

DIVISION 500 RIGID PAVEMENT

SECTION 501
PORTLAND CEMENT CONCRETE PAVEMENT

501.01 GENERAL. This item consists of constructing a concrete pavement (with or without reinforcement) on a prepared subgrade or base in accordance with the plans and the applicable specifications. Contractor Design and Quality Control of PCCP is included as a Specification requirement.

(a) Control of Materials. Sections 501.02 and 501.03 of the Specifications detail the requirements for the materials used in concrete paving. These specifications, along with the "Manual of Field Sampling and Testing Procedures" should be used as references by the Resident Engineer to ensure that all requirements are met and properly documented. Some items of special emphasis are:

- The Resident Engineer may approve the use of retarder and/or other additives. All additives used, including the Air Entrainment Agent used must be compatible with each other.
- Documentation that Cement, Flyash, Air Entrainment Agent, Retarder, Ground Granulated Blast Furnace Slag, and Curing Compound comply with the applicable Specifications must be submitted by the Contractor and maintained in the Resident Engineer's Office in accordance with the "Manual of Field Sampling and Testing Procedures". These products must be on the Department's "Qualified Products List". Refer to the "Manual of Field Sampling and Testing Procedures".
- The concrete plant used to produce the concrete must be certified by the AHTD Materials Engineer prior to use. An automatic weighing system, including an automatic printer is required at concrete plants producing PCCP. (Refer to Standard Specifications for exceptions to individual truck ticket printout requirement.)

(b) Contractor Concrete Mix Design. It is very important that the contractor provide an acceptable Concrete Mix Design prior to beginning placement. The Contractor furnishes the proposed pccp concrete mix design and Resident Engineer reviews and approves the PCCP mix design if it is acceptable. Should the Resident Engineer have concerns about the acceptability of a proposed mix design, the Department's Area Materials Engineer or the Staff Construction Engineer should be consulted.

The Specifications require the use of an air entraining agent in PCCP, and the PCCP concrete mix design must state the percent of air on which it is based. The amount of air entraining agent used in PCCP to obtain the proper

percentage of air entrained is to be determined by the Contractor at the time the PCCP concrete is mixed.

Subsection 501.03 of the Standard Specifications details the various requirements regarding the content of a PCCP concrete mix design, along with certain submission/certification requirements that must accompany it in order for the Resident Engineer to consider same for acceptance. The Resident Engineer should become familiar with this and use it as a reference when a PCCP mix is submitted for Department approval.

(c) Quality Control and Acceptance. Subsection 501.04 of the Specifications details the requirements for this. The Resident Engineer should become familiar with this, along with the appropriate portions of the Manual of Field Sampling and Testing and use these for reference when related questions arise. See *Section 106* of this Manual for additional information on acceptance testing, field tests, and verification testing.

(d) Construction Requirements. Section 501.05 of the Specifications contains the detailed construction requirements. Particular attention should be paid to the following:

- Equipment used must be specifically designed for concrete paving.
- Care must be taken to prevent the possibility of segregation in stockpiling and handling coarse aggregates. (Stockpiles must be layered or wedged in lifts not to exceed 4' [1.25 m] in height.)
- Concrete shall be mixed in the same manner as structural concrete (Section 802.08 of the Specifications).
- The specified water-cement ratio shall not be exceeded (Subsection 501.03(a)).
- Contractor compliance with Subsection 501.05(e), Cold Weather Concreting, should be verified by Resident Engineer personnel. Documentation of Contractor actions to comply with this should be made by Resident Engineer personnel as appropriate.
- The Contractor must have materials on hand to protect fresh concrete from rain.
- "No concrete shall be placed without the approval of the Engineer." [501.05(i) of the Specifications.]
- The paver must be equipped with an electronic vibrator-monitoring device that displays the operating frequency of each individual internal vibrator.
- JOINTS. Care should be taken to assure that all joints are constructed in accordance with the plans. Sawed joints should

be sawed as soon as the concrete has set sufficiently. When Type 3, 4, 5, or 6 joint sealer is used:

Joints must be flushed with water within 15 minutes after sawing and then blown out with compressed air.

