

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

1 GENERAL

1.1 SECTION INCLUDES

- A. Temporary Utilities:
 - 1. Temporary electricity.
 - 2. Temporary lighting for construction purposes.
 - 3. Temporary ventilation.
 - 4. Temporary Cooling.
 - 5. Telephone service.
 - 6. Facsimile service.
 - 7. Temporary water service.
 - 8. Temporary sanitary facilities.
- B. Construction Facilities:
 - 1. Field offices and sheds.
 - 2. Vehicular access.
 - 3. Parking.
 - 4. Progress cleaning and waste removal.
 - 5. Project identification.
- C. Temporary Controls:
 - 1. Barriers.
 - 2. Enclosures and fencing.
 - 3. Water control.
 - 4. Erosion and sediment control.
- D. Removal of utilities, facilities, and controls.

1.2 TEMPORARY ELECTRICITY

- A. Cost: Provide and pay for power service required from utility source as needed for construction operation.
- B. Provide temporary electric feeder from electrical service at location as directed. Do not disrupt Owner's use of service.
- C. Complement existing power service capacity and characteristics as required for construction operations.

- D. Provide power outlets, with branch wiring and distribution boxes located as required. Provide flexible power cords as required for portable construction tools and equipment.
- E. Provide meter.
- F. Permanent convenience receptacles may not be utilized during construction.

1.3 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES

- A. Provide and maintain incandescent lighting for construction operations to achieve minimum lighting level of **2 watt/sq ft (21 watt/sq m)**].
- B. Provide and maintain **1 watt/sq ft (10.8 watt/sq m)** lighting to exterior staging and storage areas after dark for security purposes.
- C. Provide and maintain **0.25 watt/sq ft (2.7 watt/sq m)** HID lighting to interior work areas after dark for security purposes.
- D. Provide branch wiring from power source to distribution boxes with lighting conductors, pigtails, and lamps for specified lighting levels.
- E. Maintain lighting and provide routine repairs.
- F. Permanent building lighting may not be utilized during construction.

1.4 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to achieve curing of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

1.5 TEMPORARY COOLING

- A. Provide and pay for cooling devices and cooling as needed to maintain specified conditions for temporary offices and construction operations. As describe in the Special Conditions.

1.6 TELEPHONE SERVICE

- A. Provide, maintain, and pay for telephone service to field office at time of project mobilization. As describe in the Special Conditions.

1.7 PHOTOCOPIER AND FACSIMILE SERVICE

- A. Provide, maintain and pay for photocopier and facsimile service and dedicated telephone line to field office at time of project mobilization.

1.8 TEMPORARY WATER SERVICE

- A. Provide and pay for suitable quality water service as needed to maintain specified conditions for construction operations.
- B. Extend branch piping with outlets located so water is available by hoses with threaded connections.

1.9 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Existing facility use is not permitted. Provide facilities at time of project mobilization. As describe in Special Conditions.
- B. At end of construction, return existing facilities used for construction operations to same or better condition as original condition.

1.10 FIELD OFFICES AND SHEDS

- A. Offices: Weather tight, with lighting, electrical outlets, cooling and ventilating equipment, and equipped with sturdy office furniture, drawing rack, and drawing display table and other items. As describe in the Uniform General Conditions.
- B. Provide space for Project meetings, with table and chairs. As describe in the Uniform General Conditions.
- C. Provide computer equipments for use by Owner's Representatives as describe in the Uniform General Conditions.

1.11 VEHICULAR ACCESS

- A. Construct temporary access roads from public thoroughfares to serve construction area.
- B. Extend and relocate vehicular access as Work progress requires, provide detours as necessary for unimpeded traffic flow.
- C. Provide unimpeded access for emergency vehicles.
- D. Provide and maintain access to fire hydrants and control valves free of obstructions.
- E. Provide means of removing mud from vehicle wheels before entering streets.

- F. Do not use existing on-site roads for construction traffic.

1.12 PARKING

- A. Arrange for and Provide temporary parking areas to accommodate construction personnel, Owner's Representative, and Architect/Engineer.
- B. When site space is not adequate, provide additional off-site parking.

1.13 PROGRESS CLEANING AND WASTE REMOVAL

- A. Contractor shall provide daily janitorial services.
- B. Maintain areas free of waste materials, debris, and rubbish. Maintain site in clean and orderly condition.
- C. Remove debris and rubbish from closed or remote spaces, prior to enclosing spaces.
- D. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- E. Collect and remove waste materials, debris, and rubbish from site periodically and dispose off-site.
- F. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.14 PROJECT IDENTIFICATION

- A. Project Identification Sign:
 - 1. Provide 8 ft by 6 ft (2.4m x 1.8m) project sign of exterior grade plywood and wood frame construction, painted, with exhibit lettering by professional sign painter and self-adhesive corporate logo.
- B. Design sign and structure to withstand 60 miles/hr (100 km/hr) wind velocity.
- C. Installation:
 - 1. Install project identification sign within 15 days after date fixed by Notice to Proceed.
 - 2. Erect at designated location.
 - 3. Erect supports and framing on secure foundation, rigidly braced and framed to resist wind loadings.
 - 4. Install sign surface plumb and level, with butt joints. Anchor securely.
 - 5. Paint exposed surfaces of sign, supports, and framing.

- D. Maintenance: Maintain signs and supports clean, repair deterioration and damage.
- E. Removal: Remove signs, framing, supports, and foundations at completion of Project and restore area.

1.15 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by authorities having jurisdiction for public rights-of-way.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.16 ENCLOSURES AND FENCING

- A. Construction: Design, materials, paints will be selected by Owner's representative.
- B. Exterior Enclosures:
 - 1. Provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for products, to allow for maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.17 WATER CONTROL

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion

1.18 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize surface area of bare soil exposed at one time.

- C. Provide temporary measures to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

1.19 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Remove underground installations to minimum depth of 2 feet (600 mm). Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

2 PRODUCTS

Not Used.

3 EXECUTION

Not Used.

END OF SECTION