



U N I V E R S I T Y of H O U S T O N

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June 15, 2009

Mr. Philip A. Tritico, P.E.
President
Earthwork Solutions, LLC
1155 Dairy Ashford, Suite 520
Houston, Texas 77079

Subject: Verification of Technological Advance and Product

Dear Mr. Tritico:

On behalf of the University of Houston, Cullen College of Engineering, I am pleased to provide you with verification of Earthwork Solutions, LLC (ESOL's) technological advance in connection with earthen fill compaction. The product effectively ties together site conditions and compaction performance, and locates site-specific and lab compaction curves as well as providing compacted soil properties. This is a significant advancement for the industry.

As you know, the University of Houston research team under my guidance and supervision performed independent oversight of your extensive field and lab program, and verification of ESOL's Site Specific Compaction Energy™ (SSCE™) technology. The team utilized the newly developed CIGMAT surface penetrometer (CIGMAT-SP) for soil testing as part of our independent field testing program to verify ESOL's field results. Also, we performed independent laboratory testing to verify the results of the lab portion of the program. This included verification of lab compaction curve locations in accordance with ASTM D 698 and ASTM D 1557 and soil strength parameters. The web based application was verified using our test results.

This is the first engineering advance of its type that provides the actual field compacted densities and moisture contents as well as strength properties for compacted soils. Congratulations as this is a true advance that fills a longstanding need and I am pleased to have verified the test results. This has great potential for immediate use in the engineering and construction industry.

Please contact me if you have any questions, or need further information.

Sincerely yours,

C. Vipulanandan (Vipu), Ph.D., P.E.
Chairman and Professor, Department of Civil and Environmental Engineering
Director of CIGMAT, Director of THC-IT



Texas Hurricane Center
for innovative Technology



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