

SECTION 01500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1. PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Field Office.
- B. Barriers.
- C. Water Control.
- D. Soil Erosion and Sedimentation Control.
- E. Dust Control.
- F. Protection of Installed Work.
- G. Protection of Existing Utilities.
- H. Progress Cleaning.
- I. Removal of Utilities, Facilities, and Control.
- J. Temporary Driveways.
- K. Temporary Sanitary Facilities.

1.2 RELATED SECTIONS

- A. Section 01570 - Traffic Regulation.
- B. Section 01700 - Contract Closeout: Final cleaning.

1.3 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Construction Facilities and Temporary Controls:
 - 1. Basis of Measurement: Included in the other Work items of this Project.
 - 2. Basis of Payment: Includes all associated labor, material and equipment required for construction facilities and temporary controls required for this Project for complete installation.

1.4 FIELD OFFICE

- A. Location – 1507 Canal Road.
- B. No other locations shall be used for trailer sites.
- C. Contractors shall hook up to sanitary sewer system provided at the trailer site. No portable facilities shall be at this site.

- D. Water, sewer, and electricity are available. Contractor shall be responsible for monthly electrical payments.
- E. There will be a \$500 connection fee for water and sewer payable to the Owner.

1.5 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 operations and demolition.
- B. Provide protection for plant life designated to remain. Replace damaged plant life.
- C. Protect non-owned vehicular traffic, stored materials, Site and structures from damage.
- D. Provide access to all adjacent buildings for use during construction.

1.6 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.
- C. Trenches shall be dewatered to provide a stable base for structures and piping.

1.7 SOIL EROSION AND SEDIMENTATION CONTROL

- A. Conform to Part 91 of Public Act 451 of 1994, relative to Soil Erosion and Sedimentation Control for the life of the Project.
- B. Minimize amount of bare soil exposed at one time.
- C. Provide temporary measures such as berms, dikes, and drains to prevent sediment from entering adjacent waterways.
- D. Do not deposit trash, debris, or sediment in tile or open drains.
- E. Immediately repair trenches located within the traveled surface of roadways.
- F. Landscape construction areas as soon as practical after Work is complete according to Sections 02923 - Landscape Grading and Section 02936 - Seeding.

1.8 DUST CONTROL

- A. The Contractor shall implement measures to minimize dust.
- B. The plan shall include but not be limited to the implementation of a combination of any or all of the following techniques as determined to be applicable to this Project.
 - 1. Wet Suppression.
 - 2. Vehicle Speed Reduction.
 - 3. Surface Cleaning.

4. Traffic Control.
 5. Windbreaks.
 6. Good Operating Practices.
 7. Chloride Application.
- C. The Contractor will develop a dust plan that will be reviewed and approved by the Engineer/Owner.
1. Adequate chloride application will be required monthly at minimum on all travel routes.
 2. Wet application shall be required several times daily or as directed by the Engineer.
 3. All surfaces must be swept or vacuumed at minimum at the end of each Work day and may be required more often at the direction of the Engineer.
- D. Water is available at the Staging Area at 1507 S. Canal Road or at the Delta Township Hall at 7710 W. Saginaw Highway.

1.9 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification Sections. Along Canal Road excavations will be brought up to grade each night or protected with orange construction fencing to prevent intrusion into the work area.
- B. Provide temporary and removable protection for installed products. Control activity in immediate Work area to minimize damage.
- C. Prohibit traffic from landscaped areas.

1.10 PROTECTION OF EXISTING UTILITIES

- A. CALL "MISS-DIG" (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO CONSTRUCTION.
- B. Protect landscaped areas. Damaged areas shall be replaced in kind.
- C. Protect utilities encountered during the Work. Replace or repair damaged utilities.
- D. Protect drives, roadways, and sidewalks. Repair as required in following Sections.
- E. Protect mailboxes. Relocate temporarily until mailboxes can be returned to original location. All mailboxes and posts must be returned to their original condition or better at no additional cost to the Project.
- F. Protect trees, shrubs, and bushes:
1. Where trees, shrubs, and bushes are too large to be replaced in kind, the proposed utility shall be installed in a boring or tunneling operation unless written consent is given by the property owner for removal. Owner and Engineer shall each be given one copy of consent letters.
 2. Where requested by the property owner, timber from removed trees shall be cut into 6-foot lengths and stockpiled along the Work area or as specified in the consent letter.

3. Proper disposal of removed trees or sections of removed trees not wanted by the property owner shall become the responsibility of the Contractor.
 4. Trees, shrubs, and bushes that are removed and replaced shall be transplanted by an established nursery.
- G. Utilities must remain in service. If it becomes necessary to interrupt a utility service, the utility authority must be notified immediately and steps taken to restore temporary or permanent service as soon as possible.
- H. Maintain outlets for drains. Provide temporary pumping if necessary.
- I. Expose utility mains and services by hand in the trench.
- J. Where utility and drainage piping crosses the trench, support the piping according to the utility authority's standards and backfill to the top with compacted sand.

1.11 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain Site in a clean and orderly condition.
- B. Clean road surface daily to the Owner's and/or Engineer's satisfaction.
- C. Complete leveling, remove excess material and debris and restore drainage not more than 300 feet behind construction.
- D. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- E. Remove waste materials, debris, and rubbish from site daily and dispose off-site.

1.12 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary above grade or buried utilities, equipment, facilities, and materials prior to Substantial Completion and Final Application for Payment inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.
- D. A sufficient sum of money to remove and replace or repair any utilities damaged or relocated during the construction of the Project shall be included in total Contract amount.

1.13 TEMPORARY DRIVEWAY

- A. Temporary driveways shall be constructed to provide safe, stable, and smooth access.
- B. Driveways shall be finished and accepted by Owner before 100 percent completion of Work is accepted.

1.14 TEMPORARY SANITARY FACILITIES

- A. Contact rental agency to determine correct number of sanitary units per Work Site.
- B. Delivery, setup, and stock with paper products on each Work Site.
- C. Service (paper products and pumping) portable unit three times per week.
- D. Pick up units after Work is complete.

END OF SECTION