SECTION 301 CLASS I BASE COURSE

MATERIAL		REF. / TESTED BY	PURP.	SAMPLED BY / METHOD	MIN. FREQ.	MIN. QUANT. / CONTAINER	CERT. / DISTR.	SMALL QUANTITY	TYPICAL HANDLING TIME	REMARKS
AGGREGATE BASES (Dedicated stockpile)	Recycled PC Concrete	301.02 1003.03(e) Mat. Lab	Prelim. Source Approval	Dist. Lab S 101 & S 801	1/stockpile*	12 full sample sacks	------	------	21 days	*See S 801 for maximum stockpile quantities.
		301.07(c) Contractor	Quality Control	Contractor S 101 & S 801	*	------	------	------	------	*Must be controlled so that materials placed in stockpile will conform to specifications when tested by the Department.
		301.02 1003.03(e) Dist. Lab	Design*	Proj. Engr. S 101	1/source	6 full sample sacks	-----	-----	4 days	Material must be source approved. *For moisture-density relationships
		301.02 1003.03(e) Dist. Lab	Accept.	Proj. Engr. S 101	1/1000 yd^3	1 full sample sack	-----	-----	4 days	Material must be source approved.
	Sand Clay Gravel	301.07(a) Contractor	Quality Control	Contractor S 101 or S 401	*	-----	-----	------	-----	*Must be controlled so that materials placed in stockpile will conform to specifications when tested by the Department.
		301.02 1003.03(a) Dist. Lab	Design*	Proj. Engr. S 101 or S 401	1/source	6 full sample sacks	-----	-----	10 days	*For moisture-density relationships.
		301.02 1003.03(a) Dist. Lab	Accept.	Proj. Engr. S 101 or S 401	1/1000 yd^3	1 full sample sack	-----	-----	5 days	Must be accepted prior to mixing with cement. If individual components are to be mixed in the pugmill, approval procedure shall be approved by the Materials Engineer Administrator.
	Sand for Sand-Shell Mixture	301.07 Contractor	Quality Control	Contractor S 401	*	-----	-----	-----	-----	*Must be controlled so that materials placed in stockpile will conform to specifications when tested by the Department.
		301.02 1003.03(c)(2) Dist. Lab	Design*	Proj. Engr. S 401	1/source	3 full sample sacks	-----	-----	10 days	*For moisture-density relationships of sand-shell mixture
		301.02 1003.03(c)(2) Dist. Lab	Accept.	Proj. Engr. S 401	1/1000 yd^3	1 full sample sack	-----	-----	4 days	Must be accepted prior to mixing.

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AGGREGATE BASES (Dedicated Stockpile) (Cont'd)	Shell for Sand-Shell Mixture	301.07 Contractor	Quality Control	Contractor S 101	*	------	-----	-----	------	*Must be controlled so that materials placed in stockpile will conform to specifications when tested by the Department.
		301.02 1003.03(c)(1) Dist. Lab	Design*	Proj. Engr. S 101	1/source	6 full sample sacks	-----	-----	10 days	*For moisture-density relationships of sand-shell mixture.
		301.02 1003.03(c)(1) Dist. Lab	Accept.	Proj. Engr. S 101	1/1000 yd^3	1 full sample sack	-----	------	4 days	Must be accepted prior to mixing.
	Stone or Crushed Slag	301.07 Contractor	Quality Control	Contractor S 101	*	------	------	------	-----	*Must be controlled so that materials placed in stockpile will conform to specifications when tested by the Department.
		301.02 1003.03(d),(f) Dist. Lab	Design*	Proj. Engr. S 101	1/source	6 full sample sacks	-----	------	4 days	(QPL 2) *For moisture-density relationships
		301.02 1003.03(d),(f) Dist. Lab	Accept.	Proj. Engr. S 101	1/1000 yd^3	1 full sample sack	------	-----	4 days	------
		1003.03(d) Dist. Lab	I A	Dist. Lab S 101 or S 401	SEE INDEPENDENT ASSURANCE PROGRAM S 701.					

