

SECTION 01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1-GENERAL

1.01 SECTION INCLUDES

- A. Temporary Utilities including, but not limited to: electricity, lighting, heat, ventilation, telephone service, water, and sanitary facilities.
- B. Temporary Controls including but not limited to: barriers, enclosures and fencing, protection of the Work, and water and pollution control.
- C. Construction Facilities including but not limited to: access roads, parking, progress cleaning, project signage, and temporary buildings.
- D. Restrictions on the use of the site and existing adjacent facilities.

1.02 RELATED SECTIONS

- A. Section 01700 / 01710 - Contract Closeout / Final cleaning.
- B. Section 01569 – Construction Cleaning
- C. Section 01010 – Summary of Work
- D. Section 01060 – Regulatory Requirements

1.03 QUALITY ASSURANCE

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction including, but not limited to, the following:
 - 1. Building code requirements.
 - 2. Health and safety regulations.
 - 3. Utility company regulations.
 - 4. Police, fire department, and rescue squad rules.
 - 5. Environmental protection regulations.

1.04 TEMPORARY ELECTRICITY

- A. Provide and pay for all power service required for construction and testing from local utility source.
- B. Provide temporary electric feeder from existing electrical service at location as directed by utility company. Power consumption shall not disrupt Owner's need for continuous service.
- C. Provide separate metering and pay for cost of energy used until substantial completion. If electric is turned over to Owner's name prior to substantial completion, reimburse Owner for energy used up to substantial completion.
- D. Provide power outlets for construction operations, with branch wiring and distribution boxes located as required. Provide flexible power cords as required.
- E. Permanent convenience receptacles may be utilized during construction.

1.05 TEMPORARY LIGHTING

- A. Provide and maintain adequate lighting for construction operations to achieve a minimum lighting level of one (1) watt/sq ft.
- B. Provide and maintain 2 foot candle lighting for exterior staging and storage areas after dark for security purposes.
- C. Provide and maintain 0.25 watt/sq ft H.I.D. 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 as required.
- E. Maintain lighting and provide routine repairs.
- F. Permanent building lighting may be utilized during construction.

1.06 TEMPORARY HEAT

- A. Provide and pay for heat devices and heat as required to maintain specified conditions for construction operations or as required for proper conduct of operations included in the work.

- B. Prior to operation of permanent equipment for temporary heating purposes, verify that installation is approved for operation, equipment is lubricated and filters are in place. Provide and pay for operation, maintenance, and regular replacement of filters and worn or consumed parts.
- C. Maintain minimum ambient temperature of 50 degrees F in areas where construction is in progress, unless indicated otherwise in specifications.

1.07 TEMPORARY VENTILATION

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

1.08 TELEPHONE SERVICE

- A. Provide, maintain and pay for telephone service to field office at time of project mobilization. If office is unattended during any portion of workday, provide telephone answering or message answering service.

1.09 FACSIMILE SERVICE

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

1.10 TEMPORARY WATER SERVICE

- A. Provide, maintain, and pay for suitable quality water service required for construction operations.
- B. Extend branch piping with outlets conveniently located. Water shall be accessible by hoses with threaded connections. Utilize ¾" heavy duty hose as required.

1.11 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures on site in accordance with the local health department and other applicable regulations. Maintain daily in clean and sanitary condition. Adjacent office toilet facilities are not to be used.

1.12 BARRIERS

- A. Provide physical barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations. Unless noted otherwise, conform to the Site Utilization Plan in the latest edition of the "Joint Use Construction Staging Area" plans prepared specifically for this project.
- B. Provide barricades required by governing authorities for public rights-of-way.
- C. Provide protection for plant life designated to remain. Replace any damaged plant life to an "as-was" condition.
- D. Protect non-owned vehicular traffic, stored materials, site and structures from damage.
- E. For vision barriers, provide minimum 3/8" thick exterior plywood. For safety barriers, sidewalk bridges and similar uses, provide minimum 5/8" thick exterior plywood. Tarpaulins shall be fire resistant, UL-labeled with a flame spread rating of 15 or less.

