GEORGIA DEPARTMENT OF TRANSPORTATION MOWING AND TRIMMING SPECIFICATION

ATTACHMENT A: CENTERLINE MOWING REOUIREMENTS

Requirements under these Specifications consists of furnishing all labor, material, tools, equipment, and incidentals necessary to perform mowing, trimming, and litter removal operations within the limits of the right of way and easement areas in a safe, effective, and timely manner, as detailed in these Specifications.

1. APPLICABLE DOCUMENTS

Reference the guidelines as set forth in the following documents:

- 1.01 Manual of Uniform Traffic Control Devices (MUTCD), current edition
- 1.02 American National Standards Institute [ANSI A300 (Part 1)], current edition

2. TERMS AND DEFINITIONS

- 2.01 <u>Bridge End Roll</u>: The area at each end of a bridge that slopes down from the end support to the natural ground contour under the bridge.
- 2.02 <u>Centerline Mile</u>: Incremental measurement used in this agreement that includes the mowing limits within a one (1) mile distance on a route. This includes both directions of the mile, shoulders, and median.
- 2.03 Established/Planted Trees and Shrubs: Trees and/or shrubs that have been planted for aesthetics by the Department and trees that are greater than three (3) inches in caliper dbh (4-1/2 feet above ground).
- 2.04 Interchange: An area allowing for access to and from the interstate mainline.
- 2.05 Mainline: The area(s) between interchanges on interstate and limited access routes.
- 2.06 <u>Mowing Cycle</u>: A Mowing Cycle consists of mowing complete the areas as designated in these Specifications one time.
- 2.07 <u>Mowing Complete</u>: The accepted and approved mowed and trimmed Centerline Miles, including litter removal, within established mowing limits.
- 2.08 <u>Mowing Limits</u>: All areas that are mowable with tractor mowing equipment within the right of way that are on a 3:1 or flatter slope, and trimming in front of, behind, under, and around roadside obstacles, and trimming on all slopes at Interchanges and on slopes greater than or equal to 3:1 on the mainline.
- 2.09 <u>Natural Tree Line</u>: The dominant boundary/edge of a community of hardwood and non-hardwood trees, greater than three (3) inches in caliper dbh (4-1/2 feet above ground). The edge can be a fluctuating line. Typically, in a community, the maximum trunk to trunk distance of trees, greater than three (3) inches in caliper dbh (4-1/2 feet above ground), is less than ten (10) feet.
- 2.10 **Roadside Obstaeles:** Items located within the right of way, both natural and man-made which may include but are not limited to sign posts, delineator posts, light posts, steel beam guardrail and associated posts, headwalls, barrier walls, retaining walls, catch basins, fallen rock, bridge end abutments, mailboxes, newspaper boxes, established/planted trees and shrubs, landscaped beds, natural tree line, wildflower areas, Bridge End Rolls, and fences.
- 2.11 Slope Break Point: The spot where the non-mowable slope begins.
- 2.12 Traveled Way: The portion of the roadway for the movement of vehicles, exclusive of the shoulders.
- 2.13 <u>Vegetation</u>: All woody and herbaceous plants, three (3) inches and less in caliper dbh (4-1/2 feet above ground), that are naturally occurring. (Includes Department-planted grasses) The stems of multiple trunk vegetation will be measured individually.
- 2.14 Shadow Vehicle: A vehicle used to buffer mowing and/or litter operations that may interfere with traffic.

3. EQUIPMENT

- 3.01 Assign appropriate equipment quantities and types to meet stated mowing schedules. Equipment shall meet the following requirements:
 - A. Equip each tractor with two (2) flashing signal lights, two (2) orange flags and an eighteen (18) inch slow moving emblem sign. Equip each mower with two (2) orange flags.
 - B. Acceptable guards are to be on all open portions of mowers and trimming equipment to prevent objects from being thrown from under the mower while in operation.
- 3.02 Properly maintain mower blades so that they are sharp, straight and evenly weighted.
- 3.03 Equip support vehicles, such as pickups and service trucks with a minimum of one (1) revolving or strobe type light, with amber lens.
- 3.04 Use a shadow vehicle to buffer the Mowing operation when it is on of within three (3) feet of the travel way.
 - A. Equip support vehicles used as shadow vehicles with a forty-eight (48) inch square "Watch for Mowers" sign with an eighteen (18) inch slow moving emblem attached and mounted on the rear of the shadow vehicle.
 - B. Equip a shadow vehicle with a minimum of one (1) revolving or strobe type light, with amber lens.

