PART 1 - GENERAL

1.1 ADMINISTRATIVE REQUIREMENTS

A. Where necessary, engage appropriate local utility companies to install temporary service or connect to existing service. Where utility company provides only part of service, provide remainder with matching, compatible materials and equipment. Comply with utility company's recommendations.
1. Comply with industry standards and applicable laws and regulations of authorities having jurisdiction.
2. Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.
3. Arrange with utility company and existing users for time when service can be interrupted, where necessary, to make connections for temporary services.
4. Provide adequate capacity at each stage of construction. Before temporary utility availability, provide trucked-in services.
5. Obtain construction easements necessary to bring temporary and/or permanent utilities to site.
6. Use qualified personnel for installation and maintenance of temporary facilities. Locate facilities where they will serve Project adequately and result in minimum interference with the Work of Owner or other Contractors on Project Site. Relocate and modify facilities as required.
7. Pay cost and use charges for temporary facilities and utilities.

B. Prepare schedule indicating dates for implementation and termination of each temporary utility. At earliest feasible time and when acceptable to Owner, change over from use of temporary service to use of permanent service.

C. Keep temporary services and facilities clean and neat in appearance. Operate in safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or allow them to interfere with progress of The Work. Do not allow hazardous, dangerous or unsanitary conditions, or public nuisances to develop or persist on Project site.

D. Limit availability of temporary facilities to essential and intended uses to reduce waste and abuse.

E. Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation, and similar facilities on a 24-hour day basis where required to achieve indicated results and to avoid possibility of damage.
2. Prevent water filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

F. Remove each temporary facility and control when need has ended, or when replaced by authorized use of permanent facility, or by Substantial Completion. Complete permanent construction that may have been delayed because of interference with temporary facility. Repair damaged work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
1. Materials and facilities that make up temporary facilities are property of Contractor.
2. By Substantial Completion, clean and renovate permanent facilities used during construction period, including but not limited to:
   a. Replace air filters and clean inside of ductwork and housings.
   b. Replace significantly worn parts and parts subjected to unusual operating conditions.
   c. Replace lamps that are burned out or noticeably dimmed by substantial hours of use.
PART 3 - EXECUTION

3.1 TEMPORARY UTILITIES:

A. Temporary Electric Power: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period.

B. Temporary Fire Protection:
   1. Install and maintain temporary fire protection facilities of types needed to protect against predictable and controllable fire losses. At a minimum, provide and maintain in working order two Standard UL Labeled ABC all-purpose 10 lb fire extinguishers. Do not incorporate these extinguishers into final Project.
   2. Locate fire extinguishers where convenient and effective for their intended purpose.
   3. Store combustible materials in containers in fire-safe locations.
   4. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways, and other access routes for fighting fires.
   5. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.
   6. At earliest feasible date in each area of Project, complete installation of permanent fire protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.

C. Heating, Cooling, And Ventilating:
   1. Install and operate temporary heating, cooling, and ventilating units including fuel, temporary piping, fittings, wiring, and connections necessary to provide environmental conditions specified for various portions of the Work. Coordinate ventilation requirements to produce ambient conditions required and reduce consumption of energy.
   2. Repair damage to building and contents caused by cold, heat, dampness, and/or heating, cooling, and ventilating equipment. Select equipment that will not have harmful effect on completed installations or on elements being installed.
   3. Maintain safe conditions for use of temporary heating, cooling, and ventilating systems including, but not limited to, following requirements:
      a. Operate equipment according to equipment manufacturer's instructions.
      b. Provide fresh air ventilation required by equipment manufacturer.
      c. Keep temperature of fuel containers stabilized.
      d. Secure fuel containers from overturning.
      e. Operate equipment away from combustible materials.
   4. Permanent mechanical system may be operated subject to the following conditions:
      a. Do not operate system when work causing air-borne dust is occurring or when dust caused by such work is present without installation of temporary filtering system approved by Architect.
      b. Operate system at no cost to Owner, including cost of fuel.
      c. Assume all responsibility and risk for operation of system.
      d. Return permanent mechanical equipment to 'like-new' condition for Substantial Completion Inspection.

D. Temporary Lighting: Install and operate temporary lighting that will provide adequate illumination for construction operations and traffic conditions.

E. Temporary Telephones
   1. Provide temporary telephone service for all personnel engaged in construction activities, throughout construction period.
   2. Contractor will pay for Local calls. Party making call will pay for long-distance and toll calls.
   3. At each telephone, post list of important telephone numbers.
3.2 CONSTRUCTION FACILITIES:

A. Field Offices:
   1. Provide and maintain insulated, weather tight temporary office of sufficient size to accommodate Contractor's personnel at Project site and for use by Owner, Architect and Subcontractors.
   2. Keep office clean and orderly.
   3. Heat and cool office as needed.
   4. Furnish office with locking door, light(s), table(s), bench(es), rack(s) for drawings, telephone, and FAX machine.
   5. Make office available for progress meetings.
   6. If Owner agrees to permit removal of temporary office before Substantial Completion, Contractor may use a room as an office after temporary office is removed. Equip room as specified above and restore to 'like-new' condition before Substantial Completion.

