



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

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INSTRUCTIONAL BULLETIN NO. 23-02

Update to Chapter 7 – Partial Concrete Repair Item

Effective immediately, Chapter 7 has been updated to include Item No. **502-03.21**, PARTIAL DEPTH PCC PAVEMENT REPAIR. NOTE: Not to be used on the interstate/freeway or interstate ramps per RP-J-24. This information has been added to the Roadway Design Guidelines to assist Construction and Materials and Tests in the use of the specific item.

Chapter 7 Section **203.00** and **203.05** has been updated to clarify that item number 203-06, WATER should not be utilized to pay for water used for dust control. Water used for dust control will be paid under grading items as an incidental item. This has been updated to align with subsection 104.08 of the *Standard Specifications for Road and Bridge Construction*.

The revised section is shown below:

7-203.00 EXCAVATION AND UNDERCUTTING

Item Number	Description	Unit of Measurement	Comment
203-01	Road and Drainage Excavation (Unclassified)	C.Y.	
203-01.05	Excavation	L.S.	
203-01.06	Road and Drainage Excavation (Unclassified)	L.S.	Used on Safety Projects to construct pedestrian

			facilities. Not commonly used.
203-01.07	RD & DRNG EXC (Acid Producing – Off Site Disposal)	CY	SP107L
203-01.08	RD & DRNG EXC (Acid Producing – On Site Disposal)	CY	SP107L
203-01.11	Presplitting of Rock Excavation	S.Y.	
203-02	Borrow Excavation (Solid Rock)	C.Y.	SP109A
203-02.01	Borrow Excavation (Graded Solid Rock)	Ton	SP109A
203-02.02	Borrow Excavation (Graded Solid Rock)	C.Y.	SP109A
203-03	Borrow Excavation (Unclassified)	C.Y.	SP109A
203-03.01	Borrow Excavation (Select Material)	C.Y.	SP109A
203-03.10	Select Granular Material	TON	
203-03.51	Borrow Excavation (Unclassified)	C.Y.	SP109A
203-03.56	Rock Buttress	Ton	
203-04	Placing and Spreading Topsoil	C.Y.	RDG:9-105.00 2-707.00 ?
203-05	Undercutting	C.Y.	SP109A
203-06	Water	MG	Not to be paid for Dust Control

203-07	Furnishing and Spreading Topsoil	C.Y.	RDG:9-105.00 2-707.00?
203-08	Channel Excavation (Unclassified)	C.Y.	
203-10	Embankment (Compacted in Place)	C.Y.	SP109A, SP205A
203-10.05	Settlement Plate / Monitoring Device	Each	SP203S
203-10.15	Waste Material	C.Y.	
203-10.16	Graded Solid Rock (In-Place)	C.Y.	
203-11	Scaling and Trimming	S.Y.	SP203E
203-15.03	Compacted Clay	C.Y.	D-NSD-31
203-20.01	Channel Substrate	C.Y.	D-NSD-30
203-30-01	Roadway Approaches	L.S.	
203-40.01 to 203-40.04	Rock Anchors (Description)	L.F.	
203-40.05	Drilling	L.F.	
203-40.06 to 203-40.09	Anchor Blocks (Description)	Each	
203-40.10 to 203-40.21	Tie Back Anchors (See description from Roadway Item List)	L.F.	To be used by Geotech for Retaining walls
203-50	Construction of Haul Road	L.S.	RDG 2-601.02

203-50.01	Construction of Haul Road	L.S.	Should not be used by designer unless an adjoining project contains 203-50
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See *Standard Specifications for Road and Bridge Construction Part 203*. Also, see Section 4-203.00, *Excavation and Undercutting*.

7-203.05 COMPUTATIONS FOR ITEM NO. 203-06 WATER

Water will be measured by the thousand gallons (M.G.).

Item Number 203-06 – WATER, should **NOT** be used for dust control purposes. The Standard Specifications for Road and Bridge Construction subsection **104.08** states dust control will be paid with grading items as an incidental item for dust control. Do not add extra quantities to 203-06 for dust control.