4. MOWING REQUIREMENTS

4.01 MOWING LIMITS AND SPECIAL CONDITIONS

- A. <u>Mowing Limits for Each Cycle</u>: All mowable areas within the right of way that are on a 3:1 or flatter slope using tractors with rotary or flatt type mowers, and trimming in front of, behind, under and around roadside obstacles, landscaped areas, planted/established trees and shrubs, and wildflower plots and trimming on all slopes. These include all areas as shown on Exhibit "B" Hall County Interchange Mowing Areas. Perform trimming in a manner as to create a smooth transition back to where the mowing was performed.
- B. <u>Special Mowing Conditions</u>: Perform all scheduled mowing operations during daylight hours. No work will be allowed on holidays. No work will be allowed on weekends in which a holiday falls on a Monday or Friday.
 - For the following counties; Clayton, Cobb, Dekalb, Douglas, Fulton, Rockdale, (all of District 7) and Gwinnett, do not perform work between the hours of 6:00 a.m. to 9:00 a.m. and 4:00 p.m. to 7:00 p.m., Monday through Friday.
 - 2. For the following counties; Bibb, Chatham, Cherokee, Columbia, Forsyth, Hall, Henry, Richmond, between the hours of 6:00 a.m. to 9:00 a.m. and 4:00 p.m. to 7:00 p.m., do not perform work, in the direction of rush hour traffic, Monday through Friday.

4.02 MOWING COMPLETE REQUIREMENTS

Perform Mowing Complete in accordance with these Specifications.

- A <u>Mowing</u>: Perform mowing within the Mowing Limits for vegetation on slopes no steeper than 3:1. This operation will not be allowed on slopes steeper than 3:1, or in any other situations that may be a hazard to the operator or the traveling public, including areas that may be too wet or otherwise inaccessible.
- B. <u>Trimming</u>: Trim vegetation to a height less than six (6) inches within the Mowing Limits that are inaccessible by Tractor Mowing. This includes trimming in front of, behind, under or around, and beyond roadside obstacles, landscape beds, established/planted trees, shrubs and wildflower areas to provide an attractive appearance. (See Appendix 2)
 - 1. <u>Mainline Slopes that are Greater than 3:1:</u> Trim vegetation a minimum of fifteen (15) feet beyond the slope break point each mowing cycle. If the Natural Tree Line falls within the minimum fifteen (15) foot area, trim vegetation to the Natural Tree Line.
 - 2. <u>Mainline with Slopes 3:1 or less:</u> Trim vegetation to the Natural Tree Line or to the right of way fence if no Natural Tree Line exists.

Revised 06/23/2009

- 3. <u>Landscape</u>, <u>Bulb</u>, and <u>Wildflower Plots</u>. Trim vegetation around landscaped areas, established or planted trees, shrubs, bulbs and wildflower plots without damaging plant materials. Trim vegetation under planted trees as necessary.
- 4. Wet or Inaccessible Areas: If an area is too wet and/or otherwise inaccessible by mowing equipment, trim vegetation using trimming equipment and/or slope mowers.
- 5. <u>Bridge Structures</u>: Trim vegetation located at, under, or near bridge structures including Bridge End Rolts and riprop areas within the right of way.
 - a. Trim all vegetation under and around trees greater than three (3) inches caliper dbh (4-1/2 feet above ground) that exists between adjacent bridges.
 - b. Trim vegetation on bridge ends and Bridge End Rolls at overpasses and underpasses to the right of way fence and/or Natural Tree Line. If trees exist within fifteen (15) feet around or adjacent to the bridge; trim vegetation under and around the trees. Continue trimming downslope or upslope to meet the Mowing Limits.
 - c: The limits of trimming extend to the fence line in cases where a fence is located on the top of a slope at a bridge underpass.
- 6. <u>Interchanges:</u> Trim all vegetation on non-mowable and mowable areas within an Interchange to the natural tree line and/or to the right of way fence. (See Appendix 2, Diagram A)
- 7. <u>Barrier Walls</u>: Remove vegetation at the base of and on all barrier walls. Trim and remove vegetation in non-landscaped areas between barrier walls.
- 8. <u>Vegetation Removal:</u> Remove trimmed woody vegetation from the right of way within five (5) days. Disposal shall be in accordance with applicable laws and regulations.
- 9. <u>Multiple Trunk Trimming</u>: In areas where trimming occurs, trim all stems of multiple trunk vegetation that are three (3) inches caliper dbh (4-1/2 feet above ground) or less.

