2020 ONTARIO AND QUÉBEC MINI-CORRELATIONS AGGREGATES INCLUDING SUPERPAVE AGGREGATES

Please read the following Mini-Correlation instructions carefully BEFORE you start testing!

- **Testing shall be according to the 2019 MTO instructions within the MS Excel file "SASTPImport.xlsx" MTO provided to your lab in the summer of 2019, except where otherwise stated below for SAMPLES for Mini-Correlation Testing.**
- **Submission of MS Excel data worksheets referred to in the 2019 MTO instructions is not required.**
- **Please Report the Results by the date indicated in the letter from CCIL notifying you that an additional testing program (mini-correlation) is required.**
- **In the event of a conflict between the "SASTPImport.xlsx" instructions and the following mini-correlation instructions, the mini-correlation instructions take precedence.**
- **All test results MUST be reported through your CCIL lab portal at https://portal.ccil.com/ After signing into the portal, all mini-correlation reporting forms appropriate to your lab certification will be accessible under the tab for Reporting Forms. You will be able to enter your test results into the forms and submit to CCIL through the portal.**
- **NEW: Please record the mini-correlation sample identification information found on the sample labels in the "Comments" section of the reporting forms**

SAMPLES FOR MINI-CORRELATION TESTING

- Samples for the mini-correlation are shipped to the laboratory when the laboratory is notified a mini-correlation is required.
- **The mini-correlation samples are pre-prepared to meet the requirements of the appropriate test method and are to be tested as received unless instructed otherwise.**
- Generally, only one sample will be shipped for each test requiring a mini-correlation. Tests for a mini-correlation are not generally carried out in pairs.

ONTARIO AND QUÉBEC MINI-CORRELATION INSTRUCTIONS – AGGREGATES

LS-600:

Dry all aggregate samples to a constant mass at 110 ± 5°C.

LS-602: SIEVE ANALYSIS OF AGGREGATES,

If the problem with your original test results was with the fine aggregate sieves only, your lab will receive a mini-correlation sample of fine aggregate only. If the problem with your original test results was with the coarse and fine aggregate sieves, your lab will receive a combined coarse aggregate and fine aggregate sample.

If you receive a combined coarse and fine aggregate sample, test the entire sample as specified in LS-602.

If you receive only fine aggregate for the mini-correlation sample, when reporting the fine aggregate %passing, use the % passing the 4.75mm given in the following table to calculate the **combined** grading of the fine aggregate. Report the %passing of the fine aggregate combined grading in the reporting form.

Mini sample year	% passing the 4.75mm sieve (coarse aggregate/%fine aggregate split)
2015	46.11%
2016	51.29%
2017	49.08%
2018	44.13%
2019	37.86%
2020	53.10%

Example: Using 2017 %passing the 4.75mm sieve = 49.08%:

Sieve (mm)	Fine Aggregate %Passing	(%Passing 4.75mm) /100	Combined Grading% Passing
4.75	100.0	0.4908	49.08
2.36	77.7	0.4908	38.1
1.18	58.2	0.4908	28.6
0.600	39.1	0.4908	19.2
0.300	23.2	0.4908	11.4
0.150	14.9	0.4908	7.3
0.075	10.75	0.4908	5.28

Report percent passing each sieve, with the exception of 4.75 mm sieve, to the nearest 0.1% on a cumulative basis. Report the percent passing 4.75 mm sieve to 0.01%. Report the percent passing the 75µm sieve to 0.01%. In the event of a conflict between the rounding of the test results specified in these instructions and the Format for reporting test results required by the Type C reporting form in the lab portal, these instructions take precedence.

LS-603: Los Angeles Abrasion

Carry out the test as outlined in the test procedure using Gradation B as given in Table 2. Report the Loss to the nearest 0.1%.

LS-607: Percent Crushed Particles in Processed Coarse Aggregate and ASTM D5821: Percentage of Fractured Particles in Coarse Aggregate

The mini-correlation sample is comprised of a single test sample with all the of size fractions combined. Separate the sample into size fractions according to Table 2, Method B of the test procedure. Do NOT determine the crushed particles of 26.5 mm to 19.0 mm fraction. Assign the same percent crushed value of the next smaller fraction, i.e., 19.0 mm – 13.2 mm, for the 26.5 mm to 19.0 mm fraction. All 5 fractions shall be used to compute the weighted average according to the following gradation.

	Sample Year				
Sieve	**2016**	**2017**	**2018**	**2019**	**2020**
26.5	100.0	100.0	100.0	100.0	100.0
19.0	86.9	82.8	95.4	97.7	97.9
13.2	46.1	45.4	59.3	72.7	48.7
9.5	22.5	22.7	28.8	47.7	14.7
6.7	8.2	8.9	10.8	25.8	3.3
4.75	4.5	4.3	2.6	13.7	0.8

Report the weighted average to the nearest 0.1%.

LS-608 and ASTM D4791: Percent Flat and Elongated Particles

The mini-correlation sample is comprised of a single test sample each, representing all of the size fractions combined. Do not separate into sized fractions. Test the portion of the sample retained on the 4.75mm sieve only. Test as a single fraction and report a Percent Flat and Elongated particles on that basis.

Report the overall weighed average the result to the nearest 0.1%.

LS-629 Uncompacted Void Content of Fine Aggregate,

DO NOT use the specific gravity values determined by your lab. Use the following values.

	Sample Year		
	2018	**2019**	**2020**
Specific Gravity	2.631	2.696	2.685

Report the uncompacted voids to the nearest 0.1%.