1.13 FENCING

- A. Provide a 8 foot high fence completely around construction site; provide with hinged vehicular and pedestrian gates with locks. Fencing shall be .12" thick, galvanized, 2" mesh, chain link with solid top rail. Provide 1-1/2" line posts and 2-1/2" end posts as needed to maintain stretched and uniform fencing with no sags. Provide black mesh fabric barrier around the perimeter of the project and maintain this in good condition.
- B. Fencing plan shall be approved by the owner for each phase of the project. Submit fencing layout diagram at pre-construction meeting.
- C. Perimeter fencing shall have "no trespassing" signs affixed in accordance with Florida Statute 810.9 (2) (d)

1.14 EROSION AND WATER CONTROL

- A. Plan and execute work so as to minimize erosion and off-site contamination. Design activities to minimize impact of construction activities on adjacent areas. Unless noted otherwise, conform to the Demolition and Site Utilization Plan in the latest edition of the "Joint Use Construction Staging Area" plans prepared specifically for this project.

- B. Provide barriers as required to protect adjacent site from soil erosion and contamination of adjacent parking areas from water, soil or other sources.
- C. Where work extends below water table, install and operate a system of well points, headers and pumps to create a dry condition for such work to proceed. Maintain all excavations free of water.
- D. Maintain well points in operation until construction or waterproofing has been completed, inspected and accepted, and/or sufficient load has been imposed to prevent floating.
- E. Do not finalize any activity where water is within one foot of the exposed surface.
- F. Protect site from standing or running water. Dig ditches and sumps to collect water from low points of excavation and remove water by pumping or other method acceptable to Architect. Redirect existing drainage as necessary.
- G. Keep all drains, culverts, storm sewers, and inlets clean and open for surface drainage.

1.15 DUST CONTROL

- A. Execute work by methods to minimize rising dust from construction operations. If significant dust occurs resulting in complaints from adjacent tenants or properties, revise method of operation immediately upon notification from the architect or owner.

1.16 NOISE CONTROL

- A. Significant sustained operations which generate high noise levels (such as pile driving, jack hammer work, etc.) shall be discussed with, and approved by, the Construction Manager and Owner before beginning operations.
 - 1. Choice of equipment shall be such as to keep noise to a minimum. Gasoline or diesel powered equipment shall be provided with proper mufflers for noise abatement.
 - 2.. If any on-going noise generating activity becomes objectionable by it's longevity, an activity/time schedule shall be prepared for approval of the owner to enable the activity to continue during mutually acceptable times.

1.7 POLLUTION CONTROL

- A. Provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of toxic, regulated or noxious substances from construction operations. Adhere to all applicable E.P.A regulations.
- B. The contractor shall provide equipment and personnel to perform emergency abatement measures as required to contain any spillage, and to remove any contaminated soils or liquids occurring as a result of construction activities.
 - 1. Excavate and dispose of any contaminated earth off-site and replace with suitable compacted fill, topsoil and landscaping to match present condition.
- C. Take special measures to prevent harmful substances from entering public waters.
 - 1. Prevent disposal of wastes, effluents, chemicals or other such substances in sanitary or storm sewers.
- D. Provide systems for control of atmospheric pollutants.
 - 1. Provide proper controls and containment for control of air-borne contaminants in excess of local standards or State or Federal E.P.A regulations. Prevent any harmful dispersal of pollutants into the atmosphere.

1.18 PERSONNEL

- A. The contractor shall direct removal from the site of any personnel who are disrupting the normal and orderly conduct of operations by their actions or activities. No drug usage, alcohol usage or fighting is to be allowed at any time. Conduct of the workers off-site shall conform to the standards established by the Owner.
 - 1. Tenants and visitors from the surrounding facilities are to be treated with respect at all times. Obnoxious, crude, or otherwise non-civil behavior to the tenants will not be tolerated and may result in the appropriate parties being banned from the job site by the owner.
 - 2. Access of all employees is restricted to the designated access route and actual site of the Work.

3. Employees may be required to be get and use an identification badge.
4. Contractors shall not allow known employees convicted of violent crimes, or wanted for criminal offenses, to work on this project.
5. Contractors utilizing Work Release employees shall check with the Construction Manager for procedures to be followed.
6. Employees shall adhere to all hospital rules while on campus.

