

## **SECTION 450: COLD MILLING**

### **450.1 DESCRIPTION**

This work shall consist of cold milling pavement surfaces and removing, hauling, stockpiling, or disposing of cold milled materials.

### **450.2 MATERIALS - Vacant**

### **450.3 CONSTRUCTION REQUIREMENTS**

#### **450.3.1 Equipment**

The equipment shall be a power operated pavement profiler capable of accurately controlling profile grades and cross slopes within a tolerance of plus or minus 1/4 inch, unless otherwise shown in the Contract. The Equipment shall control profile grades by using either an independent grade control or an external reference, and shall also have cross slope elevation controls.

The Equipment shall be capable of removing a minimum of two (2) inches in a single pass.

The Equipment shall be self-propelled with sufficient power, traction, and stability to maintain accurate depth of cut and slope.

The cutting area of the equipment shall be enclosed and must have an effective means of dust control.

Milling equipment shall be capable of producing a uniform milled surface free from corrugations. Teeth condition and spacing shall be maintained in such a manner as to provide the desired texture. Broken, damaged, or excessively worn teeth shall be replaced immediately.

The Equipment shall be capable of removing the material being cut from the pavement surface and discharging the millings into a truck, all in a single operation.

#### **450.3.2 Milling Operations**

The existing pavement surface shall be cold milled to the depth, width, cross slope, and grade shown in the Contract or established by the City Engineer or designee.

Curb line cold milling shall consist of milling to a depth of 1-3/4 inch plus or minus 1/4 inch at the curb apron or edge of pavement tapering to meet the pavement surface seventy-two (72) inches from the curb apron unless otherwise shown in the Contract. The same process will apply for shoulder milling operations.

Intersection and surface milling shall consist of milling of the pavement surface to a depth of one and three quarter (1-3/4) inch plus or minus one-quarter (1/4) inch unless otherwise shown in the plans.

Adjustments to the established depth shall be made in increments of one-half (1/2) inch or less. Adjustments shall be made at the direction of the City Engineer or designee. The Contractor shall control the milling operations to minimize gouges, grooves, or ridges and shall create a uniform surface without deviation greater than one-half (1/2) inch when measured with a ten (10) foot straightedge. When excess grooving occurs, cold milling operations shall cease and the equipment shall be corrected.

The milled surface shall not remain exposed to traffic more than ten (10) working days from the date of milling before subsequent surfacing operations are performed.

All non-conforming work and damage to adjacent structures caused by the Contractor’s operations shall be corrected to the satisfaction of the City Engineer or designee, at the Contractor’s expense.

**450.3.3 Hauling of Milled Materials**

All pavement material generated from the cold milling operation shall be removed immediately and stockpiled or disposed of as specified in the Contract or as directed by the City Engineer or designee.

If directed by the City Engineer or designee, the cold milled pavement material shall be hauled to and stockpiled on City property located within five (5) miles of the worksite.

Cold Milled pavement material shall be disposed of at a permitted disposal site located by the Contractor at his expense.

**450.4 METHOD OF MEASUREMENT**

Cold milling of existing pavement surfaces will be measured by the square yard-inch or by the square yard.

When cold milling is to be measured by the square yard-inch, measurement will be made to the nearest 1/4 inch.

**450.5 BASIS OF PAYMENT**

Hauling, stockpiling, and disposal of all cold milled pavement material shall be incidental to the Cold Milling pay item.

Payment will be made under:

**Pay Item**

**Pay Unit**

<i>Cold Milling (Bituminous)</i>	Square Yard-Inch
<i>Cold Milling (Concrete)</i>	Square Yard-Inch

or;

<i>Cold Milling (Bituminous)</i> _____”	Square Yard
<i>Cold Milling (Concrete)</i> _____”	Square Yard