

SECTION 311000 - SITE PREPARATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 00 and Division 01 Specifications Sections, apply to this Section.

1.02 SUMMARY

- A. Section Includes:
 - 1. Protecting existing vegetation to remain.
 - 2. Removing existing vegetation.
 - 3. Stripping and stockpiling topsoil.
 - 4. Removing above- and below-grade site improvements.
 - 5. See Civil, Electrical, Mechanical drawings for utilities.
 - 6. See Architectural drawings for building demolition.

1.03 DEFINITIONS

- A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects larger than 2 inches in diameter; and free of weeds, roots, toxic materials, or other nonsoil materials.
- D. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- E. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.04 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.05 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site and legally disposed of.

1.06 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Use sufficiently detailed photographs or video recordings.
 - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plant designated to remain.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.07 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.
- C. Do not commence site clearing operations until temporary erosion- and sedimentation-control and tree-protection measures are in place.
- D. Tree- and Plant-Protection Zones: Protect according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- E. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 312001 "Site Grading."
 - 1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Verify that trees, shrubs, and other vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- C. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.02 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.

3.03 TREE AND PLANT PROTECTION

- A. Protect trees and plants remaining on-site according to requirements in Section 015639 "Temporary Tree and Plant Protection."

3.04 EXISTING UTILITIES

- A. Owner will arrange for disconnecting and sealing indicated utilities that serve existing structures before site clearing, when requested by Contractor.
 - 1. Verify that utilities have been disconnected and capped before proceeding with site clearing.
- B. Locate, identify, disconnect, and seal or cap utilities indicated to be removed.
 - 1. Arrange with utility companies to shut off indicated utilities.
- C. Excavate for and remove underground utilities indicated to be removed.

3.05 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 - 2. Grind down stumps and remove roots larger than 2 inches in diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.

3. Use only hand methods or air spade for grubbing within protection zones.
 4. Chip removed tree branches and dispose of off-site.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density equal to adjacent original ground.

3.06 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth in a manner to prevent intermingling with underlying subsoil or other waste materials.
1. Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other objects larger than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
1. Limit height of topsoil stockpiles to 72 inches.
 2. Do not stockpile topsoil within tree protection zones.
 3. Dispose of surplus topsoil. Surplus topsoil is that which exceeds quantity indicated to be stockpiled or reused.

3.07 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.

3.08 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Burning tree, shrub, other vegetation, waste, and debris is not permitted.
- C. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials, and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION 311000