1.19 TEMPORARY CONSTRUCTION

- A. Furnish, install, and maintain for the duration of construction all required scaffolds, tarpaulins, barricades, canopies, warning signs, steps, bridges, platforms, and other temporary construction necessary for proper completion of the Work. Such construction shall be in compliance with all federal and state OSHA and other safety regulations.

1.20 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification Sections.
- B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials as approved by the Construction Manager.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from finished or surrounding landscaped areas.

1.21 PROTECTION OF EXISTING FACILITIES

- A. The contractor shall at all times guard existing work to remain against damage or loss, and be held responsible for replacing or repairing any such damage or loss. The Owner may withhold payment or make such deductions as necessary for repair or replacement of such damaged work.

- B. Coordinate any proposed underground work with the Owner before commencing work.
- C. All damaged areas and items shall be replaced with an "as-was or better" quality of replacement or repair.

1.22 SECURITY

- A. Provide security and facilities to protect Work and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Owner's security program.

1.23 SAFETY

- A. Furnish, place and maintain barriers, signs, and warning lights required for safety and protection of site personnel and adjacent existing facilities.
 - 1. Include safeguards to minimize risk to unauthorized persons.
 - 2. Install all ladders, supports, shoring, sheet piling and other related items in accordance with applicable OSHA regulations.

1.24 ACCESS ROADS

- A. Provide and maintain uninterrupted public access to existing buildings. Construction activities shall not interfere with this access. If contractor fails to maintain public access after 2 written notices, the owner reserves the right to correct such situation and back-charge the contractor.
- B. Construct and maintain temporary roads accessing the site and staging areas as shown on the latest edition of the "Joint Use Construction Staging Area" plans prepared specifically for this project.
- C. Extend and relocate as Work progress requires. Provide detours necessary for unimpeded traffic flow.
- D. Provide and maintain access to fire hydrants, free of obstructions.
- E. Designated existing on-site roads may be used for construction traffic. Repair or restore any damaged areas caused as a result of construction activity.

1.25 PARKING

- A. Temporary parking areas will be provided to accommodate construction personnel. There will be a fee associated with this usage. Contact the Construction Manager for details.
- B. Construction vehicles shall not park in non-designated areas and vehicles may be towed if improperly parked.

1.26 PROGRESS CLEANING

- A. Maintain site areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition at all times.
- B. Remove waste materials, debris, and rubbish from site a minimum of once every two weeks and dispose legally off site.
- C. Weekly, and more often if necessary, inspect structures and pick up all scrap, debris and waste material. Remove all such items to the place designated for their storage.
- B. Weekly, and more often if necessary, sweep all interior spaces clean. "Clean" shall be interpreted as meaning free from dust and other material capable of being removed by use of reasonable effort and hand-held broom.

1.27 PROJECT IDENTIFICATION

- A. Provide project sign of 3/4" exterior grade plywood and 2 X 4 wood frame construction. Sign shall be painted by professional sign painter per design provided by architect.

1. Minimum Size: 4 feet x 8 feet.

- B. Erect on site at location acceptable to Architect and Owner.
- C. No other signs are allowed without Owners permission except those required by law.

1.28 FIELD OFFICES AND SHEDS

- A. Provide at least one climate controlled job trailer for use as a field office. The trailer shall be weather-tight, with lighting, electrical outlets, heating, cooling,

and ventilating equipment, and equipped with sturdy furniture, drawing racks, and drawing display table.

- B. The job trailer shall have a dedicated space for project meetings with adequate table and chairs. Provide at least one office in the trailer with a desk, chair, plan table, and telephone for architect's use.
- C. Locate offices and sheds minimum distance of 30 feet from existing and new structures, or as approved by architect.

1.29 REMOVAL OF TEMPORARY UTILITIES, FACILITIES, AND CONTROLS

- A. Remove all temporary utilities, equipment, facilities, and materials prior to submitting Final Application for Payment. Unless noted otherwise, conform to the Restoration Plan in the latest edition of the "Joint Use Construction Staging Area" plans prepared specifically for this project.
- B. Remove temporary underground installations to minimum depth of 8 feet. Regrade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore any existing facilities used during construction to original condition. Restore existing landscaping, drainage, paving, etc. to an "as-was" condition.

PART 2-PRODUCTS

Not Used

PART 3-EXECUTION

Not Used

END OF SECTION