

DIVISION 31 - EARTHWORK

SECTION 31 10 00 - CLEARING AND GRUBBING

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Clearing
 - 2. Grubbing
 - 3. Stripping and stockpiling topsoil
 - 4. Debris disposal

1.02 DEFINITIONS

- A. Clearing is defined as the removal of trees, brush, down timber, rotten wood, rubbish, any other vegetation, and objectionable material at or above original ground elevation not designated to be saved. Clearing also includes removal and replacement of fences, walls, guideposts, guide rail, signs, and other obstructions interfering with the proposed work.
- B. Grubbing is defined as the removal from below the surface of the natural ground of stumps, roots and stubs, brush, topsoil, organic materials and debris.

1.03 SUBMITTALS

- A. Submit in accordance with requirements of Section 01 33 00.
- B. Permits for Disposal of Debris:
 - 1. Arrange for disposal of debris resulting from clearing and grubbing to locations outside the Owner's right-of-way comply with all laws applicable for this work.
 - 2. Submit two copies of the agreement with each property owner releasing the Owner from responsibility in connection with the disposal of the debris.

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements
 - 1. Comply with applicable Federal, State, and Local requirements for disposal of debris.
 - 2. As required by regulatory agencies, obtain and comply with a NPDES Permit for Stormwater Discharges Associated with Construction Activities.
 - 3. Develop and comply with an approved Erosion and Sedimentation Control Plan.

4. No clearing and grubbing is permitted until best management practices are in place.
5. Comply with conditions of any issued PennDOT Highway Occupancy Permits for the clearing, grubbing, stockpiling, and disposal.

1.05 PROJECT/SITE CONDITIONS

- A. Project/Site Environmental Requirements
 1. Use all means necessary to control dust on and near the work and on and near all off-site borrow areas. Thoroughly moisten all surfaces as required to prevent dust from being a nuisance to the public, neighbors, and concurrent work being formed on the site.
 2. Do not track dirt, mud, or debris onto streets or state highways.
- B. Existing Conditions
 1. Protect existing utilities, trees, vegetation, and features designated to remain after project completion.
 2. Protect bench marks, property pins and existing structures from damage or displacement.
 3. Protect fences, guide rails, shrubbery, trees, signs and any other items removed and designated to be preserved for reuse.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Temporary Fencing:
 1. Undamaged picket snow fence, 4' high, formed of wooden slats, tightly woven with wire cable or plastic fencing specifically manufactured for this use.
 2. Soil-set fence posts, studded "T" type, 6' high.
- B. Tree Wound Dressing:
 1. Antiseptic and waterproof, asphalt base.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Notify the Authority at least 48 hours prior to beginning any clearing work.
- B. Protect benchmarks, utilities, existing trees, shrubs and other landscape features designated for preservation with temporary fencing or barricades satisfactory to the Engineer. No material shall be stored or construction operation carried on within 4 feet of

any tree to be saved or within the tree protection fence.

- C. When a private enclosure fence encroaches on the work area, notify the property owner at least 10 days in advance of the clearing/grubbing operations to permit the owner to remove it, construct a supplemental fence, or make such other arrangements as may be necessary for security purposes. Upon failure of the property owner to reasonably proceed with the work required to secure his property, carefully remove the fence, in whole or in part, and neatly pile the materials onto the owner's property.

3.02 UTILITY RELOCATIONS

- A. Inform all companies, individuals and others owning or controlling facilities or structures within the limits of the work which have to be relocated, adjusted or reconstructed in sufficient time for the utility to organize and perform such work in conjunction with or in advance of the Contractor's operations.
- B. Comply with the provisions of PA Legislature Act 187 (1996) or as amended.

3.03 CLEARING

- A. Confine clearing to within the limits of the right-of-way or easement. All damage sustained to property resulting from the Contractor's operations shall be repaired, without cost to the Authority, to the satisfaction of the property owner.
- B. No trees are to be removed until they have been tagged by the Contractor and reviewed and tagged by the Authority.

Fell trees in a manner that will avoid damage to trees, shrubs, and other installations, which are to be retained.
- C. Remove trees and shrubbery only when authorized by the Authority.
 - 1. Perform authorized tree removal, including stumps and debris, by methods meeting Authority's approval and at no expense to the Authority.
 - 2. Perform authorized shrubbery removal; store shrubs in protected manner and replant or replace such shrubbery at no expense to the Authority.
 - 3. When directed by the Authority, trim merchantable timber of limbs and tops, saw timber into eight-foot lengths. Stockpile timber at locations designated on the site by the Authority. Merchantable timber is timber larger than six inches in smallest diameter from which saw logs, pulpwood, posts, poles, ties or cordwood can be produced.
 - 4. The disposal of the stockpiled timber will not form a part of the contract obligations and the stockpiled merchantable timber will remain the property of the property owner.
 - 5. Dispose of tree removal debris in a lawful manner.

3.04 TREE TRIMMING

- A. With approval, trees can be trimmed to remove branches or roots which interfere with construction.

- B. Trim branches back to main stem.

3.05 MISCELANEOUS OBJECTS

- A. The Contractor shall carefully remove and protect for reinstallation all fences, guide rails, signs, lawn decorations, etc. which interfere with the work required inside the right-of-way.
- B. All items damaged during removal, storage, and reinstallation shall be replaced by the Contractor at no cost to the Authority.

3.06 GRUBBING

- A. Grub areas within the construction limits to remove roots and other objectionable material to a minimum depth of 8" below the existing ground.
- B. Remove all stumps within the cleared areas to a depth of at least one (1) foot below subgrade unless otherwise authorized by the Authority.

3.07 STRIPPING AND STOCKPILING TOPSOIL

- A. Strip topsoil to whatever depth it may occur from areas to be excavated, filled, or graded and stockpile at a location in accordance with the Stormwater Pollution Prevention Plan for use in finish grading.
- B. The topsoil is the property of the Authority and shall not be used as backfill or removed from the property.

3.08 DEBRIS DISPOSAL

- A. Unless informed otherwise by the owner, debris resulting from clearing and grubbing operations shall become the property of the Contractor and shall be disposed of legally.
- B. Do not deposit or bury on the site debris resulting from the clearing and grubbing work.
- C. Debris may be burned on site if local ordinances allow open-air burning, if required permits are obtained, and if burning operations are conducted in compliance with local ordinances and regulations.
- D. The Authority uses hardwood chips in its composting operation. Consult with the Authority as an option for hardwood material.

3.09 RESTORATION

- A. Repair all injuries to bark, trunk, limbs, and roots of remaining plants by properly dressing, cutting, tracing and painting, using approved arboricultural practices and materials.
- B. Replace trees, shrubs and plants designated to be saved which are permanently injured or die during the life of the Contract and subsequent correction period as a result of construction operations with like species acceptable to the property owner.
- C. Remove protective fences, enclosures and guards upon the completion of the project.

- D. Restore guard posts, guard rail, signs and other interference's to the condition equal to that existing before construction operations.

END OF SECTION