CITY OF FORT WAYNE MASTER UPDATED: 1/5/15

SECTION 01 52 05

NTS: Use this section for large projects or where project requires additional specific facilities. Coordinate with the General Conditions, Paragraph 6.03, and Supplementary Conditions if other than the Contractor is to provide some or all temporary utilities and temporary facilities.

1. GENERAL
	1. DESCRIPTION
		1. Contractor shall provide all temporary utilities required for the Project.
			1. Make all arrangements with utility service companies for temporary services and obtain required permits and approvals for temporary utilities.

NTS: Coordinate Paragraph “2” with other sections regarding the entity that pays for electricity, water, fuel, and other services required for start-up and testing.

Edit Paragraph “2” and other paragraphs in this section as required if Owner will provide water, electricity, or other services related to temporary utilities.

* + - 1. Pay all utility service costs, including cost of electricity, water, fuel, and other utility services required for the Work.
			2. Continuously maintain adequate utilities for all purposes during the Project, until removal of temporary utilities and temporary facilities. At minimum, provide and maintain temporary utilities through Substantial Completion and removal of temporary field offices and sheds.
			3. Should Owner occupy part of the Project prior to Substantial Completion of the entire Work, cost of utilities consumed via temporary utilities serving the portion occupied by Owner will be shared proportionately between Owner and Contractor as mutually agreed to by the parties.
			4. Maintain, including cleaning, temporary utilities and continuously provide consumables as required.
			5. Temporary utilities and temporary facilities shall be adequate for personnel using the Site and requirements of Project.
			6. Provide temporary utilities and temporary facilities in compliance with Laws and Regula­tions and, when applicable, requirements of utility owners.

NTS: Edit Paragraph “B” to suit the project.

* + 1. Provide the following temporary utilities:
			1. Electricity
			2. Lighting.
			3. Telephone and communications.
			4. Heating, ventilating, and temporary enclosures.
			5. Water.
			6. Sanitary facilities.
			7. First-aid facilities.
			8. Fire protection.
			9. Temporary Site and Other Roads
			10. Parking
			11. Security
			12. Contractor’s Staging and Work Area
			13. Contractor’s Field Offices and Buildings
			14. Engineer’s Field Offices and Buildings

NTS: Section “1.2” is to be included if project is bid on unit price basis. Section to be deleted or revised if project is to be bid on lump sum basis.

NTS: If any of the above items in Paragraph “B” are to be bid as a separate work item edit Section “1.2” below and coordinate with the Bid Schedule.

* 1. MEASUREMENT AND PAYMENT
		1. This item is to be included in overall Project cost and not bid as a separate work item.

NTS: Edit Section “1.3” below to suit the project. If temporary electricity is not available ensure that obtaining electricity from the Owner is available.

