



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

AVILES ENGINEERING CORPORATION  
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Houston, TX 77041  
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GEOTECHNICAL

Valid To: November 30, 2019

Certificate Number: 0035.02

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the laboratory's compliance with the A2LA R209 – Specific Requirements for Harris County/Houston, TX: Geotechnical Engineering Testing Laboratory Accreditation Program), accreditation is granted to this laboratory to perform the following tests under the ASTM recommended practice D3740:

<b><u>Test Method:</u></b>	<b><u>Test Description:</u></b>
<b><u>Soils:</u></b>	
ASTM D421	Dry Preparation of Soil Samples for Particle-Size Analysis and Determination of Soil Constants
ASTM D422	Particle-Size Analysis of Soils
ASTM D698	Laboratory Compaction Characteristics of Soil Using Standard Effort
ASTM D854	Specific Gravity of Soil Solids by Water Pycnometer
ASTM D1140	Amount of Material in Soils Finer than No. 200 (75- $\mu$ m) Sieve
ASTM D1557	Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D1883	CBR (California Bearing Ratio) of Laboratory-Compacted Soils
ASTM D2166	Unconfined Compressive Strength of Cohesive Soil
ASTM D2216	Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D2435	One-Dimensional Consolidation Properties of Soils Using Incremental Loading
ASTM D2487	Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D2850	Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils
ASTM D2974, Excluding Method D	Moisture, Ash, and Organic Matter of Peat and Other Organic Soils
ASTM D3877	One-Dimensional Expansion, Shrinkage, and Uplift Pressure of Soil-Lime Mixtures
ASTM D4221	Dispersive Characteristics of Clay Soil by Double Hydrometer
ASTM D4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4429 <sup>1</sup>	CBR (California Bearing Ratio) of Soils in Place
ASTM D4546	One-Dimensional Swell or Collapse of Cohesive Soils
ASTM D4643	Determination of Water (Moisture) Content of Soil by Microwave Oven Heating

<b><u>Test Method:</u></b>	<b><u>Test Description:</u></b>
ASTM D4647	Identification and Classification of Dispersive Clay Soils by the Pinhole Test
ASTM D4718	Unit Weight and Water Content for Soils Containing Oversize Particles
ASTM D4767 <sup>2</sup>	Consolidated Undrained Triaxial Compression Test for Cohesive Soils
ASTM D4943	Shrinkage Factors of Soils by the Wax Method
ASTM D4959	Determination of Water (Moisture) Content of Soil by Direct Heating
ASTM D4972	pH of Soils
ASTM D5084	Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter
ASTM D5298	Measurement of Soil Potential (Suction) Using Filter Paper
ASTM D6276	Using pH to Estimate the Soil-Lime Proportion Requirement for Soil Stabilization
ASTM D6913	Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
ASTM D6951 <sup>1</sup>	Standard Test Method for Use of the Dynamic Cone Penetrometer in Shallow Pavement Applications
AASHTO T92	Determining the Shrinkage Factors of Soils
Tex-145-E	Determining Sulfate Content in Soils - Colorimetric Method

<sup>1</sup> This laboratory meets A2LA R104 – *General Requirements: Accreditation of Field Testing and Field Calibration Laboratories* for these tests.

<sup>2</sup> BSI 1377-7:1990 is used for multistage triaxial tests in conjunction with ASTM D4767



## *Accredited Laboratory*

A2LA has accredited

**AVILES ENGINEERING CORP.**

*Houston, TX*

for technical competence in the field of

**Geotechnical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).



Presented this 7<sup>th</sup> day of November 2017.

A handwritten signature in black ink, written over a horizontal line.

President and CEO  
For the Accreditation Council  
Certificate Number 0035.02  
Valid to November 30, 2019

*For the tests to which this accreditation applies, please refer to the laboratory's Geotechnical Scope of Accreditation.*