort shall be sustained for the time period necessary to bring the affected area back into conformance.

#### **1.11 HOISTING FACILITIES**

- A. Each Prime Contractor must provide hoisting facilities for its own work. All hoisting facilities must comply with the safety regulations of the Department of Labor and Industry.

#### **PART 2 - PRODUCTS (Not Used)**

#### **PART 3 - EXECUTION (Not Used)**

END OF SECTION