Wait a minimum of six (6) days after concrete is placed (18 hours minimum for high early strength concrete), then sandblast each joint and blow out with compressed air.

Fill the clean, dry, joint with joint sealer on the same day as the sandblasting.

- Prior to initial set, the pavement surface shall be drug (burlap, cotton fabric, artificial turf) and tined. Tining must be performed using approved mechanical equipment on main lanes.
- When curing compound is used, adequate checks should be performed to ensure that the rate of application meets or exceeds the minimum rate specified (1 gallon per 125 square feet) [1 L/3 sq m].

(d) Surface and Thickness Checks. The following checks must be performed on the finished surface:

- Straightedge. The Contractor is required by Subsection 501.05(k)(4) of the Specifications to straightedge concrete paving while it is still plastic and correct deficiencies as necessary.
- -Profilograph. The Contractor shall provide a California-style Profilograph or (more likely) an automated lightweight Profilograph and shall perform the required surface tests [Subsection 501.05(m)] and take any appropriate corrective action required by the Specifications. Resident Engineer personnel must verify the calibration of the profilograph used by the Contractor and the settings used. (Research Section should be contacted for recommended settings Resident Engineer personnel should also observe this Contractor operation as necessary to assure that it is being performed properly. In addition, Resident Engineer personnel must verify the profiles of approximately 10% of the pavement using the Contractor's profilograph or one provided by the Department (Resident Engineer's option).

Refer to Subsection 501.05(m) of the Standard Specifications for other information regarding frequency and acceptable tolerances on profiles and straightedging. Whenever the Contractor's work is found to not be within the allowable tolerances, the Contractor must make alterations to his methods and/or equipment prior to beginning the next day's paving.

- Pavement Thickness Cores. Section 501.10 of the Specifications outlines the procedures for coring the pavement. The contractor is required to cut one core from each subplot of 1000 cubic yards. (This is in addition to the soundings in the plastic concrete taken by the AHTD inspector to check concrete yield, reinforcing steel/wire mesh depth, and slab thickness.) Pavement thickness cores as described in this specification are used in computing any applicable deduction in pay to the Contractor due to deficient slab thickness.

501.02 INCENTIVES. Section 501.12 of the Specifications provides for the payment of incentives for pavement smoothness. Incentives are based on the initial pavement profile index-before any corrective work is made. Payments for incentives are made by change order. A summary showing the incentive calculations and a summary of the profile index for each section qualifying for the incentive must be attached to the change order.

501.03 METHOD OF MEASUREMENT. "Portland Cement Concrete Pavement" and "High Early Strength Concrete Pavement" are measured by the Square Yard (Square Meter) in place. The quantity is reduced for deficient thickness of up to 1/2" (12 mm) as determined by cores, using procedures described in Section 501.10 of the Specifications.

501.04 DOCUMENTATION - CURRENT ESTIMATES. Current estimate documentation may be based on a percent of plan quantity, a percent of plan quantity within specified Station limits, approximate field measurement, etc. Current Estimate documentation for this item shall be recorded on the "Report of Work Performed" (RWP) and marked "Current Estimate". If a reduction in pay due to deficient thickness is necessary, and/or when the concrete pavement is re-measured upon completion, an RWP marked "Current Estimate" should be completed referring to the appropriate "Final Document(s)" to reflect the revised pay quantity as documentation for payment on a Current Estimate.

501.04 DOCUMENTATION - FINAL ESTIMATES. The following are considered Original Source Documents for payment of "Portland Cement Concrete Pavement (___" [__mm] Uniform Thickness)" and "High Early Strength Concrete Pavement (___" [__mm] Uniform Thickness)":

(a) Reports from the Resident Engineer summarizing the core thicknesses obtained by the contractor.

