SECTION 015000 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Work Included:
 - 1. Temporary utilities.
 - 2. Barriers.
 - 3. Tree removal.
 - 4. Contractor office and storage shed(s).
 - 5. Engineer's field office.
 - 6. Protection of installed work.
 - 7. Temporary support facilities.
 - 8. Removal of utilities, facilities, and controls.
 - 9. Dust control.
 - 10. Water, erosion and sediment control.
 - 11. Noise control.
 - 12. Traffic control.
 - 13. Site security.
 - 14. Site cleanup.
- B. Contractor shall arrange for and provide temporary facilities as specified herein and as required for proper and expeditious prosecution of the Work.
- C. Contractor shall pay all costs, except as otherwise specified, until final acceptance of the Work unless Owner makes arrangements for use of completed portions of the Work after substantial completion in accordance with the provisions of the General Conditions.
- D. Contractor shall make all temporary connections to utilities and services in locations acceptable to Owner and local authorities having appropriate jurisdiction.
 - 1. Furnish all necessary labor and materials.
 - 2. Make all installations in a manner subject to the acceptance of such authorities and Owner.
 - 3. Maintain such connections.
 - 4. Remove temporary installation and connection when no longer required.
 - 5. Restore services and sources of supply to proper operating conditions.

1.2 TEMPORARY UTILITIES

- A. Temporary Electricity
 - 1. Arrange for and provide for all temporary electrical service required for the project. Provide for all temporary drops required by the work.
 - 2. All work shall comply with all local, state and federal requirements. Include lockout tag-out procedures and devices as necessary.

- B. Temporary Lighting
 - 1. Provide lighting as required of the various trades and the work being performed.
- C. Temporary Sanitary Facilities
 - 1. Provide and maintain required facilities and enclosures.
 - 2. Provide sufficient number for number of workmen and women employed. Locate near work areas. Perform regular maintenance as needed to control odors.
 - 3. At end of construction, remove facilities or return existing facilities to same or better condition as originally found.
- D. Temporary Water
 - 1. Contractor shall supply its own water during construction. Contractor shall also provide its own piping, valves and appurtenances for its requirements. Connection to the existing water system shall be coordinated with the Owner and shall meet all code requirements including disinfection and backflow prevention.
- E. Temporary Fire Protection
 - 1. Contractors who maintain or provide an enclosed shed or trailer shall provide and maintain in operating order in each shed or trailer a minimum of one fire extinguisher. More extinguishers shall be provided as necessary. Fire extinguishers shall be minimum dry chemical, nonfreezing type, UL rating 2A-30BC, with 10-pound capacity for Class A, B and C fires.
- F. Continuous Treatment
 - 1. Federal regulations prohibit by-passing of any sewage during construction operations. The Contractor shall be responsible for providing any required temporary pumping facilities, piping, etc., necessary to complete the project without any plant by-passing and continuous treatment must be provided at the same level during construction as existed prior to construction.
 - 2. Contractor shall provide a minimum of 72 hours' advance notice to the Owner when interruption of existing facility power service and use of a temporary power supply is proposed.

1.3 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of site, and to protect existing facilities and adjacent properties from damage from construction activities and demolition.
- B. Provide barricades required by governing authorities for public rights-of-way.
- C. Protect vehicular traffic, stored materials, site, and structures from damage.

1.4 TREE REMOVAL

- A. No tree removal will be permitted outside the designated construction work limits without permission of the Owner or Engineer.
- B. Trees which are not removed will be protected by ensuring that trees to be removed are felled so as not to injure the remaining trees.
- C. Prior to site clearing or tree trimming, the contractor and Owner shall walk the site in an effort to designate the trees to be saved and those to be trimmed back or removed. A barrier will be placed at an appropriate distance from the trunks and root systems of the trees to remain.
- D. Soil and other materials will not be stored next to or within the drip-line of trees.
- E. The contractor shall repair all injuries to bark, trunks, limbs, and roots of remaining vegetation by properly dressing, cutting, bracing, and painting using only approved tree surgery methods, tools, and materials.
- F. Selective pruning of tree limbs prior to initiation of construction should only be used within the established construction work limits where removal is required for construction activities.
- 1.5 CONTRACTOR OFFICE AND STORAGE SHED(S)
 - A. Contractor shall provide facilities to meet Contractor's needs.
 - B. Provide telephone as required for Contractor's needs. At a minimum, Contractor shall maintain telephone service to the project site to facilitate communication with site supervisory personnel.
 - C. Maintain a copy of the Contract Documents for the specific use of marking to reflect the construction records. Clearly indicate in red the modifications or alterations to the original documents. Attach supporting documentation as necessary. The Contractor shall continually update these documents.
 - D. Provide storage areas and sheds of size to meet storage requirements for products of individual sections, allowing for access and orderly provision for maintenance and for observation of products to meet requirements of Section 01600 Materials and Equipment.
- 1.6 ENGINEER'S FIELD OFFICE
 - A. None Required.
- 1.7 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. 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.
- D. Prohibit traffic from landscaped areas.