B. Sanitary Facilities:
   1. Provide temporary sanitary toilet.
   2. Service and maintain temporary toilet in a clean, sanitary condition.

3.3 CONSTRUCTION AIDS:

A. Scaffolding, Platforms, Stairs, Etc:
   1. Furnish and maintain equipment such as temporary stairs, ladders, ramps, platforms, scaffolds, hoists, runways, derricks, chutes and elevators as required for proper execution of The Work.
   2. Apparatus, equipment, and construction will meet requirements of applicable laws and safety regulations.

3.4 VEHICULAR ACCESS AND PARKING:

A. Temporary Access Roads:

B. Haul Routes:

C. Temporary Parking Areas:

D. Temporary Roads:

E. Traffic Control:

F. Staging Areas:

3.5 TEMPORARY BARRIERS AND ENCLOSURES:

A. General:
   1. Protection Of Existing Improvements: Protect streets, private roads, and sidewalks, including overhead protection where required. Repair damage to existing improvements caused by construction activities.
   2. Protection Of Adjacent Property: Provide necessary protection for adjacent property and lateral support thereof.

B. Temporary Barricades:
   1. Comply with standards and code requirements in erecting barricades, warning signs, and lights.
2. Take necessary precautions to protect persons, including members of the public, from injury or harm.

C. Temporary Fencing: Before construction begins, install 6 foot high enclosure fence with lockable entrance gates. Locate where shown on Drawings. If not shown on Drawings, enclose entire site or portion sufficient to accommodate construction operations.

D. Temporary Protective Walkways: Erect structurally adequate protective covered walkway for passage of persons along adjacent Public Street if shown on drawings or required by applicable laws. Coordinate with entrance gates, other facilities and obstructions.

E. Temporary Security Barriers:
   1. Install temporary enclosures of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft, and other violations of security.
   2. Secure materials and equipment stored on site.
   3. Maintain exterior building security until Substantial Completion.
   4. Secure building at the end of each work day.

F. Temporary Tree And Plant Protection:
   1. Before commencing site work, build and maintain protective fencing around existing trees and vegetation as shown on the drawings.
   2. Individual trees will have protective fencing built beyond drip line.
   3. Build protective fencing around groups of trees and other vegetation as indicated on Drawings.
   4. Keep areas within protective fencing undisturbed and do not use for any purpose.
   5. Remove and replace vegetation that dies or is damaged beyond repair due to construction activities.

3.6 TEMPORARY CONTROLS:

A. Temporary Erosion And Sediment Control:
   1. Take precautions necessary to prevent erosion and transportation of soil downstream, to adjacent properties, and into on-site or off-site drainage systems.
   2. Develop, install, and maintain an erosion control plan if required by law.
   3. Repair and correct damage caused by erosion.

B. Temporary Environmental Controls:
   1. Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations, and reduce possibility that air, waterways, and subsoil might be contaminated or polluted, or that other undesirable effects might result. Avoid use of tools and equipment that produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near site.
   2. Provide protection against weather (rain, winds, storms, frost, or heat) to maintain all work, materials, apparatus, and fixtures free from injury or damage.
   3. Protect excavation, trenches, and building from damage from rain water, spring water, ground water, backing up of drains or sewers, and all other water. For temporary drainage and dewatering facilities and operations not directly associated with construction activities included under individual Sections, comply with requirements of applicable local regulations. Where feasible, use permanent facilities. If sewers are not available or cannot be used, provide drainage ditches, dry wells, stabilization ponds, and similar facilities. Filter out excessive amounts of soil, construction debris, chemicals, oils and similar contaminants that might clog sewers or pollute waterways before discharge.
   4. Comply with governing ordinances relating to weed control and removal.

3.7 PROJECT IDENTIFICATION

A. Temporary Project Signage:
1. Contractor may, at its option, erect a temporary project identification sign. Sign may be free-standing or attached to temporary field office or storage shed. No other signs or advertisements are allowed on building site.

2. Owner reserves right to remove and/or take possession of any Project identification sign.

3. Provide a temporary Project Identification sign. Sign may be free-standing or attached to temporary field office or storage shed. No other signs or advertisements are allowed on building site.

4. Sign will be no larger than 4 feet by 8 feet and include following information:
   a. Project Name as shown in Contract Documents.
   b. Contractor’s name.
   c. Architectural firm name.

5. Owner reserves the right to remove and/or take possession of any Project identification sign.

END OF SECTION