(b) A RWP marked "Final Document". All applicable measurements and calculations shall be shown on the RWP or on attached sheets. The RWP shall also contain any calculations necessary to compute applicable reductions in quantity due to deficient pavement thickness, based on core thicknesses and as described in Subsection 501.10 of the Specifications. The "Basis of Payment" on the RWP should be "Actual Field Measurement." See *Figure 501-1*.

SECTION 502 REINFORCING STEEL FOR PAVEMENT

502.01 GENERAL. This section of the Specifications deals with reinforcing steel used in Portland Cement Concrete Pavement as shown on the plans.

Materials used should be approved prior to use. Resident Engineer personnel should make sufficient checks to determine that the reinforcing steel is placed at the proper location and depth. This includes sounding the reinforcing steel in the plastic concrete.

NOTE: Dowel bars and tie bars must be epoxy coated.

502.02 METHOD OF MEASUREMENT. "Reinforcing Steel for Pavement (Bars)" and "Reinforcing Steel for Pavement (Mesh Fabric Type ___)" are measured by the pound (kilogram), in place. The quantity is computed using the planned pounds/s.y (kilograms/square meter). and the square yards (square meters) of concrete pavement measured and documented as described in *Section 501* of this Manual.

502.03 DOCUMENTATION - CURRENT ESTIMATES. Documentation for payment of this item on Current Estimates is in the same manner as concrete paving. Refer to *Subsection 501.03* of this Manual.

502.04 DOCUMENTATION - FINAL ESTIMATES. Original Source Documentation for payment of "Reinforcing Steel for Pavement (Bars)," and "Reinforcing Steel for Pavement (Mesh Fabric Type ___)" on Final Estimates consists of an RWP (See *Figure 502-1*) marked "Final Document" containing:

- (a) Reference to the appropriate concrete pavement RWP(s) that contain square yard (square meter) measurements and calculations.
- (b) Computations for reinforcing steel quantity to be paid as described in *Subsection 502.02* above.

NOTE: The square yards (square meters) used in computation of this quantity is that actually covered by concrete paving. There is no reduction in quantity of reinforcing steel due to deficient slab thicknesses.

SECTION 503 CONTINUOUSLY REINFORCED CONCRETE PAVEMENT

Refer to *Sections 501 and 502* of this Manual. These are also applicable to "Continuously Reinforced Concrete Pavement (___" [__mm] Uniform Thickness)."

SECTION 504 APPROACH SLABS AND GUTTERS

504.01 GENERAL. This section of the Specifications deals with the construction of Approach Slabs and Gutters. It refers to several Specifications regarding material compliance and construction methods. These should be used as a reference when working on Approach Slabs and Gutters.

NOTE: The Contractor performs QC/QA per Standard Specifications.

504.02 METHOD OF MEASUREMENT. "Approach Slabs" and "Approach Gutters (Type ___)" are measured by the Cubic Yard (Cubic Meter). Base material, Reinforcing Steel, and Corrugated Metal Pipe are measured for payment according to their respective applicable specifications.

504.03 DOCUMENTATION - CURRENT ESTIMATES. Current Estimate documentation should be based on the appropriate "Final Document" RWP, if complete, or an estimated proportion of work actually completed, normally in terms of an estimated percentage of plan quantity or a total of estimated percentages of individual locations. Current Estimate documentation for "Approach Slabs" and "Approach Gutters (Type ___)" must be recorded on the RWP form and marked "Current Estimate." Base material, Reinforcing Steel, and Corrugated Metal Pipe are documented for Current Estimates as shown in *Sections 303, 804, and 606* of this Manual, respectively.