4.03 TRAFFIC CONTROL REQUIREMENTS

- A. At a minimum, abide by the Manual of Uniform Traffic Control Devices (MUTCD), current edition, for traffic control guidance,
- B. Perform all Mowing as a continuous mowing operation as described in these Specifications. Mow only in the direction of traffic.
- C. Any signs used must be of rigid, one-piece construction covered with suitable sheeting and legend (engineering grade). Roll-up type signs may be used if they meet MUTCD Standards. Equip all signs with flags.
- D. Do not cross the median on Interstates or other divided highways. Enter and exit at the existing Interchanges.
- E. Do not exceed a ten (10) mile work zone. The Atlanta Metro area will be limited to five (5) miles.
- F. On non-divided highways, only one Tractor Mowing operation in a work zone will be allowed. On divided highways, two mowing operations in a work zone may be allowed on the outside shoulders. Additional work zones will be allowed, separated by a minimum of two (2) miles. Do not exceed ten (10) miles of mowing without completing trimming.
 - 1. <u>Signs</u>: Place "Watch for Mowers" signs with flags attached at each end of the work zone in the direction of traffic on both the median and outside shoulder.
 - 2. <u>Ramps</u>: In the event of an on-ramp located within the work zone, place at the top of the onramp a "Watch for Mowers" sign with flags. Place all signs before any tractor mowing is performed. Remove all signs at the end of each workday.
- G. Buffer tractor mowers traveling within three (3) feet of the traveled way, crossing lanes, traveling on paved shoulder, moving equipment to other locations (dead heading), by a shadow vehicle.
 - 1. Operations may be restricted when, in the opinion of the Department, the continuance of the work would seriously hinder traffic or is unsafe.

 Move equipment or materials on or across the traveled way in a safe manner which will not interfere with traffic. There shall be no reduction in the total number of available traveled ways. Schedule and arrange the work to ensure the teast inconvenience and the utmost safety to the traveling public.

4.04 SAFETY AND INCIDENT REPORTING

- A. Suspend operations if weather conditions are such that mowing operations cannot be carried out in an effective manner.
- B. Notify the Department immediately by phone of any incident or accident that involves the Licensee while fulfilling this Agreement.
 - 1. Submit a written report to the Department within forty-eight (48) working hours after the incident or accident. Describe in full what occurred. Provide the names of those involved with their contact phone numbers, and extent of injury and damage.
 - 2. Employees shall carry business cards that have the name, address, and phone number of the Licensee upon request of individuals involved in an incident or accident.
- C. If mowing and trimming operations cause damage to roadside obstacles, vegetation to remain, or ground disturbance, repair or replace the damaged item with a like item.
- D. Do not allow any debris to be thrown onto the road surface by the mowing equipment or by personnel. Perform work in such manner as to leave existing vegetation undamaged.
- E. Mowing equipment, while in operation, must be horizontal with the mowing surface. Operating tractor mowers in a vertical position parallel to a traveled way is prohibited.
- F. Equipment left on the right of way is the responsibility of the Licensee. Do not park equipment on the right of way or on state property for more than five (5) continual working days in the same location.
 - 1. Park no equipment in the median.
 - 2. Park equipment behind guardrail or in other protected areas where such areas exist. Otherwise, park equipment a minimum of thirty (30) feet from the edge of pavement.
- G. Operate no equipment that causes ground disturbance and/or damages any part of the right of way. Repair, at no cost to the Department, all damage caused by equipment.

4.05 QUALITY ACCEPTANCE

A. The height of all vegetation after any Mowing or Trimming operation shall be no more than six (6) inches.

GEORGIA DEPARTMENT OF TRANSPORTATION MOWING AND TRIMMING SPECIFICATION

ATTACHMENT B: LITTER REMOVAL REQUIREMENTS

1. APPLICABLE DOCUMENTS

See Attachment A - 1. Applicable Documents

2. DEFINITIONS

See Attachment A - 2. Terms and Definitions

3. **DESCRIPTION**

- 3.01 Pick up, remove and dispose of litter and debris within all mowing and trimming areas as specified in Attachment A Centerline Mowing Requirements and on all paved shoulders.
- 3.02 Litter and debris may consist of paper, boxes, bottles, cans, tires, recaps, nibber pieces, mattresses, appliances, lumber, metal pieces, hubcaps, vehicle parts, brush, trimmed vegetation on paved surfaces, dead animals, memorials, and other items not considered normal to the right of way, etc.

4. METHODS OF REMOVAL OPERATIONS

4.01 It is expected that all litter and debris activity will be accomplished by manual means; however, these Specifications are not intended to be restrictive or limit other techniques that achieve the specified and desired quality.

