805 MOBILIZATION / EQUIPMENT MOVING (10/16)

1. DESCRIPTION

This Section consists of one or more mobilizations of personnel, equipment, supplies, and incidentals to the project site, or sites listed in the Schedule of Items.

2. REQUIREMENT

a. Make equipment available for inspection before it is used on National Forest System lands.

b. Moving is complete, when the contractor has moved from the present work site to the ordered work site and returned to the previous location.

c. Equipment will be clean and weed free before it arrives on National Forest System lands.

3. LOCATION OF WORK

As specified on roads listed on the Road Listing, Shown on the Plans, or as ordered by the Contracting Officer.

4. MEASUREMENT

Measurement under this Section will be made by the total number of units for each item listed in the Schedule of Items completed and accepted.

Mile: work activity will be measured along the shortest feasible route to the nearest one (1) mile, from the starting location of the move, to the ordered work site.

5. PAYMENT

a. The accepted quantities will be paid at the contract price per unit of measurement for the Section 805 pay items listed in the schedule of items. Mobilization is complete when all equipment, personnel, and materials are moved to the project site and work has been started. Payment will be full compensation for the work prescribed in this Section. Mobilization is incidental unless ordered for a specific project at a specific time.

b. Payment will be made under:

Pay Item	Description	Pay Unit
805 (1)	Mobilization	Mile

811 BLADING (10/16)

1. DESCRIPTION

This work consists of

a. Surface blading native or aggregate roadbed to a condition to facilitate traffic and provide proper drainage.

b. Smooth blading to remove loose surfacing materials from the wheel paths and store the removed materials in a recoverable windrow.

Blading includes shaping the crown or slope of traveled way, berms, and drainage dips in accordance with this specification. Compaction is required when ordered by the Contracting Officer.

2. MAINTENANCE REQUIREMENTS

a. Timing

Surface blading shall be performed during the contract period as ordered by the Government.

b. General

1) The existing traveled way and shoulders, including turnouts unless otherwise ordered, shall be bladed and shaped to produce a surface which is uniform, consistent to grade, and crowned or cross-sloped as indicated by the character of the existing surface unless otherwise shown in the Road Listing, to at least one half inch (1/2") per foot of width, but not more than three quarter inch (3/4") per foot of width. Surfacing materials shall be thoroughly loosened to no less than 2 inch depth or the depth of potholes or corrugations. Scarification to facilitate cutting to the full depth of potholes or corrugations may be elected by the Contractor but will be considered incidental to blading. Scarification shall not go deep enough to cause contamination of the surfacing.

2) When Section 891 is included in the Road Listing, the Contractor shall apply water during blading when sufficient moisture is not present to prevent segregation. Water supply, hauling, and application shall be in accordance with Section 891 and shall be incidental to blading unless Pay Items for Section 891 are included in the Schedule of Items.

3) Existing native, rock or aggregate surfaced drainage dips shall be shaped incidental to blading to divert surface runoff to existing outlet devices, ditches and discharge locations.

4) The Contractor shall establish a blading pattern which provides a uniform driving surface, retains the surfacing on the roadbed and provides a thorough mixing of the materials within the completed surface width. Upon final blading, no disturbed rock

shall protrude more than two (2) inches above the adjacent surface unless otherwise provided in the contract. Material not meeting this dimension shall be removed and placed outside the roadbed so as not to obstruct drainage ways or structures. This material may be scattered off the roadbed if there is free drainage.

5) Watering will not be required for smooth blading. Smooth blading shall be accomplished without distorting the existing cross-slope or crown of the traveled way. Loose surfacing materials shall be moved and stored on the high side of super-elevated curves and sections with uniform inslope or outslope. In crowned sections, the material shall be stored on either or both sides as elected. Stored materials shall be windrowed and shall be placed to provide not less than eleven (11) feet of smoothed traveled way on one- lane segments or twenty (20) feet of smoothed traveled way on two-lane or sections with turnouts. Windrows which may collect water on the road shall have holes cut through for drainage at least every 500 feet.

c. Routine Blading

1) Upon completion of blading, the surfaces shall conform to the dimensions shown in the Special Project Specifications 811-3.

2) Roadbed width in excess of the dimensions shown shall be shaped only as needed to provide drainage away from the traveled way. Established grasses and other vegetation shall not be removed from the excess width except as incidental to providing drainage or unless otherwise provided in the contract.

d. Compaction

Roads requiring compaction will be included in the Road Listing. Unless otherwise specified, all traveled ways requiring compaction shall be compacted by breaking track while operating equipment on the traveled way.

e. Intrusions

Where the minimum width shown in the Special Project Specifications is not available, the Contractor will construct berms where ordered and marked on the ground. Material to provide berms will come from sources designated in the Special Project Specifications.

f. Undercutting

Roadway back slope shall not be undercut.

g. Intersections

1) At intersections, the roadbeds of side roads which are not closed or restricted from vehicular use shall be bladed to assure smooth transitions.

2) Field evidence of closure or restrictions shall be considered to be signing, cross ditching in the road surface (traveled way), earth berms or other devices placed

to discourage or eliminate use by passenger cars, also roads listed for work under Sections 835 or 838 shall be considered restricted.

3) Side roads listed for work under this Section shall be considered as not restricted.

h. Cleaning of Structures

Materials resulting from work under this Section shall not be allowed to remain on or in structures, such as bridges, culverts, cattleguards, or drainage dips.

i. Berms

Existing berms shall be maintained to the condition of adjacent segments when ordered by the Government.

