DESCRIPTION

This work shall consist of the milling, shaping and removal of portions of existing pavement surfaces by a cold milling process, within the areas indicated on the plans, utilizing equipment and procedures meeting the requirements in this specification.

All materials removed during this milling process, including any foreign debris existing within or on the pavement, shall be disposed of by the CONTRACTOR at a site to be obtained by him or at a specific location designated in the contract documents.

MATERIALS

Not specified.

EQUIPMENT

The milling machine shall be designed and built for milling pavements. It shall reach the depth desired in as many passes as necessary and produce a milled surface free from gouges or ridges which are deeper or higher than 3/8".

The machine shall be equipped with a means to control dust and other particulate matter created by the cutting action.

The milled materials shall be picked up and removed in any manner chosen by the CONTRACTOR.

The milling machine shall be equipped with automatic grade and cross slope controls and shall be capable of producing a finished profile and cross slope with +/- 0.02 feet of a string line elevation.

The referenced elevation shall be determined through the use of a taut reference line positioned at or near the edge of the milling machine, or through the use of a moving reference line such as a "floating beam or ski" of at least six (20) feet in length that is attached to the machine. A short ski or shoe may be used as a moving reference line, with approval of the ENGINEER, provided a satisfactory fixed reference plane is available at or near the milling machine.

The CONTRACTOR shall provide equipment to immediately clean the milled surface of all loose material without producing any objectionable dust. A dust free surface shall result from the cleaning.

CONSTRUCTION DETAILS

The cold milling of the existing pavement shall be performed within the areas of and to the depth and cross section indicated on the plans. It shall be done consistent with the maintenance of traffic requirements indicated for the project. All milled areas are to be provided with adequate sign and warning devices until brought flush with existing

686-9950.doc 1 of 3 Last Revised 1-05

pavement.

Profile and cross slope during milling shall be controlled on structures or pavement on grade by the use of a floating beam or ski of at least twenty feet in length. Cross slope shall be controlled by a beam or ski on each side of the milling machine, or with one referenced beam or ski with the cross slope dialed or locked into the machine. The ENGINEER shall have approval of the method of profile and cross slope control.

When indicated on the plans, profile and cross slope shall be controlled by a taut reference string line.

The depth of milling shall be as indicated on the plans $\pm 1/4$. Additional milling shall be as directed by the ENGINEER.

Areas not accessible to the milling machine such as around and/or adjacent to inlets, manholes, curbs and transverse joints on structures, may be removed and shaped by handwork or other methods approved by the ENGINEER.

The milled material, including that removed by other means, shall be immediately removed from the roadway surface. The milled material shall become the property of the CONTRACTOR and disposed of by him.

When working adjacent to traffic, the material shall not be spilled on the traveled way. In the event that such a condition should occur, the CONTRACTOR shall immediately remove the material

The milling operation shall be performed in such a manner that the milled area shall be immediately cleaned of all loose material and dust, without producing objectionable dust, prior to opening to traffic. Any milled material that becomes wet and/or is not picked up by the equipment shall be removed by the CONTRACTOR before milling continues.

In the event the entire pavement width has not been milled to a flush surface by the end of a work period resulting in a vertical or near vertical longitudinal face exceeding 2 inches in height, this longitudinal face shall be sloped in a manner acceptable to the ENGINEER so as not to create a hazard to traffic using the facility during periods when construction is not in progress. Transverse faces that are present at the end of a working period shall be tapered in a manner approved by the ENGINEER.

Milled surfaces to be overlaid with asphalt concrete shall be covered with a dense graded asphalt course within a 48 hour period of the milling operation.

Damage to milled surfaces, prior to overlaying, resulting from traffic or other causes such as, but not limited to, raveling, fuel spillage or any contaminants which would inhibit bonding shall be repaired or remilled by the CONTRACTOR in a manner approved by the ENGINEER.

The CONTRACTOR shall maintain drainage at catch basins according to the details shown on the plans or in a manner approved by the ENGINEER.

METHOD OF MEASUREMENT

The quantity shall be measured as the number of square yards of pavement surface milled to the average depth shown on the plans and in accordance with this specification. Additional milling, including handwork ordered by the ENGINEER, will be measured by the number of square yards milled.

In no case will a deduction in area be made for minor unmilled areas due to catch basins, manholes, transverse joints, or minor low areas in pavements from the measured surface area that has been milled. Minor unmilled or low areas are those areas of 10 square yards or less.

BASIS OF PAYMENT

The unit price bid per square meter shall include the cost of furnishing all labor and equipment necessary to complete the milling including the removal of pavement by other means, the removal and disposal of milled material, the removal and hauling of milled material to a designated storage area when indicated on the plans or proposal and cleaning the resultant surface after milling. No additional payment will be made for additional cleaning that may be necessary just prior to placement of any overlaying pavement courses. The cost of that work shall be included in the price bid for the various pavement courses.

Overlay courses shall be paid for under their respective items.

The cost of maintaining drainage at draining structures temporarily higher than the surrounding milled surface shall be included in the price bid for this item.

The cost of providing temporary pavement wedges of asphalt concrete around drainage structures, manholes, valve boxes, bridge abutments, and beginning, sides and ends of milled pavement shall be included in the price bid for this item.

Payment shall be made on approval of the completed milling at each site by the ENGINEER.

Payment will be made under:

Item No.	<u>Item</u>	Pay Unit
C686.9950	Milling Existing Pavement for Loops	SY

686-9950.doc 3 of 3 Last Revised 1-05