Please read the following instructions carefully BEFORE you start testing!

- **Please report the results online using the reporting forms in your lab portal by Friday January 4, 2019.**

- **Results reported after Friday January 4, 2019 may not be included in the analysis, potentially causing a delay in your laboratory's certification.**
- **PLEASE DO NOT enter fictitious results for a test that your lab has decided not to report. If the test will not be reported, please check off the box "Cancel test?" opposite the applicable test description in the online Reporting Form.**

- **PLEASE DO NOT CANCEL a test using the "Cancel test?" feature in a Type D or Soils reporting form unless you do not want your lab to be certified for that test.**

INSTRUCTIONS

2019 CCIL Soil Proficiency Sample Testing

Samples

If you selected soils tests on your lab's application for certification, you should receive 1 pair (2 small bags) of soil samples labelled **1.18S** and **2.18S**. Please Note: These small samples have been placed in one of the large bags of samples 1.18ST or 2.18ST. However, soil samples were not provided if only ASTM D698, or D698 and D1557, were selected on your lab's 2018 application. These samples are in a dry state and therefore no drying should be necessary. Should you find it necessary, dry them to a constant mass at no more than 60°C.

All testing must be carried out in pairs by the same Operator, e.g., the Operator who performs AASHTO T88 analysis on Sample 1.18S must also perform AASHTO T88 analysis on Sample 2.18S. However, the same Operator need not perform every test in which the laboratory intends to participate. For example, Operator A may perform AASHTO T88 analysis and Operator B the ASTM D854 analysis.

Particle Size Analysis of Soils, AASHTO T88:

Prepare individual test samples from samples labelled **1.18S** and **2.18S**. Use a freshly prepared dispersing agent with distilled water and **40 grams** of sodium hexametaphosphate per litre of solution and ensure the pH value of the solution is adjusted to 8 or 9. The soil samples supplied should be dispersed in the stirring apparatus for 10 minutes.

Compute the specific gravity correction factor α and constant K assuming a value of **2.770** for the **specific gravity of soil particles** (**DO NOT use the values determined by your lab**).

Report the Percent passing the 425μm, 75μm, 20μm, 5μm and 2μm sieves to the nearest 0.1 percent.

Liquid Limit, Plastic Limit and Plasticity Index of Soils, ASTM D 4318:

Please determine the Liquid Limit, Plastic Limit and Plasticity Index of soil samples **1.18S** and **2.18S** in accordance with the procedures as outlined in **ASTM D 4318**. Prepare the test specimens as outlined in Section 10.2 – Dry Preparation and determine the Liquid Limit

according to the procedure described in Section 11.0, Method A – Multi-point Liquid Limit. Determine the Plastic Limit using a minimum of two trials and report the mean value. Report th**e Liquid Limit, Plastic Limit and Plasticity Index** to the nearest one decimal, i.e., 0.1 percent.

Specific Gravity of Soils – ASTM D 854:

Determine the specific gravity of soil samples **1.18S** and **2.18S** according to **ASTM D 854**. Carry out the test according to the procedures as outlined in Section 9.3 – Procedures for Oven Dried Specimen.

Perform the test on **minimum of three specimens** and report the **Mean Specific Gravity** of the soil to the nearest three decimal places (0.001). The calculated test results from three specimens (range) should be within 0.02 of each other. If the range exceeds 0.02, the test must be repeated.