

## **LITTER REMOVAL AND MOWING.**

**(REV 8-19-21) (7-22)**

SECTION 107 is deleted and the following substituted:

### **107-1 Description.**

**107-1.1 Litter Removal:** Provide pickup, removal, and disposal of litter and debris within the maintained limits from the outside edge of travel way to the right of way line, including the median on divided highways from the inside edge of travel way to the inside edge of travel way, ponds, and remote areas as specified in the Contract Documents. Litter or debris includes but is not limited to varied sizes of bottles, cans, paper, tires, tire pieces, lumber, vehicle parts, metal junk, small outdoor advertisement signs, brush, tree limbs, and other items to be removed under this work.

**107-1.2 Mowing:** Mow grass or vegetation within the project limits at locations identified in the Contract Documents. Locations may consist of roadside areas, ponds, ditches, or other areas as specified. Where landscaping has been established or natural landscaping has been preserved, mow conforming to the established mowing contours. Mow up to the limits maintained by the Department and around existing appurtenances located within the project limits as directed by the Engineer. Use specialized equipment or hand labor when required to perform specified work in certain areas or situations. Vegetation consists of planted and/or natural grasses, weeds, and other vegetation within the area to be mowed. Comply with the current edition of the Department's "A Guide to Roadside Vegetation Management".

**107-1.2.1 Large Machine Mowing:** Provide large machine mowing in areas conducive to large machine mowing equipment with a 3 horizontal to 1 vertical or less slope.

**107-1.2.2 Slope Mowing:** Provide slope mowing on slopes with a greater or steeper than 3 horizontal to 1 vertical slope or other areas that are relatively inaccessible to the use of conventional style equipment.

**107-1.2.3 Intermediate Machine Mowing:** Provide intermediate machine mowing in areas of 3 horizontal to 1 vertical slope or less that are not accessible by large machine mowing equipment but not conducive to the use of small machine mowing equipment.

**107-1.2.4 Small Machine Mowing:** Provide small machine mowing in areas of 3 horizontal to 1 vertical slope or less that are not accessible by large and intermediate machine mowing equipment.

**107-1.2.5 Manual Weed Control:** For areas with densely planted trees and steep slopes that are not accessible to mowing equipment, when directed by the Work Document, remove grasses, weeds, vines, and other underbrush using hand or power tools.

Unless otherwise specified, manual labor required to perform work around appurtenances will be incidental to the type of mowing being performed. Appurtenances may consist of signpost and bases, delineator post, fences, guardrail, barrier walls, end walls, retaining walls, pipes, drainage structures, poles, guys, mailboxes, handrails, landscaped areas, and trees.

**107-2 Frequency.**

**107-2.1 Litter Removal:** The number of litter removal cycles maybe increased or decreased based on litter conditions or special events, as directed by the Engineer. Areas or portions of areas within the project limits may be increased or decreased. The estimated number of litter removal cycles is approximately [redacted].

Complete each litter removal cycle within [redacted] calendar days of beginning the cycle when the litter removal cycle is concurrent with a mowing cycle. When litter pick up is issued concurrently with a mowing cycle, remove litter prior to and in conjunction with mowing operations in all areas.

Complete each independent litter removal cycle within [redacted] calendar days of beginning the cycle.

**107-2.2 Mowing:** The Engineer will determine the type of mowing, the estimated number of acres to be accomplished within a specified number of calendar days (cycle), when to begin each mowing cycle, and the total number of mowing cycles to be completed.

The number of acres to be completed per cycle may vary depending upon soil conditions. The number of acres to be completed will vary per cycle when wildflowers are in bloom or are re-seeding. Complete each mowing cycle within [redacted] calendar days of beginning the cycle. The approximate number of cycles for each type of mowing will be as follows:

Large Machine Mowing	[redacted] cycles ([redacted] <u>minimum</u> cycles)
Slope Mowing	[redacted] cycles ([redacted] <u>minimum</u> cycles)
Intermediate Machine Mowing	[redacted] cycles ([redacted] <u>minimum</u> cycles)
Small Machine Mowing	[redacted] cycles ([redacted] <u>minimum</u> cycles)
Mow Wildflower plots approximately	[redacted] times per year
Manual Weed Control	[redacted] cycles ([redacted] <u>minimum</u> cycles)

Notify the Engineer prior to beginning work in areas with questionable mowing capabilities. Adjustments to quantities will not be made once work begins.

**107-3 Equipment.**

**107-3.1 Litter Removal:** Transport litter using equipment capable of preventing further distribution or loss of litter along the roadway. Cover and secure all open top carriers with tarpaulins.

Specialized mechanical equipment capable of successfully removing litter and debris may be used upon written approval by the Engineer. Additional safety devices or precautions may be required when using unique equipment.

Provide equipment that does not damage curbs, pavement, or turf.

**107-3.2 Mowing:** Provide mowing equipment with a slow-moving vehicle sign located on the rear of the tractor, amber flashing light or white strobe light mounted on the tractor, 18-inch X 18-inch fluorescent orange warning flags mounted on each side of the rear of the mower, protective devices on the mower to prevent objects from being thrown into traffic, and safety devices installed by the manufacturer. Properly install and maintain safety devices at all times when the equipment is in use.

Maintain mowing equipment to produce a clean, sharp cut and uniform distribution of the cuttings at all times. Provide mowing equipment with the capability of cutting a height from 4 inches to 12 inches.

Provide equipment of a type and quantity to perform the work satisfactorily within the specified time periods.

Immediately remove equipment deficient in safety devices and keep the equipment out of service until the deficiency is corrected.