504.04 DOCUMENTATION - FINAL ESTIMATES. Final Estimate documentation for "Approach Slabs" and "Approach Gutters (Type ___)" and Reinforcing Steel are to be based on plan quantities, unless exceptions (plus or minus) are noted. The Original Source Document (OSD) that must accompany the Final Estimate is the RWP marked "Final Document," using "Verified Plan Quantity" (plus additions/deletions, if applicable). See *Figure 504-1*. Refer to *Sections 802 and 804* of this Manual for additional information on documentation of these items. Base material and Corrugated Metal Pipe are documented for Final Estimates in accordance with *Sections 303 and 606* of this Manual.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 CONSTRUCTION DIVISION - REPORT OF WORK PERFORMED
 ITEM PORTLAND CEMENT CONCRETE PAVEMENT (10' U.T.) ITEM CODE: 0301
 JOB NO. 00011 FAP NO. IR-1177-2(B) JOB NAME HOESHOE BEND - SOUTH (F)
 REPORT NO. 1 | FINAL
 CURRENT ESTIMATE DATE 2-15-02
 FINAL DOCUMENT

Pay Quantity	Unit	Description, Location	Sub Item #
29849.56	SY	See BELOW	
29849.56	SY	TOTAL TODAY	
		PREVIOUS TOTAL	
29849.56	SY	TOTAL TO DATE	

BASIS OF ESTIMATE: ACTUAL FIELD MEASUREMENT
 STA. 0+00 - 54+00 (LML) $5401.7' \times 24' \div 9 = 14404.53 \text{ SY}$
 STA. 0+00 - 54+00 (RML) $5399.2' \times 24' \div 9 = 14397.87 \text{ SY}$
 STA. 24+50 - 30+02 (OFF RAMP NO. 1) $553.1' \times 15' \div 9 = 921.83 \text{ SY}$
 ADDL. SY. FOR OFF RAMP NO. 1 (ACCELERATION LANE + CORE AREA)
 SEE ATTACHED SKETCH + CALCULATIONS 125.33 SY
 TOTAL 29849.56 SY

NOTE: SKETCH NOT INCLUDED WITH THIS SAMPLE RMP
 REPORTED BY: B. Brugg CHECKED BY: John Thomson Rev. 6-8-94

Figure 501-1

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 CONSTRUCTION DIVISION - REPORT OF WORK PERFORMED
 ITEM REINFORCING STEEL FOR PAVEMENT (MESH FAWAL T.Y. 3) ITEM CODE: 0321
 JOB NO. 00011 FAP NO. IR-1177-2(B) JOB NAME HOESHOE BEND - SOUTH (F)
 REPORT NO. 1 | FINAL
 CURRENT ESTIMATE DATE 2-15-02
 FINAL DOCUMENT

Pay Quantity	Unit	Description, Location	Sub Item #
158502	LBS.		
158502	LBS	TOTAL TODAY	
		PREVIOUS TOTAL	
158502	LBS	TOTAL TO DATE	

BASIS OF ESTIMATE: ACTUAL FIELD MEASUREMENT - SEE FINAL DOCUMENT NO. 1 FOR PCCP (10' U.T.)
 ESTIMATE: FOR MEASUREMENTS + SQUARE YARDAGE CALCULATIONS.
 STA. 0+00 - 54+00 LML $14404.53 \text{ SY} \times 5.31 \text{ LBS/SY} = 76488 \text{ LBS.}$
 STA. 0+00 - 54+00 RML $14397.87 \text{ SY} \times 5.31 \text{ LBS/SY} = 76453 \text{ LBS.}$
 STA. 24+50 - 30+02 OFF RAMP NO. 1 $921.83 \text{ SY} \times 5.31 \text{ LBS/SY} = 4895 \text{ LBS.}$
 ADDL. OFF RAMP NO. 1 (DECEL. LANE + CORE) $125.33 \text{ SY} \times 5.31 \text{ LBS/SY} = 666 \text{ LBS.}$
 TOTAL 158502 LBS.