1.8 SUPPORT FACILITIES

- A. Contractor shall provide whatever facilities and services which may be needed to properly support primary construction processes and meet compliance requirements and governing regulations.
- B. Contractor shall not use permanent facilities except as otherwise indicated, unless authorized by Owner.
- 1.9 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS
 - A. Remove temporary utilities, equipment, facilities, and materials just prior to final completion inspection.
 - B. Clean and repair damage caused by installation or use of temporary facilities.
 - C. Restore existing facilities used during construction to specified, or to original or better condition.

PART 2 - PRODUCTS

Not Applicable.

PART 3 - EXECUTION

- 3.1 DUST CONTROL
 - A. Contractor shall execute the Work by methods to minimize raising dust from construction operations.
 - B. Contractor shall provide positive means to prevent airborne dust from dispersing into atmosphere.
- 3.2 WATER, EROSION AND SEDIMENT CONTROL
 - A. Contractor shall grade site to drain and shall maintain excavations free of water. Provide, operate and maintain pumping equipment.
 - B. Contractor shall protect site from puddling or running water.

- C. Contractor shall provide erosion control measures as necessary to control discharge of sediment laden water to surface waters and wetlands.
- D. Except as provided in the Contract Documents, overland discharge of water from dewatering operations shall not be allowed. Depending on water quality, such water shall either be piped directly to the surface water or shall be directed to sedimentation basins or other such structures or features prior to discharge to surface waters so as not to cause damage to existing ground and improvements, erosion, or deposition in the discharge area.
- E. Contractor shall use jute or synthetic netting, silt fences, straw bales, dikes, channels and other applicable measures to prevent erosion of soils disturbed by its construction operation.
- F. Restoration of the site shall proceed concurrently with the construction operation. See Drawings and Specifications for erosion control measures in addition to that which may be required above.

3.3 NOISE CONTROL

- A. Provide methods, means and facilities to minimize noise produced by construction operations.
- 3.4 TRAFFIC CONTROL
 - A. Contractor shall be responsible for providing all signs, barricades, flagmen and other traffic control devices in the construction zone.
 - B. All traffic control measures shall meet the requirements of the Ohio Manual of Uniform Traffic Control Devices.
 - C. Do not close or obstruct roadways without approval of the Owner.
 - D. Maintain two-way traffic on streets at all times unless the Owner and the governing agency authorize one-way traffic for given areas and during specific operations.
 - E. Conduct construction operations with minimum interference to roadways.

3.5 SITE SECURITY

- A. Contractor shall have the sole responsibility of safeguarding the Site perimeter to prevent unauthorized entry to the Site throughout the duration of the Project. Contractor shall at all times provide such permanent and temporary fencing or barricades or other measures as may be necessary to restrict unauthorized entry to its construction area including construction in public right-of-way or easements. Site security measures shall include safeguards against attractive nuisance hazards as a result of construction activity.
- B. Contractor shall at all times be responsible for the security of the Work including

materials and equipment. Owner will not take any responsibility for missing or damaged equipment, tools, or personal belongings. Contractor shall have the sole responsibility of safeguarding the Work and the Site throughout the duration of the Project.

3.6 SITE CLEANUP

- A. Contractor shall cleanup the Site and remove all rubbish on a weekly basis unless a more frequent interval is warranted by the volume or type of rubbish present.
- B. Contractor shall cleanup public streets and highways and remove any dirt, mud, or other materials due to project traffic on a daily basis and shall comply with all local and state ordinances and permit regulations.

END OF SECTION 015000