3. MEASUREMENT

a. Measurement under this Section will be made by the total number of units for each item listed in the Schedule of Items completed and accepted.

b. Measurement for blading will be single-lane mile measured along the centerline of the roadway (see quantity measurement terms). Two-lane roads will be measured as two (2) single-lane miles. Measurement will be measured to the nearest one-tenth (0.1) mile.

c. Each intersection bladed under 2.g. will be equivalent to one-tenth (0.1) single-lane mile; however, when the intersecting side road is scheduled for subsequent blading under this Section, no measurement will be made.

d. Berm maintained or established will be measured by linear foot.

e. No measurement will be made under this Section for compaction method specified in 2.d. For roads needing compaction with special compaction equipment (ie. pneumatic or steel roller), use pay items in Section 807 for additional compaction efforts.

4. PAYMENT

a. The quantities measured and accepted will be paid for at the contract unit price shown in the Schedule of Items.

b. Payment will be made under:

Pay Item	Description	Pay Unit
811 (1)	Blading Surfaced Roads	Single-Lane Mile
811 (2)	Blading Native and Pit Run Roads	Single-Lane Mile
811 (3)	Smooth Blading	Single-Lane Mile
811 (4)	Berm Maintained	Linear Foot
811 (5)	Establishing Berms	Linear Foot

839 RESTORE DRAINAGE (10/16)

1. DESCRIPTION

This work consists of log, limb and debris removal; blading and shaping of the roadbed to restore drainage function. This work includes shoulders, ditches, drainage dips, leadoff ditches, turnouts, and intersections; cleaning drainage facilities; removing washes and sloughs that inhibit drainage.

2. MAINTENANCE REQUIREMENTS

a. General

The existing traveled way and shoulders, including turnouts unless otherwise ordered, shall be bladed and shaped to produce a surface which is uniform, consistent to grade, and crowned or cross-sloped as indicated by the character of the existing surface unless otherwise Marked on the Ground, to at least one half inch (1/2") per foot of width, but not more than three quarter inch (3/4") per foot of width. Surfacing materials shall be thoroughly loosened to a depth of no less than 2 inches or the depth of potholes or corrugations. Corrugations are washboarding and similar defects.

Scarification to facilitate cutting to the full depth of potholes or corrugations may be elected by the Contractor but will be considered incidental to blading. Scarification shall not go deep enough to cause contamination of the surfacing.

When Section 891 is included in the Road Listing, the Contractor shall apply water during blading when sufficient moisture is not present to prevent segregation. Water supply, hauling, and application shall be in accordance with Section 891 and shall be incidental to blading unless Pay Items for Section 891 are included in the Schedule of Items.

Existing native, rock or aggregate surfaced drainage dips shall be cleaned and shaped incidental to blading to divert surface runoff to existing outlet devices, ditches and discharge locations.

The Contractor shall establish a blading pattern which provides a uniform driving surface, retains the surfacing on the roadbed and provides a thorough mixing of the materials within the completed surface width.

b. Drainage Facilities

Cleaning existing drainage facilities includes roadside drainage ditches, drainage dips, inlet and outlet ditches, overside drains and flumes, inverts and interiors of culverts, culvert catch basins, drop inlets, trash racks, and sediment basins. Slash and debris shall be disposed of as in 839e. Sediment basin clean out shall be disposed for the unit price as shown in the Schedule of Items for Section 832.

Drainage structures not included under this specification are bridges, cattle guards, and culverts over 72 inches in diameter.

c. Ditches, Lead Off and Roadside

Wood, rock, trees, brush and other debris shall be removed from ditches to provide unobstructed flow of water. Slash and debris (woody or organic) shall be scattered in such a manner as not to impede the flow of water. The backslope of ditches shall not be undercut by cleaning operations. Existing ditch blocks shall be restored, reshaped, and compacted as needed for effective drainage through culverts. Catch basins shall be cleaned of material above the invert of the culvert.

d. Dips (Also called intercepting dips or rolling dips)

Existing drainage dips shall be cleaned and the outslope gradient sufficiently restored to remove surface water from roadbed, conducting the water through drainage facilities.

e. Culverts

Inlet and outlet ends, as well as four feet inside each end, of existing culvert, shall be cleaned to provide unobstructed flow of water. Natural drain culvert channels shall be cleared of all down trees, limbs, stumps, brush, rocks and other debris, that restricts the flow of water, 6 feet in width for 15 linear feet at each end. Slash and debris (woody or organic) shall be scattered in such a manner as not to impede the flow of water. The channel shall be shaped to natural streambed with constant grade at inlet and outlet ends.

f. Overside Drains and Flumes

Overside drains shall be cleaned of debris to provide an unobstructed flow of water. Debris (woody or organic) shall be scattered in such a manner as not to impede the flow of water.

g. Designed Earth Berms

Berm breaches of less than 5 cubic yards shall be filled, shaped, and compacted by wheel rolling. Fill material shall be located within 500 feet of breach or by ripping to the depth and width necessary to obliterate such defects; providing a smooth transition to adjacent satisfactory roadbed. Filling with loose material will not be acceptable.

h. Settlements

Settlements 12 inches or less in depth shall be scarified and then repaired by cutting from the roadbed on each end of the settled area, filling and wheel rolling the material into the settled area providing a smooth transition to adjacent satisfactory roadbed.

i. Washouts

Washouts in roadway of less than five cubic yards shall be filled and compacted by wheel rolling. Fill material shall be located within 500 feet of washout or as directed by the Contracting Officer.

3. METHOD OF MEASUREMENT

Measurement for maintenance will be “by the mile”, measured by slope distance along the centerline of the roadway. Measurement will be to the nearest one-tenth mile. No separate measurement will be made for any of the elements of work described in the foregoing

4. PAYMENT

a. Payment will be made for all units inspected and accepted at the unit price shown on the schedule of items.

b. Payments will be made under:

Pay Item	Description	Pay Unit
839 (1)	Restore Drainage Function, Without Water	Mile
839(2)	Restore Drainage Function, With Water	Mile