REPORTED BY: B. Brugg CHECKED BY: John Thomson Rev. 6-8-94

Figure 502-1

Figure 501-1

Figure 502-1

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 CONSTRUCTION DIVISION - REPORT OF WORK PERFORMED
 ITEM APPROACH SLABS (TYPE II) ITEM CODE: 0411
 QUICK CODE _____
 JOB NO. 00011 FAP NO. 1R-1177-2(B) JOB NAME HERSESHOE BEND-SOUTH (F)
 CURRENT ESTIMATE DATE 4/20/02 REPORT NO. 1 FINAL
 FINAL DOCUMENT

Pay Quantity	Unit	Description, Location	Sub Item #
23.0	CY	Sta. 35+00 - 35+35 LML	
22.0	CY	Sta. 36+35 - 36+70 LML	
45.0	CY	TOTAL TODAY	
		PREVIOUS TOTAL	
45.0	CY	TOTAL TO DATE	

BASIS OF ESTIMATE: VERIFIED PLAN QUANTITY

REPORTED BY: David Young CHECKED BY: Shawn Stueben
 Rev. 6-8-94

Figure 504-1b

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
 CONSTRUCTION DIVISION - REPORT OF WORK PERFORMED
 ITEM APPROACH SLABS (TYPE II) ITEM CODE: 0411
 QUICK CODE _____
 JOB NO. 00011 FAP NO. 1R-1177-2(B) JOB NAME HERSESHOE BEND-SOUTH (F)
 CURRENT ESTIMATE DATE 2-15-02 REPORT NO. 1
 FINAL DOCUMENT

Pay Quantity	Unit	Description, Location	Sub Item #
11.5	CY	Sta. 35+00 - 35+35 LML	
11.5	CY	TOTAL TODAY	
		PREVIOUS TOTAL	
11.5	CY	TOTAL TO DATE	

BASIS OF ESTIMATE: 50% PLAN QUANTITY FOR ABOVE LOCATION

REPORTED BY: David Young CHECKED BY: Shawn Stueben
 Rev. 6-8-94

Figure 504-1a

Figure 504-1A

Figure 504-1B

SECTION 505
PORTLAND CEMENT CONCRETE DRIVEWAY

505.01 GENERAL. This item consists of concrete placed on a prepared subgrade or base in accordance with the plans, Specifications and as directed by the Engineer. Transverse expansion joints shall be placed at 15' (4.5 m) intervals or as directed by the Engineer. Class M or Class A concrete from Section 802 is specified.

NOTE: The Department Performs Acceptance sampling and testing on this item.

505.02 METHOD OF MEASUREMENT. This item is measured by the square yard (Square Meter) in place. Field measurement is required. The micro computer AREA program may be used to compute the area. When used, the printout shall be attached to the appropriate RWP.

505.03 DOCUMENTATION - CURRENT ESTIMATES. Current estimate documentation may be based on a percent of plan quantity, a percent of plan quantity within specified station limits, approximate field measurement, etc. Current Estimate documentation for "Portland Cement Concrete Driveway" shall be recorded on the "Report of Work Performed" (RWP) marked "Current Estimate."

505.04 DOCUMENTATION - FINAL ESTIMATES. Final Estimate documentation for "Portland Cement Concrete Driveway" shall be based on "Actual Field Measurement." Original Source Documentation must be properly completed "Report(s) of Work Performed" (RWP) marked "Final Document." All applicable sketches, measurements, and computations shall be shown on the RWP(s) or on attached sheets. See *Figure 505-1*.

SECTION 506
PORTLAND CEMENT CONCRETE CORRUGATIONS

506.01 GENERAL. This item consists of the forming of a corrugated rumble strip in the plastic concrete as shown on the plans and as directed by the Engineer.

506.02 METHOD OF MEASUREMENT AND DOCUMENTATION - CURRENT AND FINAL ESTIMATES. Measurement and documentation are the same as for PC Concrete Driveways. See *Section 505* of this Manual.

SECTION 507
PORTLAND CEMENT CONCRETE PAVEMENT PATCHING

507.01 GENERAL. This section of the Specifications deals with the removing and patching of concrete pavement at locations designated by the Engineer.

