

STANDARD SPECIFICATIONS
SECTION 02230
SITE CLEARING

PART 1 GENERAL

1.1 DESCRIPTION

- A. Section includes requirements for clearing and grubbing areas within Contract limits of right of way and other areas shown, including work designated in permits and other agreements.

1.2 DEFINITIONS

- A. Clearing: Removal from ground surface and disposal within designated areas of trees, brush, shrubs, down timber, decayed wood, other vegetation, rubbish, and debris as well as removal of fences and incidental structures.
- B. Grubbing: Removal and disposal of stumps, buried logs, roots larger than 2 inches, matted roots, and organic materials.

PART 2 PRODUCTS
NOT USED

PART 3 EXECUTION

3.1 DISPOSITION OF TREES IN PRIVATE PROPERTY

- A. General.
 - 1. Remove trees and shrubs within limits of right of way unless otherwise indicated in Contract Documents.
 - 2. Do not cut or damage trees outside right of way unless indicated or written permission has been obtained from affected property owner.
 - a. Furnish 3 copies of permission to Engineer before removal operations commence.
- B. Trees and Shrubs To Be Removed.
 - 1. Remove trees and shrubs to avoid damage to trees and shrubs designated to remain.
 - a. On trees greater than 6 inches diameter at breast height (DBH) remove limbs, crown, and trunk in 8 to 10 foot sections, when necessary, to avoid damage to trees and shrubs designated to remain.
 - 2. Remove trees and shrubs felled within right of way to authorized disposal site following Section 01770.
 - a. Fill depressions created by removal with soils material suitable for backfill.

C. Trees and Shrubs To Be Saved.

1. Protect trees and shrubs within right of way, construction strip, or work areas from defacement, injury, and destruction when delineated on Drawings or field marked to be saved.
 - a. See Standard Details for protection and limitations.
2. Proceed with work within limits of tree drip line with extreme care, using either hand tools or equipment that will not damage trees.
 - a. Do not store materials or park equipment under drip line of trees to be saved.
 - b. Saw cut roots 1 inch and larger flush with trench wall on tree side of trench.
 - c. Backfill around tree roots immediately after completion of construction in vicinity of trees.
3. Protect vegetation from damage by motorized equipment emissions.
4. During working operations, protect trunk, foliage, and root system of trees to be saved with boards or other guards following Standard Details and to prevent damage, injury, and defacement.
 - a. Do not pile excavated material adjacent to base of trees.
 - b. Do not allow runoff to accumulate around base of trees.
 - c. Do not fasten or attach ropes, cables, or guy wires to trees without Engineer's permission.
 - 1) When permission is granted, protect tree before fastening or attaching, using burlap wrapping and softwood cleats.
 - d. Do not use axes or climbing spurs for trimming or trees to be saved.
 - e. Use climbing ropes during trimming and be responsible for damage resulting from these actions.
5. Remove shrubs to be saved, taking sufficient earth ball with roots to maintain shrub.
 - a. Temporarily replant if required, and replace at completion of construction in condition equaling what existed before removal.
 - b. Replace in kind if transplant fails following Section 02930 for transplanting, planting, watering, and guarantee.
6. Perform tree and shrub repair where required, using tree expert licensed by State of Maryland, within 24 hours after damage occurred.

3.2 DISPOSITION OF TREES AND SHRUBS IN DEDICATED PUBLIC SPACE

- A. See Maryland Department of Natural Resources Forest Service's Roadside Tree Care standards and requirements for disturbance or removal of trees and shrubs in public space in Prince George's or Montgomery Counties, as set forth in permits for this Contract.

3.3 DISPOSITION OF TREES AND SHRUBS IN PARK PROPERTY (MNCP&PC, NPS, AND MPS)

- A. Remove trees and shrubs within designated work area specified herein.

1. On trees greater than 6 inches DBH remove limbs, crown, and trunk in 8 to 10 foot sections, when necessary, to avoid damage to trees and shrubs designated to remain.
 2. Save and protect from damage, trees within working area marked or noted on Drawings to be saved.
- B. Protect trees and shrubs outside designated work strip on Park property from defacement, injury, and damage.
- C. Transplant Dogwoods as directed by Park authorities.
- D. Park authorities may designate final location of replacement trees within Park property.

3.4 DISPOSITION OF CUT LOGS ON PRIVATE OR PARK PROPERTY

- A. When Contract Documents or special agreements require that felled trees be trimmed and cut into selected lengths and stored on site, stockpile them along edge of right of way or in areas requested by property owner or agent with Engineer's approval.
- B. Unless otherwise required, do not store logs within 100-year floodplain.

3.5 CLEARING AND GRUBBING

- A. Clear items specified herein to limits indicated, and remove cleared and grubbed material from site.
1. Do not start earthwork operations in areas where clearing is not complete.
 2. Stumps and root mats may be removed concurrently with excavation.
 3. Follow erosion, sediment control, and stormwater management measures specified elsewhere.
- B. Clear and grub areas to be excavated, areas receiving less than 3 feet of fill, and areas upon which structures are to be constructed.
1. Remove stumps and root mats in these areas to not less than 1 foot below subgrade or slope surfaces.
 2. Fill depressions made by removal of stumps or roots with soils material suitable for backfill.
- C. Clear areas receiving more than 3 feet of fill and cut trees and shrubs as close as practical to existing ground.
1. Grubbing will not be required.
- D. Do not burn without written permission from County Agency.
1. Burn perishable material under constant care of competent watchmen.
 2. Burn at times and in manner to avoid jeopardizing material designated to remain on property, surrounding cover, and adjacent property.

3. Disposal of ashes:
 - a. Off-site, or
 - b. Covered properly, or
 - c. Combined with soils material before restoration.
4. Follow applicable laws and ordinances.

3.6 TOPSOIL

- A. Strip existing topsoil from areas to be excavated or graded before Work, and place in well-drained stockpiles in locations with Engineer's approval.

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