A written request may be submitted to the Department for the use of specialized mechanical equipment designed for removal of litter and debris. The Department, prior to any equipment being used, must approve the request. The Department may require additional safety devices or precautions if special equipment is allowed to be used. No ATV's (all terrain vehicles) will be allowed for use during litter pickups.

- 4.02 All litter and debris must be deposited into trash bags prior to being placed into disposal vehicles. Larger pieces such as ladders, tires, mattresses, etc., may be directly deposited into disposal vehicles.
- 4.03 Conduct litter removal activities during daylight hours only.

5. METHODS OF DISPOSAL

- 5.01 Remove all litter and debris, including larger pieces, from the right of way at the end of each working day and dispose of at locations provided by the Licensee. Storage or stockpiling of litter or debris on the right of way is prohibited. Disposal shall be in accordance with applicable laws and regulations. Locations for disposal and costs associated for use of such locations will be the responsibility of the Licensee.
- 5.02 Construct all vehicles, such as pickups or dump trucks, utilized to remove and dispose litter and debris to inhibit further distribution or loss of litter along the roadway. Cover all open-top vehicles and secure with tarpaulins. These vehicles must be in accordance with local and state laws governing waste hauling equipment.

6. FREQUENCIES AND TIMING OF REMOVAL AND DISPOSAL

- 6.01 At a minimum, all litter and debris must be removed in advance of each Mowing Cycle.
- 6.02 Perform litter removal and disposal immediately in front of and as an integral part of the mowing operations. Remove any litter and debris accumulated between litter activities and mowing activities prior to mowing operations.

7. TRAFFIC CONTROL REQUIREMENTS

7.01 Use a shadow vehicle when removing litter on paved shoulders. The shadow vehicle may be the litter disposal vehicle.

- 7.02 Follow all guidelines as per Attachment A Section 4.03 Traffic Control Requirements. Use "Litter Pickup Ahead" warning signs during the non-mowing season. Use "Litter Pickup Ahead" warning signs during the mowing season when the litter operation does not fall within a ten (10) mile mowing work zone.
- 7.03 A shadow vehicle and litter disposal vehicles must be equipped with a strobe light and slow-moving vehicle signs during removal of trash bags and larger material. Use these lights only when required in the course of the work and not when traveling to and from the job site.
- 7.04 All vehicles, including transport or service vehicles, must not obstruct traffic lanes.

Revised 06/23/2009

GEORGIA DEPARTMENT OF TRANSPORTATION MOWING AND TRIMMING SPECIFICATION

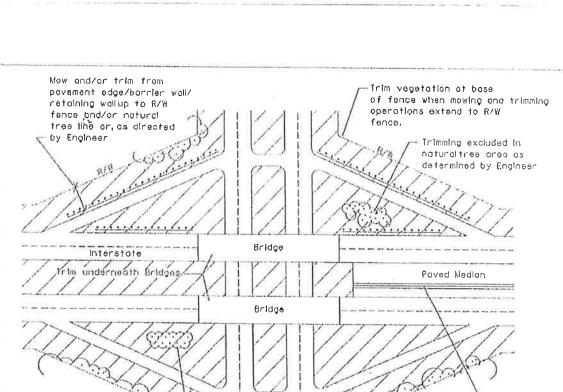
APPENDIX 1: CENTERLINE MILE LOCATIONS AND TOTALS

ROUTE	COUNTY	BEGIN MP	END MP	CENTERLINE MILES
1-985/US 23	HALL	8.1	8.4	0.3
1-985/US 23	HALL	11.5	11.9	0.4
1-985/US 23	HALL	13.5	14.1	0.6
1-985/US 23	HALL	16.0	17.0	1.0
1-985/US 23	HALL	19.9	20.2	0.3
1-985/US 23	HALL	21.2	21.6	0.4
1-985/US 23/SR 365	HALL	23.8	24.3	0.5
TOTAL	3.5			

ACCESS ROADS

ROUTE	COUNTY	FROM	ТО

GEORGIA DEPARTMENT OF TRANSPORTATION MOWING AND TRIMMING SPECIFICATION



Im and remove all vegetation -

olowing on and at the base of

barrier walls/retaining walls,

(Sée Appendix 20) klowing/ Trimming Area

APPENDIX 2: MOWABLE LIMIT DIAGRAMS

Diagram A: MOWABLE LIMITS AT INTERCHANGES – INTERSECTIONS AS AMMENDEDD BY EXHIBIT "B"

Within an Interchange, mow and/or trim all vegetation to the right of way fence and/or natural tree line, as indicated above, each mowing cycle. NOTE: HALL COUNTY DOES NOT INTEND ON MOWING THE MEDIAN ON I-985 AT ANY INTERCHANGE AS DEPICTED ON EXHIBIT "B"

Revised 06/23/2009

Trim around landscaped areas.