* 1. REQUIREMENTS FOR TEMPORARY UTILITIES AND TEMPORARY FACILITIES
		1. Electrical:
			1. Temporary electricity is not available and may not be obtained from Owner’s electrical system.
			2. Arrange with local utility for temporary electrical service.
			3. Pay for installation of temporary electrical service including poles, transformers, and metering.
			4. Register temporary meter in Contractor’s name.
			5. Pay for electricity consumed for construction purposes until Final Completion or until occupancy by Owner.
			6. Provide, maintain, and remove temporary electric service facilities.
			7. Provide temporary electric systems and components in conformance with requirements of National Electric Code and local authorities.
			8. Facilities exposed to weather shall be weatherproof type.
			9. Enclosures shall be locked to prevent unauthorized access.
			10. Provide wiring, switches, sockets, and similar equipment required for temporary lighting and power tools.
			11. Provide electric service to temporary offices.
		2. Lighting.
			1. Temporary lighting shall be sufficient to enable Contractor and Subcontractors to complete Work and enable Engineer to observe Work. Illumination shall meet or exceed all federal, state and local code requirements.
		3. Telephone and Communications.
			1. Provide temporary telephone and communications required for Contractor’s operations at the Site and for summoning emergency medical assistance.
		4. Heating, Ventilating, and Enclosures.
			1. Provide sufficient temporary heating, ventilating, and enclosures to ensure safe working conditions and prevent damage to existing facilities and the Work.
			2. Except where otherwise specified, temporary heating shall maintain temperature of the area served between 50 degrees F and maximum design temperature of building or facility and its contents.
			3. Maintain temperature of areas occupied by Owner’s personnel or electronic equipment, including offices, lunch rooms, locker rooms, toilet rooms, and rooms containing computers, microprocessors, and control equipment, between 65 degrees F and 80 degrees F with relative humidity less than 75 percent.
			4. Required temperature range for storage areas and certain elements of the Work, including preparation of materials and surfaces, installation or application, and curing as applicable, shall be in accordance with the Contract Documents for the associated Work and the Supplier’s recommended temperature range for storage, application, or installation, as appropriate.
			5. Provide temporary ventilation sufficient to prevent accumulation in construction areas and areas occupied by Owner of hazardous and nuisance levels or concentrations of dust and particulates, mist, fumes or vapors, odors, and gases, associated with construction.
			6. Provide temporary enclosures and partitions required to maintain required temperature and humidity.
			7. Repair or replace materials damaged because of lack of heat.
			8. Heat shall be warm air from oil or gas-fired portable heaters suitable ventilated to the outside.
			9. Open salamander type heaters are not permitted.
		5. Water.
			1. Provide temporary water facilities including piping, valves, meters if not provided by owner of existing waterline, backflow preventers, pressure regulators, and other appurtenances. Provide freeze-protection as required.
			2. Provide water for temporary sanitary facilities, field offices, Site maintenance and cleaning and, when applicable, disinfecting and testing of systems.
			3. Continuously maintain adequate water flow and pressure for all purposes during the Project, until removal of temporary water system.
		6. Sanitary Facilities.
			1. Provide suitably-enclosed chemical or self-contained toilets for Contractor’s employees and visitors to the Site. Location of temporary toilets shall be acceptable to Owner.
			2. Maintain in sanitary condition and properly supply with toilet paper.
			3. Provide supply of potable drinking water and related facilities and consumables for all personnel using the Site.
			4. Provide suitable temporary washing facilities for employees and visitors.
			5. Provide temporary sanitary facilities for Engineer’s field office. Coordinate with Owner for tie in with existing drain.
		7. First-aid Facilities.
			1. Provide temporary first-aid stations at or immediately adjacent to the Site’s major Work areas, and inside Contractor’s temporary field office. Locations of first-aid stations shall be determined by Contractor’s safety representative.
			2. Provide list of emergency telephone numbers at each hardwired telephone at the Site. List shall be in accordance with the list of emergency contact information required in Section 01 31 19.13, Pre-Construction Meeting.
		8. Fire Protection.
			1. Provide temporary fire protection, including portable fire extinguishers rated not less than 2A or 5B in accordance with NFPA 10, Portable Fire Extinguish­ers, for each temporary building and for every 3,000 square feet of floor area under construction.
			2. Comply with NFPA 241, Safeguarding Building Construction, Alternation, and Demolition Operations, and requirements of fire marshals and authorities having jurisdiction at the Site.
		9. Temporary Site and Other Roads
			1. Construct and maintain temporary roadways and parking in snow free, ice free, drivable condition.
			2. Maintain existing roads used during construction free from accumulation of dirt, mud and construction debris. Roads shall be considered “maintained” when material has been removed by a sweeper. Conduct magnetic sweeps of all temporary and existing roadways and parking as needed upon request of Engineer or Owner.
			3. Contractor shall repair or replace existing roads to original or better condition prior to final completion. Survey and video record condition of existing roads prior to construction as part of pre-construction video.
		10. Parking
			1. Staging area and designated areas within construction limits may be used for parking of construction personnel’s private vehicles and Contractor’s lightweight vehicles.
			2. Do not allow heavy vehicles or construction equipment in parking areas.
			3. Make arrangements for additional parking off Site as required.
			4. Provide separate temporary parking at Engineer’s field office to accommodate three vehicles.
		11. Security
			1. Owner will not provide security.
			2. Contractor is responsible for loss or injury to persons or property where Work is involved, and shall provide security and take precautionary measures to protect Contractor’s and Owner’s interest.
		12. Contractor’s Staging and Work Area
			1. Contractor’s Staging
				1. Construct and maintain staging area at location showing on Drawings and at other locations obtained by the Contractor as required to complete the Work.
				2. Provide video survey of all Owner’s properties outside of new structure areas proposed by Contractor to be used for staging, storage, or Work areas as part of preconstruction video.
				3. Provide a minimum 6 inches crushed stone surface where equipment and office trailers and other vehicular traffic is anticipated. Material lay down areas do not need to be surfaces with stone.
			2. Work Area
				1. Limit operations and storage of equipment and materials on Owner’s property to areas shown on Drawings and as determined by Engineer.
				2. Except as provided herein, no sidewalk, private property, railroad or public right-of-way, or other area adjacent to Site shall be used for storage of Contractor’s equipment and materials unless prior written approval is obtained from the Owner and legal owner of the respective locations.
				3. Contractor shall maintain staging areas during construction in a manner that will not obstruct operations on any existing public right of way, railroad tracks, or Owner’s areas. Work shall proceed in an orderly manner; maintain construction Site and staging area free of debris and unnecessary equipment or materials.
				4. Site used for staging, storage and Work areas shall be restored to existing conditions at the end of the Project unless shown otherwise in the Drawings.
		13. Contractor’s Field offices and Buildings
			1. If required by Contractor, erect where designated by Engineer, and maintain temporary field office and tool and storage buildings for Contractor use.
			2. Buildings shall be neat and well constructed, surfaced with plywood, siding, Masonite, or other similar material, well painted and void of advertisements.
		14. Engineer’s Field Office
			1. Provide field office with minimum floor area of 550 sq. ft, with three separate offices, bathroom and interior partitions as designated by Engineer. Provide exterior covered entrance with handrail and steps. Provide weather tight enclosures connecting field trailers together as one facility or provide combined modular units to equal required square footage and facilities.
			2. Field office shall be new or like new mobile or modular structure.
			3. Include following utilities, equipment and furniture:
				1. Heat and air condition, capable of maintaining 70°F during all winter and summer temperatures.
				2. Electrical power and lights.
				3. Potable water and sanitary hookup.
				4. Secure lockable doors and barred windows.
				5. Potable bottled water, chiller, and heater with fresh bottle service for the duration of Project.
				6. New or like new office furniture and fixtures as required by the Engineer.