Embankment:

$$\frac{\text{Earth embankment (C.Y.)} \times 2.525 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Base material and granular backfill:

$$\frac{\text{Compacted volume (C.Y.)} \times 15.150 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Foundation preparation (Item No. 204-10.01 through 204-10.25):

$$\frac{\text{Width of subgrade (Ft)} \times 0.5 \text{ Ft} \times \text{Length of project (ft)} \times 4 \text{ Gal/C.Y.}}{27 \text{ C.F./C.Y.} \times 1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Subgrade treatment (hydrated lime) (Item No. 302-01.01):

$$\frac{\text{Subgrade treatment volume (C.Y.)} \times 40.400 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Soil-cement base (Item No. 304-01.02):

$$\frac{\text{Volume of base (C.Y.)} \times 15.150 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

Aggregate-cement base (Item Nos. 309-01.01 and 309-01.02):

$$\frac{\text{Volume of base (C.Y.)} \times 15.150 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

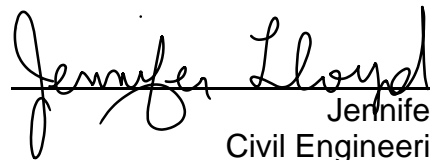
Lime fly-ash base (Item Nos. 312-01, 312-02, and 312-03):

$$\frac{\text{Volume of base (C.Y.)} \times 30.77 \text{ Gal/C.Y.}}{1000 \text{ Gal/M.G.}} = \text{M.G.}$$

7-501.01 COMPUTATIONS FOR UNDERSEALING CONCRETE PAVEMENT

Item Number	Description	Unit of Measurement	Comment
502-01	CLEANING AND SEALING JOINTS	L.F.	
502-01.02	CLEANING JOINTS	L.F.	
502-02	HOLES	EACH	
502-03.01	CEMENT GROUTING	C.F.	
502-03.05	HOT APPLIED FIBER-POLYMER PATCHING MATERIAL	LB.	SP502FRP
502-03.13	CONCRETE PAVEMENT REMOVAL	S.Y.	
502-03.21	PARTIAL DEPTH PCC PAVEMENT REPAIR	S.Y.	RP-J-24; NOT TO BE USED ON THE INTERSTATE/ FREEWAY OR INTERSTATE RAMPS
502-03.24	FULL DEPTH PCC PAVEMENT REPAIR HIGH EARLY (DESCRIPTION)	C.Y.	

502-03.25	FULL DEPTH PCC PAVEMENT REPAIR HIGH EARLY	C.Y.	SP502C
502-03.26	PARTIAL DEPTH PCC PAVEMENT REPAIR HIGH EARLY	S.Y.	SP502C
502-04.01	SAWING CONCRETE PAVEMENT (FULL DEPTH)	L.F.	SP502A;RP-J-23
502-04.02	LOAD TRANSFER DOWELS	EACH	SP502A;RP-J-23
502-04.03	TRANSVERSE TIE- BARS	EACH	SP502A;RP-J-23
502-05	CALCIUM CHLORIDE (TYPE 1)	BAG	
502-06.01	EXPANSION JOINT REPLACEMENT	L.F.	
502-08	PRE-ROLLING	S.Y.	
502-08.01	RESEALING JOINTS (HOT Poured ELASTIC)	L.F.	SP502J;RP-J-25
502-08.02	RESEALING JOINTS (SILICONE SEALANT)	L.F.	SP502J;RP-J-25
502-08.03	SEALING SHOULDER JOINTS	L.F.	SP502J;RP-J-25
502-08.07	SEALING RANDOM CRACKS (SILICONE SEALANT)	L.F.	SP502J;RP-J-24
502-08.10	SAWING & RESEALING JOINTS (SILICONE SEALANT)	L.F.	SP502J
502-08.23	CLEANING AND RESEALING JOINTS AND CRACKS	L.F.	SP502J
502-08.24	CRACK SEALANT	LB.	
502-10	CEMENT-FLY ASH GROUT	C.F.	
502-20	POLYURETHANE MATERIAL	LB.	
502-25	SAWING CONCRETE JOINTS	L.F.	


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