- (a) **Control of Materials.** PCCP concrete shall be used unless otherwise specified. See Section 501 of the Specifications. The Contractor is responsible for QC/QA sampling and testing.

NOTE: Dowel & tie bars are not required to be epoxy coated for PCCP Patching.

(b) **Construction Requirements.** The construction requirements in Subsection 202.03 of the Standard Specifications regarding "Removal and Disposal of Concrete Pavement" also apply to "Removal and Disposal of Concrete Pavement for Patching." In addition to this, the existing pavement shall be sawed full depth and lifted out in such a manner as to not damage the remaining pavement. Overcuts are to be filled with a low viscosity epoxy compound prior to installation of the patch.

The construction requirements in Subsections 501.05 and 503.04 regarding "Portland Cement Concrete Pavement" and "Reinforcing Steel for Pavement" also apply to "Portland Cement Concrete Pavement Patching (___" [__mm] Uniform Thickness)." In addition to this, loose base material shall either be recompacted or removed. Dowel and tie bars must be installed in accordance with the plans.

NOTE: Drills used to make holes for dowel bar placement are to be held in a rigid frame to assure proper vertical and horizontal alignment.

NOTE: Subsection 507.03(e) allows use of a mobile, continuous volumetric mixer in lieu of a concrete batch plant.

507.02 METHOD OF MEASUREMENT AND DOCUMENTATION - CURRENT AND FINAL ESTIMATES. Refer to *Section 505* of this Manual, "Portland Cement Concrete Driveway," for measurement and documentation requirements. In addition to this, there is provision in this specification to increase the square meters (square yards) measured for a patch paid under "Portland Cement Concrete Pavement Patching (___" [__mm] Uniform Thickness)" if the average thickness is in excess of the planned thickness plus 1"

(25 mm). Refer to Subsection 507.05 of the Specifications for the applicable formula to be used.

This calculation, if applicable, shall be shown on or attached to the "Final Document" RWP for the "Portland Cement Concrete Pavement Patching (____" [__mm] Uniform Thickness)." **NOTE:** This calculation is NOT applied to "Removal and Disposal of Concrete Pavement for Patching."

SECTION 508 VACANT

SECTION 509 JOINT REHABILITATION

509.01 GENERAL. This item consists of sawing, cleaning, and sealing existing joints in Portland cement concrete pavement as shown on the plans and as designated by the Engineer.

The joint sealer used shall conform to the requirements of that used in concrete paving joints [Section 501.02(h)]. The type sealer used will depend upon the type of Joint Rehabilitation being undertaken (i.e., A, B, C, or D).

Section 509.03 of the Specifications details Construction Methods required under this item and when each of the various Types of Joint Rehabilitation is used. It should be used as a reference when working on this item.

NOTE: No joints, except those for concrete pavement patches, shall be sawed after December 1 or prior to March 1, without written permission of the Engineer. All joints shall be sealed prior to opening the pavement to traffic and, with the exception of concrete pavement patches, shall be sealed within fifteen (15) days after sawing.

509.02 METHOD OF MEASUREMENT. "Joint Rehabilitation (Type ____)" shall be measured by the linear foot (meter) in place.

509.03 DOCUMENTATION - CURRENT ESTIMATES. Current estimate documentation may be based on a percent of plan quantity, a percent of plan quantity within specified Station limits, approximate field measurement, etc. Current Estimate documentation for this item shall be recorded on the "Report of Work Performed" (RWP) and marked "Current Estimate".

509.04 DOCUMENTATION - FINAL ESTIMATES. Final Estimate documentation for "Joint Rehabilitation (Type ____)" shall be based on "Actual Field Measurement." Original Source Documentation must be properly completed "Report(s) of Work Performed" (RWP) marked "Final Document." All applicable measurements and computations shall be shown on the RWP(s) or on attached sheets.

