



## Professional Service Industries, Inc.

December 22, 1992

Mr. Greg Kimmelman  
Rockwell Construction  
2420 North Andrews Avenue Extension  
Suite 200  
Pompano Beach, Florida 33064

Re: Chemical Stabilization  
Home Depot  
Central Parkway South  
San Antonio, Texas  
PSI File Number: 312-25253

Dear Mr. Kimmelman:

As requested, PSI performed a laboratory analysis of untreated and chemically treated soils from the above mentioned site. The scope of services included the following:

1. The securing of soil samples from the chemically treated zone, which was conducted by Land Stabilizers on November 19, 1992.
2. Performance of a swell test on the treated soil sample in general accordance with ASTM D-4546/method B.
3. Report laboratory test results.

### Soil Sampling

A soil boring was conducted and samples obtained on December 16, 1992 by PSI in the treated and untreated areas. The boring was extended to a depth of 10 feet. Soil samples were obtained using a 3.0 inch O.D. Shelby tube sampler. The boring locations were selected by a representative of PSI.

### Laboratory Testing

A soil sample from the treated area was submitted to a one-dimensional swell test in accordance with ASTM designation D-4546/method B on December 17, 1992. The sample used for testing was taken from a depth of 4 to 6 feet. Surcharge loads applied were based upon an

estimated unit weight of 125 pounds per cubic foot of the in-situ soil, one foot of select fill at an estimated unit weight of 135 pounds per cubic foot, and a six inch concrete slab at an estimated pressure of 1.0 pound per square inch.

#### Laboratory Results

One sample in the treated zone was selected for swell testing which resulted in a percentage of swell of 0.4 percent.

TABLE 1  
ONE-DIMENSIONAL SWELL POTENTIAL OF COHESIVE SOILS  
ASTM D-4546/Method B  
(Sample Depth: 4' to 6')

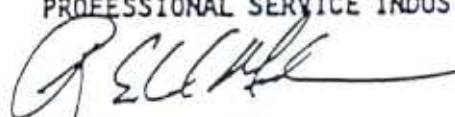
<u>UNTREATED ZONE</u>	<u>TREATED ZONE</u>	
<u>Swell, %</u>	<u>Swell, %</u>	<u>Swell, %</u>
1.65	0.9*	0.4**

- \* 12-day curing period
- \*\* 27-day curing period

Based upon the results shown in Table 1, it appears that swell was reduced by approximately 46 percent at the depth of 4 to 6 feet after 12 days of curing and 75 percent reduction in swell at the same depth after a 27 day curing period.

We appreciate this opportunity to be of service to you. If you have any questions, please contact our office.

Respectfully submitted,  
PROFESSIONAL SERVICE INDUSTRIES, INC.



R. Edward Medrano  
Project Manager



Robert P. Arias, P.E.  
Vice President

cc: Larry Heimer - Vickrey & Associates  
Bob Evans - Home Depot  
Roland Jary - Pro-Chemical Soil Stabilization