UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2021
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DIVISION 31 - EARTHWORK

SECTION 31 10 00

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02/21

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UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2021

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SECTION 31 10 00

SITE CLEARING
02/21

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NOTE: This guide specification covers the requirements for furnishing all labor and equipment and performing all work required for clearing and disposal of trees, stumps, clearing fences, buildings, and other structures and disposal of debris, trash, and materials resulting from clearing operations. This section was originally developed for USACE Civil Works projects.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).

****

PART 1 GENERAL

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NOTE: This guide specification has been prepared for use in reservoir clearing operations. It has two alternates, one which is concerned with the clearing of timber lands and the other one deals with the removal of man-made structures, debris, etc.

****

1.1 UNIT PRICES

****

NOTE: If Section 01 20 00 PRICE AND PAYMENT PROCEDURES is included in the project specifications, this paragraph title (UNIT PRICES) should be deleted from this section and the remaining appropriately edited subparagraphs below should be inserted into Section 01 20 00.

No paragraph covering partial payment has been included in this guide specification. If partial payment is to be made, it should be addressed in the contract at the appropriate place (e.g., Section 01 20 00 PRICE AND PAYMENT PROCEDURES. One method, which has been used, is described here in general terms and may be incorporated when necessary. To estimate the value of work completed during each period, the zones are divided into the class of clearing involved. Class A clearing includes, as nearly as can be determined from aerial photographs or other means, all the wooded area with the exception of scattered trees, fringe growth along roads and fences, etc. Class B clearing contains all of the open, cultivated or pasture lands and those relatively open areas containing scattered trees, fringe growth along roads and fences, etc. The numbers of hectares acreages in each class should be estimated in advance and tabulated under the partial payment clause of the specification and thenceforth not be subject to change even if it is discovered that the original classification may have been in error. The most difficult class is arbitrarily assigned ninety work units for clearing, disposal, and clean-up. The number of work units in the other classes are estimated by comparison with the base class. The final estimate might be as follows:

Class	Zone	Areas (hectaresacres)	Multiplication Factor	Work Units
A	1		60	
B	1		15	
A	2		90	
B	2		25	
			Total work units	

The value of a work unit is determined by dividing the contract price by the above total. The value of the work completed during any period will be determined by multiplying the number of hectares acres of the various classes completed in each zone, as estimated by the Contracting Officer by planimetering areas from Government progress maps,

by the work units in that class, totaling these figures and multiplying this total by the value of an individual unit as determined above. The estimate of the Contracting Officer will be final. For the purpose of apportioning the classes of work completed during any period, the felling and decking ready for burning or removal is considered as 50 percent of the work required and the removal and/or burning and clean-up will be considered as the remaining 50 percent.

****

1.1.1 Clearing (Timber and Structure)

1.1.1.1 Payment

Payment will be made for costs associated with furnishing plant, labor, materials and equipments, and performing all operations necessary for clearing (timber and structures) as specified.

1.1.1.2 Unit of Measure

Unit of measure: lump sum.

1.2 DEFINITIONS

1.2.1 Trees

****

NOTE: Alternate 1.

****

The line of demarcation between brush and trees, for the purpose of distinguishing clearing requirements, is that trees, as used, will be considered as that woody growth not falling within the limits of brush as defined below.

1.2.2 Brush

****

NOTE: Alternate 1.

****

Brush is that growth which is less than 50 mm 2 inches in diameter measured 150 mm6 inches from the ground on the uphill side and is less than 2 m 6 feet in height measured from the ground on the uphill side.

1.2.3 Structures

****

NOTE: Alternate 2.

****

The term "structures" includes buildings or portions thereof, walls, silos, storm or root cellars, cisterns, wells, windmills, pit silos, water towers, etc. Structures shall be removed or filled to the ground surface.

1.3 PROJECT/SITE CONDITIONS

1.3.1 Aesthetics and Pollution Control

****
NOTE: Alternate 1.
****

1.3.1.1 Ground Areas

All ground areas in the zone of normal pool level fluctuations which are disturbed by clearing operations and which would become subject to erosion will be protected or restored.

1.3.1.2 Construction Roads

****
NOTE: Insert type of cover crop and seeding rate, if applicable.
****

All construction roads proposed for use by the Contractor for removing salvaged timber or for access to the work area shall be approved, as to location and alignment, prior to construction. Where such roads are determined to be of no value to project operation or will not serve recreational access needs after project construction, the areas occupied by these roads will be restored as nearly as possible to pre-construction conditions by reasonable grading and seeding [_____] [of a native cover crop] along with the planting of seedling trees if in a tree cover area.