Trim inside planted tree areas

If required by Engineer.

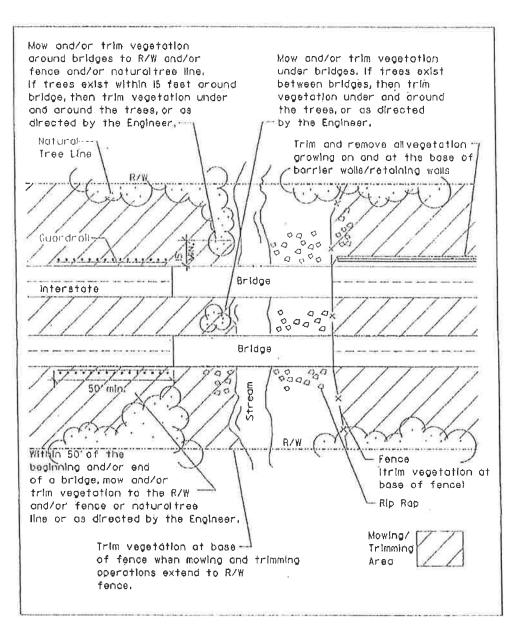


Diagram B: MOWABLE LIMITS AT WATER CROSSING/BRIDGES

On all slopes, mow and/or trim all vegetation to the right of way fence and/or Natural Tree Line, as indicated above, each mowing cycle.



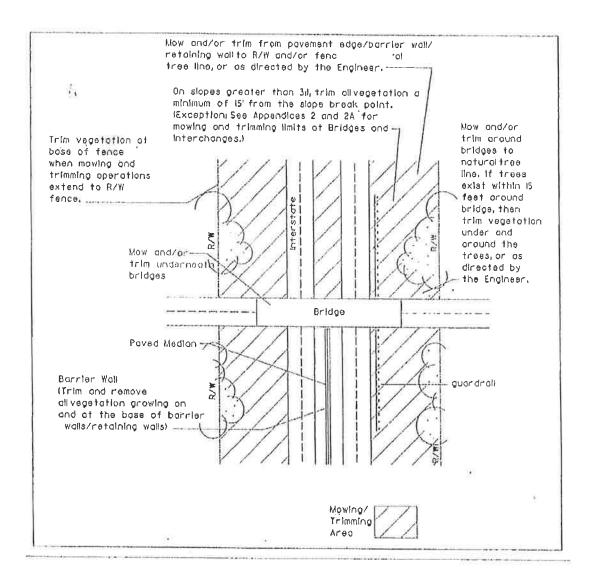


Diagram C: MOWABLE LIMITS ALONG MAINLINE



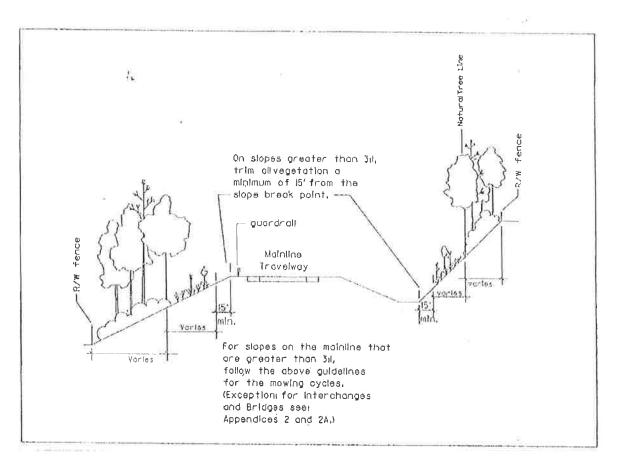


Diagram D: CROSS SECTION OF MOWABLE LIMITS ALONG MAINLINE FOR SLOPES GREATER THAN 3:1

Trim vegetation a minimum of fifteen (15) feet beyond the Slope Break Point each Mowing Cycle. If the Natural Tree Line falls within the minimum fifteen (15) foot area, trim vegetation to the Natural Tree Line.]

On slopes 3:1 or less, trim vegetation to the Natural Tree Line or to the right of way fence if no Natural Tree Line exists.

Revised 06/23/2009

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