Desk, book cases, chairs, folding tables, etc.

First aid and blood-borne pathogens kit.

Adequate fire extinguishers and smoke alarms for field office space.

* + - 1. Maintain utility systems, office equipment, and field office weekly. Provide field office, bathroom, and kitchen cleaning weekly. Provide expendable supplies for office equipment and bathroom requirements until Final completion.
	1. USE OF OWNER’S SYSTEM

NTS: Use Paragraph “A” if the work is an addition to an existing building. Delete if not applicable, or edit to suit the project.

* + 1. Existing Utility Systems: Do not use systems in existing buildings or structures for temporary utilities without Owner’s written permission and mutually acceptable basis agreed upon by the parties for proportionate sharing of costs between Owner and Contractor.

NTS: Edit Paragraph “B” to suit the project and coordinate with other paragraphs in this section and other specification sections.

* + 1. Use of Permanent Utility Systems Provided Under the Project:
			1. Permanent electrical, lighting, water, heating, ventilating, and fire protection systems and first-aid facilities may be used to provide temporary utilities and temporary facilities if the following are met:
				1. Obtain Owner’s written permission to use permanent systems.
				2. Permanent systems to be used for temporary utilities or temporary facilities shall have achieved Substantial Completion, including complete functionality of all controls.
				3. Contractor shall pay all costs while using permanent system, including operation, maintenance, replacement of consumables, and provide replacement parts.
			2. Do not use the following permanent facilities:
				1. Telephone and communication facilities.
				2. Sanitary facilities.
1. PRODUCTS
	1. MATERIALS AND EQUIPMENT
		1. Materials and equipment for temporary systems may be new or used, but shall be adequate for purposes intended and shall not create unsafe conditions, and shall comply with Laws and Regulations.
		2. Provide required materials, equipment, and facilities, including piping, wiring, and controls.
2. EXECUTION
	1. INSTALLATION
		1. Install temporary facilities in neat, orderly, manner, and make structurally, mechanically, and electrically sound throughout.
		2. Location of Temporary Utilities and Temporary Facilities:
			1. Locate temporary systems for proper function and service.
			2. Temporary systems shall not interfere with or provide hazards or nuisances to: the Work under this and other contracts, movement of personnel, traffic areas, materials handling, hoisting systems, storage areas, finishes, and Work of utility companies.
			3. Do not install temporary utilities on the ground, with the exception of temporary extension cords, hoses, and similar systems in place for short durations.
		3. Modify and extend temporary systems as required by progress of the Work.
	2. USE
		1. Maintain temporary systems to provide safe, continuous service as required.
		2. Properly supervise operation of temporary systems:
			1. Enforce compliance with Laws and Regulations.
			2. Enforce safe practices.
			3. Prevent abuse of services.
			4. Prevent nuisances and hazards caused by temporary systems and their use.
			5. Prevent damage to finishes.
			6. Ensure that temporary systems and equipment do not interrupt continuous progress of construction.
		3. At end of each work day, check temporary systems and verify that sufficient consumables are available to maintain operation until Work is resumed at the Site. Provide additional consumables if the supply on hand is insufficient.
	3. REMOVAL
		1. Completely remove temporary utilities, facilities, equipment, and materials when no longer required. Repair damage caused by temporary systems and their removal and restore the Site to condition required by the Contract Documents; if restoration of damaged areas is not specified, restore to preconstruction condition.
		2. Where temporary utilities are disconnected from existing utility, provide suitable, watertight or gastight (as applicable) cap or blind flange, as applicable, on service line, in accordance with requirements of utility owner.
		3. When permanent utilities and systems that were used for temporary utilities, upon Substantial Completion replace all consumables such as filters and light bulbs and parts used during the Work.
	4. OWNERS USE
		1. Upon acceptance of Work, or portion of Work defined and certified as Substantially Complete by Engineer, and Owner commences full-time successful operation of facility or portion thereof, Owner will pay cost for utilities used for Owner’s operation.

+ + END OF SECTION + +