1.3.2 Existing Conditions

****
NOTE: Paragraphs of Alternate 1 and 2 should be deleted if not applicable.
****

1.3.2.1 Boundaries

****
NOTE: Alternate 1.

When land lines or identifiable topographic features, such as roads, railroads, streams, etc., are used in place of or in addition to contours to designate zone boundaries, the descriptions indicated below should be so modified.
****

The area to be cleared under this [section] [contract] is divided into two (2) zones having the general limits as defined below and as indicated on the [drawings] [and] [maps] and [aerial photographs], which form a part of this contract.

1.3.2.1.1 Zone 1

Included in this zone is that portion of the reservoir area [bounded by][at a lower elevation than] the [_____] meter foot msl contour line.

1.3.2.1.2 Zone 2

****
NOTE: Use the contour elevation of Zone 1.
****

Included in this zone is that portion of the reservoir area above the [_____] meter foot msl contour line and below the [_____] meter foot msl contour line.

[1.3.2.2 Cemeteries

****
NOTE: Alternate 1.
****

Cemeteries are in the area to be cleared. Do not disturb or destroy any grave marker, or allow any vehicle to pass over a grave, or otherwise disturb the surface of the ground over any grave. Adequately mark the graves to insure that equipment does not work over the areas. Graves and headstones or markers will be relocated by others.

]1.3.2.3 Markings of Zones

****
NOTE: Alternate 1.
****

The [_____] and [_____] contour lines have been established in the field by the Government. The contour lines are identified by stakes on the lines or by painted bands on trees near the lines. The [_____] contour is marked with [_____] paint and the [_____] contour is marked with [_____] paint. [Other boundaries are marked by identifiable topographical features or by section or fractional section lines.]

1.3.2.4 Zones

****
NOTE: Alternate 2.

When Alternate 2 is used independently of Alternate 1, the boundaries should be completely described. Similarly, this section should be further modified to include all other applicable portions of Alternate 1.
****

The boundaries of the zones are as described in paragraph BOUNDARIES, subparagraphs ZONE 1 and ZONE 2.

1.3.2.5 Fences

1.3.2.5.1 Zone 1

No clearing of fences is required in Zone 1; however, the Contractor may, as an option, remove any or all fence materials from the area and dispose of such materials off the reservoir area.

1.3.2.5.2 Zone 2

All fences in Zone 2, except in those areas where no timber clearing is required, shall be cleared.

1.3.2.6 Structures

Burn combustible materials obtained from removal of structures in accordance with paragraph DISPOSAL OF MATERIAL or dispose of them off the reservoir area. Where filling of structures is required, fill to within 450 mm 18 inches of the ground surface and made with noncombustible materials such as masonry rubble, and other debris. When all available debris has been used in filling, all remaining unfilled portions, together with the above 450 mm 18 inches shall be completely filled to the ground surface with earth, borrowed as directed by the Contracting Officer. The top surfaces of fills shall be neat in appearance and smooth enough not to constitute a hazard to persons or livestock.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

3.1 CLEARING REQUIREMENTS

****
NOTE: Alternate 1.
****

3.1.1 Brush

The cutting of brush in either zone is not required.

3.1.2 Zone 1

****
NOTE: Use the same elevation which determines the contour bounding Zone 1.
****

Remove all trees and stumps, not defined as brush, that extend above elevation [_____], except that no material will be required to be removed any nearer to the ground surface than is specified for Zone 2. Topping of trees and stumps to elevation [_____] will be permitted as a Contractor's option.

3.1.3 Zone 2

Remove all trees and stumps, not falling within the classification of brush, to a height not exceeding 150 mm 6 inches above the ground surface measured on the uphill side.

3.1.4 Equipment

A tree crushing machine may be used at the option of the Contractor in all clearing operations.

3.2 DISPOSAL OF MATERIAL

****

NOTES: This paragraph makes general provisions for the Contractors' responsibility for fire damage beyond the clearing area. Notwithstanding these requirements, substantial damage has occurred in reservoir areas above the clearing line, due to fire escaping from areas being cleared. Fires originating in this manner have destroyed timber, ruined choice public use areas, destroyed wildlife habitat, and adversely affected public relations in the areas. Every effort should be made to avoid unnecessary destruction of the natural resources of reservoir areas, including the following actions:

1. The Contracting Officer or the Contractor or both should maintain constant knowledge, by appropriate telephone or radio liaison with personnel of the State forest protection service, relative to the degree of fire hazard and promptly disseminate by appropriate means this information to all others concerned.

