



# PROJECT REPORT

## PASCO MIDDLE SCHOOL BUILDING EE

<b>EQUIPMENT:</b>	RIC 7000
<b>PROJECT:</b>	PASCO MIDDLE SCHOOL BUILDING EE
<b>LOCATION:</b>	LAND O'LAKES, FLORIDA, USA
<b>PURPOSE:</b>	FOUNDATION PREPERATION FOR SCHOOL DEVELOPMENT

A new 2-story school was to be constructed over loose sands 10 to 20 feet deep. The loose sands (SP and SM) had SPT values of 1 to 6 blows per foot (bpf) in the upper 15 feet. Groundwater was 3 to 5 feet below the ground surface.

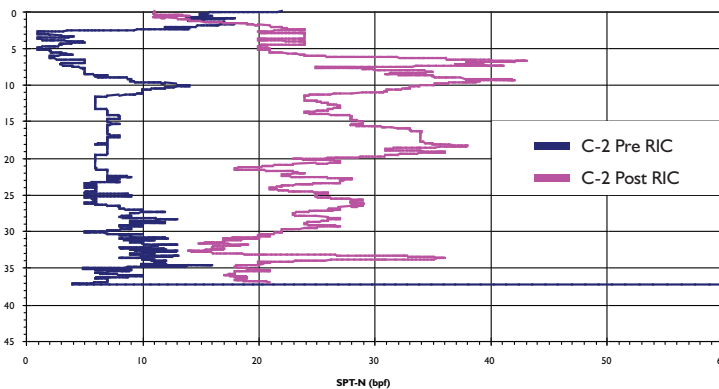
The building footprint of 120,000 square feet included footings designed for 2,500 psf bearing pressure and column loads up to 720 kips with typical column loads less than 200 kips.



RIC 7000 preparing foundations for school

**PROBLEM:** Improving the sands in order to provide 2,500 psf for the lightly-loaded columns was relatively easy. However, additional energy and QC were needed to make sure the 720-kip column footings had adequate support.

**SOLUTION:** The RIC was able to monitor the set of the tamper to see when full densification was achieved. CPT (cone penetration testing) was used to show that the equivalent SPT values were improved as needed for the heavily-loaded footings. RIC increased the N values to greater than 20 bpf to a depth of 25 feet.



RIC improvement depth below ground vs SPT N-Value

Contract Specifications	
<b>General Contractor:</b>	Terra Excavating, Inc., Largo, FL
<b>Owner:</b>	School Board of Pasco County, New Port Richey, FL
<b>Architect:</b>	Michael Graves
<b>Structural Engineer:</b>	Harvard Jolly, Ft. Meyers, FL
<b>Geotechnical Engineer:</b>	Universal Engineering Services, Tampa, FL



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### THE GEOPIER & RIC ADVANTAGE

- RIC improved the insitu sands from N = 1 to 6 bpf to greater than 20 bpf to a depth of 25 feet.
- RIC enabled heavily-loaded footings to be supported by delivering additional energy quickly.
- The RIC onboard computer allowed for correlations between tamper deflection and SPT to be made quickly in the field thereby increasing efficiency and saving time.

**BSP International Foundations Ltd**  
 Claydon Business Park, Gt. Blakenham, Ipswich, Suffolk, IP6 0JD, United Kingdom  
 Tel. +44 (0) 1473 830431, Fax +44 (0) 1473 832019  
 email: sales@bspif.co.uk www.bsp-if.com

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