## PAVEMENT MARKING REMOVAL SPECIFICATIONS

**ITEM S-190** 

PAVEMENT MARKING REMOVAL

## **DESCRIPTION**

190-1.1 This item shall consist of removing existing pavement markings from paved areas designated on the drawings or required by the Engineer. The Contractor shall schedule and coordinate the removal operations with the Engineer prior to the start of any work. The Engineer will determine the limits and degrees of pavement marking removal. This item does not include the removal of loose, flaking or poorly bonded paint which is covered under Item P-620.

#### **MATERIALS**

190-2.1 Water to be used by high-pressure water equipment or for other purposes shall be made available to the Contractor on the airfield.

190-2.2 The use of chemicals for removing pavement markings will not be permitted.

### **EQUIPMENT**

190-3.1 Equipment, tools and machinery to be used in the work shall be in safe and satisfactory operational condition at all times.

## CONSTRUCTION

190-4.1 Except as approved by the Engineer, do not perform work when the atmospheric temperature is below 40 degrees F or when the pavement is covered with snow or ice.

190-4.2 Existing paint markings shall be removed to the degree specified by the Engineer. The degree of removal will be determined by the following criteria:

- a. 85-90% paint removal to reduce paint build up from old layers of paint
- b. 90-95% paint removal of existing due to new color being applied
- c. 80-85% paint removal of existing prior to asphalt overlay or sealcoat
- d. 95-100% paint removal of existing obsolete markings
- e. 90-100% paint removal of existing when changing a marking pattern

There may be instances on the airfield surface where one or more of these situations pertain, in which case the Engineer should clearly define those areas requiring each degree of removal. [The Engineer understands that requiring 100% removal will cause more damage to the pavement due to the last 5% of material remaining being the most difficult to remove.]

190-4.3 Pavement markings shall be removed from indicated areas by methods acceptable to the Engineer that cause negligible damage to existing pavements, surface texture, or other airfield appurtenances as determined by the Engineer. The Contractor and the Engineer should evaluate the surfaces prior to commencing paint removal operations so that all parties can

acknowledge and record existing pavement and/or joint deterioration. It is understood that the paint removal process will leave some scarring. It will be incumbent upon the contractor to mitigate the degree of damage and scarring to the pavement. If excessive damage results from the paint removal operation, the Contractor shall repair, at his expense, said damage to the pavement, surface texture, sealant or appurtenances caused by the removal work by methods acceptable to the Engineer. Excessive damage can be defined as any result whereby PCC pavement is removed more than 1/8-inch in depth or ACC pavement, after adequate clean-up, has exposed aggregate, a majority of which can be loosened by light brushing or abrasion. Grooved runway surfaces shall maintain their functionality, i.e., water shall be able to run off the surface without puddling.

190-4.4 Sand, water, residue and other waste material that may be deposited on the pavement as a result of removal operations shall be removed as the work progresses. Obtain the approval of residue removal and disposal method from the Engineer prior to beginning work. Accumulations of residue or other waste materials that might interfere with drainage or might constitute a hazard to aircraft or aircraft operations will not be permitted.

190-4.5 Prior to the start of work, remove pavement markings on designated test areas not less than 50 square yards in size. Use approved procedures and equipment needed to achieve the required degree of marking removal. The test section will be inspected and approved by the Engineer before any further removal work will be allowed. If more than one degree of paint removal is required during the course of the work, a test section for each area shall be designated, conducted and approved.

### **COMPLIANCE**

190-5.1 In order to determine compliance with the Engineer's requirements, a clear grid containing 100 equal squares, each approximately 1-inch square, shall be placed on the areas of pavement where paint removal operations have been conducted. The degree of paint removal required as outlined in Section 190-4.2 above should equal the number of squares within the grid that contain no undisturbed paint. For example, if 85% paint removal is required, 85 squares should show 85 squares where paint has been almost completely removed from the pavement, but 15 squares can contain heavier paint remnants.

### METHOD OF MEASUREMENT

190-6.1 The quantity of pavement marking removal to be paid for shall be the number of square feet of designated pavement markings removed in accordance with the specifications, complete, and accepted by the Engineer.

## **BASIS OF PAYMENT**

190-7.1 For each degree of removal required under this contract, a separate unit price shall be provided. The contract unit prices shall be full compensation for all disposal work and for furnishing all material, labor, equipment, tools and incidentals necessary to complete the item to the degree specified and to the satisfaction of the Engineer.

Payment will be made under:

# S-190 Pavement Marking Removal: Per square foot

S-190 a.	85-90% paint removal to reduce paint build up from old layers of paint
S-190 b.	90-95% paint removal of existing due to new color being applied
S-190 c.	80-85% paint removal of existing prior to asphalt overlay or sealcoat
S-190 d.	95-100% paint removal of existing obsolete markings
S-190 e.	90-100% paint removal of existing when changing a marking pattern