2. The Contractor should be required to patrol firebreaks around clearing operations during all periods when there is danger of fire spreading beyond the clearing areas.

3. The Contractor should be required to halt all burning during periods of high fire danger.

It is considered that the provisions of the guide specifications and contract documents give the Contracting Officer the authority to enforce the required safety precautions.

****

3.2.1 General

The material cleared from the areas shall be completely removed by transporting from the Government property or burned within the cleared areas unless otherwise approved by the Contracting Officer. All timber from which saw logs, posts, ties or cordwood can be produced will become the property of the Contractor and in the interest of conservation it is required that the Contractor make a reasonable effort to dispose of material for these purposes. The Contractor may cut timber into convenient lengths at the site but approval must be secured prior to the operation of saw mills within the Government lands. In no case shall cleared material be thrown into or left in the creeks or river. After the felling operation has been completed, the timber to be burned must be decked for burning within [_____] days. All felled timber shall be completely removed. However, it is intended that all existing down timber in zones one (1) and two (2) will remain in place except solid, floatable material that is larger than 100 mm 4 inches in diameter (regardless of length) and/or over 2.5 m 8 feet in length (regardless of diameter) shall be disposed of in the manner prescribed for cleared material. Clean-up of floatable debris shall be accomplished by any practical means. The cutting of branches and debris remaining after clean-up, to reduce their

length in order to avoid removal, will not be permitted.

3.2.2 Burning

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NOTE: Specification provisions for burning of material from cleared areas should be written to comply with applicable statutory and regulatory requirements for Prevention, Control, and Abatement of Air Pollution by Federal Activities.

****

a. The material cleared may be burned within the contract area, and at any time within the contract period provided such burning does not interfere with inhabitants of the area by drastic changes in their accustomed environment, such as addition to air pollution or danger of fire. However, the specific time, location and manner of burning shall be subject to approval from the viewpoints of air pollution, governing fire laws and safety.

b. In the interest of conservation, as an option, make available to the general public without charge, the material scheduled for burning. No burning operations shall be conducted within 30 m 100 feet of any standing timber or flammable growth. The burning operations shall be subject to all public law governing such operations and the Contractor will be responsible for any damage to life and/or property resulting from fires that are started by its employees or as a result of its operations.

c. Furnish at the site adequate fire fighting equipment, such as back tanks, flaps, shovels, rakes, etc., to properly equip his personnel for fighting fires. Fires shall be guarded at all times and shall be under constant surveillance until they have burned out or have been extinguished.

d. Burn so thorough that the materials is reduced to ashes, except that occasional charred pieces of logs or branches not exceeding 100 mm 4 inches in diameter and/or 2.5 m 8 feet in length will be permitted to remain. Upon approval, charred material will be buried after it is determined that it could not be disposed of by methods used in the normal burning operation. All material disposed of in such manner shall be at approved locations and shall be covered within a minimum of 450 mm 18 inches of earth.

3.2.3 Burial

In certain cases, such as along drainage channels in remote areas, cleared material may be disposed of by burial in areas designated for disposal of excess excavation or spoil. When this option is used, care will be taken to insure that all such cleared material will be buried under not less than 450 mm 18 inches of earth. Approval will be obtained for each area selected for debris disposal for burial prior to beginning such operations. Areas to be used for permanent roadways, levees or embankments will not be used for disposal of material from clearing operations. Areas for disposal of cleared materials by burial will not be located within 92 m 300 feet of public road crossings or of project areas to be regularly visited by the public.

3.2.4 Removal from Site

Except as otherwise provided, the Contractor will be permitted to remove felled and trimmed timber from the site of the work. The Contractor will be allowed to stockpile salvaged timber near contour line [_____] at approved locations. The Government will assume no responsibility for the protection and safekeeping of such material. All stockpiled timber must be removed from Government lands before final acceptance of the work will be made.

3.3 DEBRIS

****
NOTE: Alternate 2.
****

Burn combustible debris in accordance with paragraph DISPOSAL OF MATERIAL. Noncombustible debris in excess of that disposed of as set forth in paragraph STRUCTURES shall be disposed of at such locations below elevation [_____] as may be designated by the Contracting Officer. Debris shall include trash of all kinds.

3.4 MARKETABLE MATERIALS

Any of the cleared materials which the Contractor considers marketable shall become its property and shall be removed from the reservoir area.

3.5 LOCATIONS

The locations of structures and debris to be cleared are tabulated below.

[_____]

-- End of Section --