**SECTION 510
GRINDING PORTLAND CEMENT CONCRETE PAVEMENT**

510.01 GENERAL. This item consists of grinding Portland Cement Concrete Pavement to eliminate vertical differential and to restore drainage, riding characteristics, and skid resistance to concrete pavement.

The Resident Engineer should become familiar with this specification & use it as a reference as needed.

Particular attention should be noted regarding the initial profile that is required to be provided by the Contractor and the final surface finish roughness (IRI) measurement also required. (In addition, the Department must verify the Contractor results by testing approximately 10% of the pavement.)

NOTE: Furnishing of the required profile & IRI roughness measurements, along with providing a lightweight profilograph to measure same, are subsidiary to this item.

510.02 METHOD OF MEASUREMENT AND DOCUMENTATION - CURRENT AND FINAL ESTIMATES. "Grinding Portland Cement Concrete Pavement" is to be measured and paid on Current and Final Estimates" in the same manner as "Portland Cement Concrete Driveway." Refer to *Section 505* of this Manual.

**SECTION 511
PORTLAND CEMENT CONCRETE SHOULDER (ADD-ON)**

511.01 GENERAL. This item consists of adding a Portland cement concrete shoulder to an existing concrete pavement according to plans.

This work basically must conform to the same requirements as "Portland Cement Concrete Pavement". Refer to Section 501 of the Specifications and this Manual and Section 511 of the Specifications. The Resident Engineer should note that transverse joint locations shall match existing joints and that the final surface finish shall be accomplished using a broom or burlap drag. (It is not tined.)

NOTE: The Contractor performs QC/QA testing on this item.

511.02 METHOD OF MEASUREMENT AND DOCUMENTATION - CURRENT AND FINAL ESTIMATES. "Portland Cement Concrete Shoulder (Add-On)" is to be measured and paid on Current and Final Estimates in the

same manner as "Portland Cement Concrete Driveway." Refer to *Section 505* of this Manual.

SECTION 512

CLEANING AND FILLING JOINTS IN EXISTING CONCRETE PAVEMENT

512.01 GENERAL. As the Section Title states, this item consists of cleaning concrete pavement joints and filling them with joint material allowed by Subsection 512.02 of the Specifications. It is important for Resident Engineer personnel to ensure that the joint is clean and dry prior to the application of the joint filler.

512.02 METHOD OF MEASUREMENT. "Cleaning and Filling Joints in Existing Concrete Pavement" is measured by the linear foot (meter).

512.03 DOCUMENTATION - CURRENT ESTIMATES. Documentation on Current Estimates for "Cleaning and Filling Joints in Existing Concrete Pavement" may be based on a percent of plan quantity, a percent of plan quantity within specified Station limits, approximate field measurements, reference to the appropriate "Final Document" (OSD), etc. Current Estimate documentation for this item will be recorded on the "Report of Work Performed" and marked "Current Estimate".

512.04 DOCUMENTATION - FINAL ESTIMATES. Documentation on Final Estimates for "Cleaning and Filling Joints in Existing Concrete Pavement" shall be the properly completed "Report of Work Performed" marked "Final Document". The "Basis of Estimate" for this item should be "Actual Field Measurement". The field measurement for this item should be either contained on this RWP or attached to it.

SECTION 513

RUBBLIZING PORTLAND CEMENT CONCRETE PAVEMENT

513.01 GENERAL. This item consists of utilization of a self propelled resonant frequency breaker to break up ("rubblize") existing concrete pavement and stabilization of the resulting concrete rubble. The Resident Engineer should become familiar with this section of the Specifications and use it as a reference as appropriate.

513.02 METHOD OF MEASUREMENT AND DOCUMENTATION - CURRENT AND FINAL ESTIMATES. "Rubblizing Portland Cement Concrete Pavement" and "Removal of Existing Asphalt Overlay" (when directed by the Engineer) are to be measured and paid on Current and Final Estimates in the same manner as "Portland Cement Concrete Driveway." Refer to *Section 505* of this Manual.