The Engineer's inspection of equipment will not relieve the Contractor of responsibility or liability for injury to persons or damage to property caused by the operation of the equipment, nor will it relieve the Contractor of the responsibility to meet the established time for the completion of the mowing cycle.

#### **107-4 Method of Operation.**

**107-4.1 Litter Removal:** Store equipment to remain on the project right of way while not in use outside the clear zone. Do not park or store equipment or supply vehicles in median areas. Conduct all service and supply operations between the travel-way and the right-of-way line and outside of the clear zone. Do not allow supply vehicles to enter the median. Do not allow service vehicles to enter the median except when necessary to repair or remove inoperable equipment.

Perform all litter removal during daylight hours.

Worksite personnel must wear high visibility apparel that meets the standards for High-Visibility Safety Apparel as established by The American National Standards Institute (ANSI) when performing litter removal activities.

**107-4.2 Mowing:** Perform all work operations in accordance with the appropriate temporary traffic control and lane closure requirements. Furnish, place, and maintain all traffic control devices throughout the duration of the work within the maintenance limits for the protection of the public and employees.

Operate the equipment in the same direction of the traffic unless the adjacent lane is closed to traffic when mowing within four feet of the travel-way (travel lane).

Perform all work during daylight hours.

Begin mowing cycles as directed by the Engineer in the Work Document.

Notify the Engineer when a cycle is started and when work is interrupted for any reason.

Prior to beginning work on the first cycle, provide a pattern or plan for mowing to the Engineer for approval. Follow the pattern adopted for the first cycle with subsequent mowing cycles.

Mow shoulders and medians concurrently within the limits of the area mowed so that not more than one mile will be left partially mowed at the conclusion of the working day. Mow grass and vegetation on slopes or around appurtenances concurrent with the mowing operation.

Complete each mowing cycle in its entirety prior to beginning another cycle. A complete cycle includes all manual labor around appurtenances.

If weather conditions or other situations of a temporary nature prevent the mowing of any areas, and such conditions are eliminated during the period designated for that mowing cycle, the adopted pattern for mowing may be altered to complete mowing of these areas during the mowing cycle.

Notify the Engineer of areas saturated with standing water to the point that standard mowing equipment would cause excessive damage to the turf. Mow the saturated areas during a subsequent cycle or cut to the surface of the water using hand labor or other specialized equipment as directed by the Engineer. Consult with the Engineer prior to beginning work in any questionable area.

Notify the Engineer when mowing areas or cycles have been completed. If any area does not meet the specified requirements, re-mow the areas at no additional cost to the Department.

#### **107-5 Disposal.**

**107-5.1 Litter Removal:** During each litter removal cycle, bag and remove all litter or piles at the end of each working day. Dispose of litter as necessary in accordance with applicable Federal, State, and Local Rules and Regulations. Do not store or stockpile litter within the project limits.

**107.5.2 Mowing:** In some areas it may be necessary to collect and remove grass clippings from the mowing operation, Dispose of vegetation cuttings in accordance with applicable Federal, State, and Local Rules and Regulations.

#### **107-6 Requirements.**

**107-6.1 Litter Removal:** Perform litter removal in a manner that results in areas being free of litter and debris.

**107-6.2 Mowing:** Mow all grass and vegetation to a height of 6 inches plus or minus 1/2 inch. Mow grass and vegetation to a height of 4 inches plus or minus 1/2 inch in specified areas as directed by the Engineer.

Perform mowing in a manner that will not result in streaking or scalping. Mow areas of different widths in a manner that will result in smooth flowing transitions. Do not allow accumulation or piling of cuttings as a result of cleaning the mowing equipment.

Mow all grass and vegetation on slopes or around appurtenances to the same height and quality as the surrounding mowed area when using hand tools.

Negligence that results in damage to turf, curbs, sidewalks, pavement, signs, or structures, mailboxes, appurtenances, etc. will be repaired or replaced at no additional cost to the Department. Complete repairs prior to submission of the invoice for work accomplished during the cycle.

Do not leave an accumulation of clippings in curb and gutters or on sidewalks. The use of blowers (away from traffic) to remove cuttings may be allowed unless prohibited by Federal, State, and Local Rules and Regulations.

#### **107-7 Method of Measurement.**

**107.7.1 Litter Removal:** The quantities to be paid for litter removal will be the number of acres of litter removal completed and accepted.

**107-7.2 Mowing:** Use of specialized equipment will be of no additional cost to the Department.

The quantities to be paid for mowing will be the area, in acres, of mowing completed and accepted.

The number of acres scheduled to be mowed per cycle will not be reduced for wildflower areas not mowed if the area is less than one acre.

The number of acres scheduled to be mowed per cycle will not be reduced for saturated areas that cannot be mowed when the area is less than one acre.

When alternate methods to mow saturated areas are required by the Engineer, payment will be based on the actual work performed.

**107-8 Basis of Payment.**

**107-8.1 Litter Removal:** Payment will be full compensation for furnishing all equipment, materials, labor, disposal, and incidentals necessary to complete litter and debris removal. Landfill receipts may be required with invoice submittals.

**107-8.2 Mowing:** Payment will be full compensation for furnishing all equipment, materials, labor, and incidentals necessary to complete all mowing operations specified. Compensation will be the unit price per acre for mowing for the number of acres completed and accepted.

Payment will be made under:

- Item No. E107 - 1-1 Litter Removal - per acre.
- Item No. E107 - 2-1 Large Machine Mowing - per acre
- Item No. E107 - 2-2 Slope Machine Mowing - per acre
- Item No. E107 - 2-3 Intermediate Machine Mowing - per acre
- Item No. E107 - 2-4 Small Machine Mowing - per acre
- Item No. E107 - 2-5 Manual Weed Control