520.04.01 Pavement Thickness Price Adjustment. Payment for areas that are accepted at a reduced price for deficient thickness will be adjusted by the factors shown in the following table. Deficiencies will be determined by procedures specified in 520.03.10. There will be no additional payment for excess thickness.

PAVEMENT THICKNESS PRICE ADJUSTMENT	
DEFICIENCY IN INCHES	PERCENT OF PAYMENT CONTRACT UNIT PRICE
0.00 to 0.20	100
0.21 to 0.30	80
0.31 to 0.40	72
0.41 to 0.50	68
0.51 to 0.75	57
0.76 to 1.00	50
Greater than 1.00 *See 520.03.10	0*

SECTION 521 — CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT

521.01 DESCRIPTION. This work shall consist of constructing continuously reinforced portland cement concrete pavement on a prepared subgrade as specified in the Contract Documents.

521.02 MATERIALS. Refer to 520.02 and the following:

Reinforcement. Reinforcement, including load transfer assemblies, tie bars, deformed steel bars and longitudinal tie devices shall conform to Section 908 and shall be epoxy coated. The Contractor shall select the type of reinforcement from one of the following:

(a) Deformed steel bar mats conforming to 908.07. The longitudinal bars shall be No. 5, Grade 60, and the transverse bars shall be No. 4, Grade 60.

(b) Loose deformed steel bars conforming to 908.01. The longitudinal bars shall be No. 5, Grade 60 with a minimum length

of 40 ft, and the transverse bars shall be No. 4, Grade 60. The longitudinal bars shall have a minimum length of 40 ft.

(c) Welded deformed steel wire fabric conforming to 908.06.

521.03 CONSTRUCTION. Refer to 520.03 except as modified herein.

521.03.01 Placing Reinforcement. The reinforcement shall be preset on chairs or chair bars with the transverse members placed down. Placement of the longitudinal bars shall be within the tolerances specified in the Contract Documents when measured from the top of the pavement to the bottom of the bar.

Rust, mud, oil or other detrimental coatings shall be removed before placing the concrete. The mat or fabric reinforcement shall be flat and free from distortions. Loose steel bars shall be free from kinks or bends that may prevent them from being properly assembled or installed.

Chairs or chair bars shall be designed to support the reinforcement in position without deflection or displacement during the placing and consolidation of the concrete. Chair bases shall have sufficient bearing to prevent overturning or penetration into the subgrade. The design of the chairs shall not impede the placing of the concrete. The Contractor shall obtain the Engineer's approval for the type of chair or chair bar to be used. Welding of chairs to the transverse bars prior to epoxy coating will be permitted.

If the support system does not hold the reinforcement within the specified tolerances, the Contractor shall increase the number of chairs or take other steps to ensure proper positioning of the steel.

521.03.02 Placing Concrete. Concrete shall be placed in one lift, and be internally vibrated over its full width and depth by immersion vibrators mounted at intervals not to exceed 30 in. center to center, across the full width of the slab being placed. The vibrators shall be operated at a frequency and an amplitude sufficient to be perceptible on the surface of the concrete more than 1 ft in any direction and shall be equipped to provide variable controlled frequencies. The battery of vibrators shall advance longitudinally with the paving machinery. The vibrators shall be hinge mounted to facilitate riding over any obstruction and shall be set to clear the reinforcement by approximately 1/2 in.

All screeding and vibrating operations shall stop immediately whenever forward motion of the paving machinery is stopped.

521.03.03 Joints. Transverse expansion or contraction joints are prohibited in continuously reinforced portland cement concrete pavement. Transverse construction of bulkhead joints shall be formed only at the end of any working period or when necessary to stop concreting operations for more than 30 minutes. They shall be formed with an approved header board in conformance with the cross section of the pavement, placed at right angles to the center line, and perpendicular to the surface. Additional bars shall be furnished and installed as specified in the Contract Documents. The pavement shall be finished to the header board without edging. These joints shall be made with extreme care and the bulkhead kept clean. The roadway reinforcement shall extend continuously through the joint. The reinforcement extending through the joint shall be securely supported on chairs or wooden sills to prevent it from deflecting.

Paving operations shall resume when the Engineer determines that the concrete has sufficiently set. The bulkheads and all debris shall be removed, and the joint shall be cleaned before placing concrete against it.

All joints shall be sealed as specified in Section 523.

521.03.04 Terminal Joints. Terminal joints shall be constructed as specified in the Contract Documents.

521.03.05 Thickness Check. Refer to 520.03.10

521.03.06 Pavement Profile. Refer to the Pavement Surface Profile requirements in the Contract Documents.

521.04 MEASUREMENT AND PAYMENT. Continuously Reinforced Portland Cement Concrete Pavement will be measured and paid for at the Contract unit price per square yard. The square yard measurement will conform to 520.04. The payment will be full compensation for all concrete, forms, reinforcement steel, chairs, epoxy coating, finishing, curing, joints, joint construction, saw cutting, and joint sealing, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

521.04.01 Pavement Thickness Price Adjustment. Refer to 520.04.01.

521.04.02 Terminal Joints. Terminal Joints will be measured and paid for at the Contract unit price per linear foot. The payment will be full compensation for all steel beams, stiffener plates, end plates, drilled holes, welding, cutting, styrofoam, joint filler, concrete, reinforcement, bond breaker, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.