

Appendix 1003-D, Additional information for OPSS.MUNI 1003, April 2013

Note: This appendix is not a mandatory part of the standard specification. However, it is written in mandatory language to permit invoking it by reference in the Contract Documents.

OPSS.MUNI 1003 is modified by the addition of the following gradation requirements for fine and coarse aggregates:

**TABLE D-1
OPSS 1003 - Gradation for Fine Aggregate, LS-602**

MTO Sieve Designation	Percent Passing by Mass				
	DFC	HL 1 and HL 3	HL 2	HL 4, HL 8, and MDBC	HDBC
9.5 mm	100	100	100	100	100
4.75 mm	85 - 100	90 - 100	85 - 100	85 - 100	95 - 100
2.36 mm	65 - 95	70 - 100	70 - 90	60 - 100	80 - 100
1.18 mm	48 - 80	50 - 90	50 - 75	34 - 90	50 - 90
600 µm	25-60	30 - 70	30 - 55	17 - 70	28 - 70
300 µm	10 - 35	15 - 40	15 - 35	9 - 40	10 - 40
150 µm	5 - 15	5 - 15	5 - 15	3 - 15	0 - 15
75 µm	0 - 6	0 - 5	3 - 8	0 - 7	0 - 5

Note:
A. The difference between the amount retained between any two consecutive sieves, excluding the 75 µm sieve shall not be less than 5%.

**TABLE D-2
OPSS 1003 - Gradation for Coarse Aggregate, LS-602**

MTO Sieve Designation	Percent Passing by Mass		
	HL 1, DFC, and HL 3	HL 4	HL 8, MDBC, and HDBC
26.5 mm	-	-	100
19.0 mm	-	100	90 - 100
16.0 mm	100	96 - 100	65 - 90
13.2 mm	96 - 100	67 - 86	-
9.5 mm	50 - 73	29 - 52	20 - 55
6.7 mm	-	-	-
4.75 mm	0 - 10	0 - 10	0 - 10