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ASPHALTIC CONCRETE BASES		FOR ALL RELATED MATERIALS, SEE SECTION 501 OR 502 OF THIS MANUAL. SEE INDEPENDENT ASSURANCE PROGRAM S 701.								
ASPHALTIC MATERIAL	Curing Membrane	SEE SECTION 506 OF THIS MANUAL								
	Prime Coat	SEE SECTION 505 OF THIS MANUAL								
CEMENT (Hydraulic)	Types I, I(B), II & IP	1001.01 Mat. Lab	Prelim. Source Approval	Mfr. S 102	1/month/type	1 gal Friction top can or acceptable moisture proof container	------	------	------	(QPL 7) Composited and blended from daily plant samples and submitted for quality control verification.
		301.02 1001.01 Proj. Engr.	Accept.	-----	1/shipment	-----	CD 1 & 7	-----	-----	(QPL 7)
		301.02 1001.01 Mat. Lab	Verif.	Proj. Engr. S 102	1/project/ source	1 gal Friction top can	------	-----	21 days	(QPL 7)
PORTLAND CEMENT CONCRETE BASES		301.01 301.16	Design/ Control/ Accept.	SEE SECTION 706 & 901 OF THIS MANUAL.						
MIXTURE WITH CEMENT AT CENTRAL MIX PLANT	Cement Percent	301.07 Contractor	Quality Control	Contractor TR 436	2/half day*	-----	-----	------	------	*In addition to start-up of plant each day and after each shut down.
		301.16 Proj. Engr.	Accept.	Proj. Engr. TR 436	1/half day	-----	------	-----	1 hr.	-----

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MIXTURE WITH CEMENT AT CENTRAL MIX PLANT (Cont'd)	Gradation	301.07 Contractor	Quality Control	Contractor S 101	1/half day*	1 full sample sack	------	------	------	*When gradation is a requirement of specifications.
		301.16 Proj. Engr.	Accept.	Proj. Engr. S 101	1/day*	1 full sample sack	-----	------	4 hr.	*Gradation will be run when questionable or individual components of SCG are mixed in a pugmill.
	Moisture Content	301.07 Contractor	Quality Control	Contractor S 101, S 401	1/half day*	------	------	------	-----	*In addition to start-up of plant each day and after each shut down.
	Proportions	301.07 Contractor	Quality Control	Contractor TR 436	*	------	------	------	------	*Shall be monitored continuously.
		301.16 Proj. Engr.	Accept.	Proj. Engr. TR 436	1/half day	------	------	------	1 hr.	------
	Pulverization	301.07 Contractor	Quality Control	Contractor S 401	1/half day	-----	-----	------	½ hr.	------
		301.16 Proj. Engr.	Accept.	Proj. Engr. S 401	1/half day	------	------	-----	------	------
BASE MATERIAL ON ROADWAY	Density	301.11 Contractor	Quality Control	Contractor TR 401	*	------	-----	------	------	*Shall test sufficient to ensure specifications will be met.
		301.16(a) Proj. Engr.	Accept.	Proj. Engr. TR 401	1/1000 lin ft/ 2-lane rdwy or 1/2000 lin ft/ shoulder	------	------	------	½ hr.	-----
		301.16(a) Dist. Lab	I A	Dist. Lab TR 401	SEE INDEPENDENT ASSURANCE PROGRAM S 701.					

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BASE MATERIAL ON ROADWAY (Cont'd)	Cross Slope & Grade	301.11 Contractor	Quality Control	Contractor	*	-----	------	------	-----	*Shall take measurements sufficient to ensure specifications are met. Use an approved 10-ft metal static straightedge.
		301.16(e) Proj. Engr.	Verif.	Proj. Engr.	*	-----	-----	------	1/4 hr.	
	Moisture Content	301.11 Contractor	Quality Control	Contractor TR 403	*	------	------	------	------	*Shall test sufficient to ensure specifications are met.
		301.16 Proj. Engr.	Accept.	Proj. Engr. S 101, S 401	1/half day	------	------	------	1 hr.	(TR 403)
	Thickness & Width	301.11 Contractor	Quality Control	Contractor	*	------	-----	------	------	*Shall take measurements sufficient to ensure specifications are met.
		301.16(b) 301.16(c) Proj. Engr.	Verif.	Proj. Engr. TR 602	1/half day	------	------	------	1/4 hr.	Proj. Engr. shall notify the Dist. Lab when section is complete.
		301.16(b) 301.16(c) Dist. Lab	Accept.	Dist. Lab TR 602	1/1000 lin ft/ 2-lane rdwy or 1/2000 lin ft/ shoulder*	------	------	300 lin ft per location	3 days	*See DOTD TR 602. For small quantity, Proj. Engr. documents in field book
SOIL (RAW)	Dedicated Stockpile	301.11 Contractor	Quality Control	Contractor S 401	------	------	------	------	------	Control uniformity of moisture and soil type while stockpile is being built.
		301.02(a) 301.05(a) Dist. Lab	Design*/ Accept.	Proj. Engr. S 401	1/1000 yd^3	6 full sample sack**	------	------	14 days	*For cement content & moisture-density relationships. **When soils are to be blended, each component must meet specifications before blending . Design and final acceptance will be conducted on the blend.
		301.02(a) 301.05(a) Dist. Lab	I A	Dist. Lab S 401	SEE INDEPENDENT ASSURANCE PROGRAM S 701.					
WATER		1018.01 Mat. Lab	Accept.	Proj. Engr. S 303	1/source*	1 qt Plastic bottle	------	------	21 days	*Drinkable water need not be sampled.