5136 SE 141st PL
ID: 1S2E 14AD 00230
3544/4 Lot 22 05-133028

Geotech Solutions Inc.

August 7, 2007

palace-07-03-consult

GT-001768

Palace Construction Corporation
8733 SE Division Street
Portland, OR 97266
kevinpartain@palaceconstruction.com

GEOTECHNICAL EVALUATION OF COMPLIANCE
Powell Butte Terrace - 5136 and 5108 SE 141st Place, and 14148 SE Mitchell

As authorized, this letter summarizes our evaluation of the subject properties relative to compliance with the geotechnical recommendations for the site. We have provide previous geotechnical investigations of the development (report dated May 20, 2002) as well as construction observation of mass grading and structural fills on many of the lots (compliance letter dated September 8, 2004). The subject properties include single family residences that are a few years old. 5108 SE 141st Place and 14148 SE Mitchell have rockery walls retaining landscaping, some of which are downslope of footings. Our scope of work included the following:

- Review our records regarding vicinity subsurface conditions and grading observations.
- Complete a site visit to observe the exterior condition of the foundation stemwalls and observe for settlement features at 5124, and observe rockeries at 5108 and 14148.
- Complete one hand auger to a depth of up to 5 feet adjacent to 5124.
- Evaluate presence of and general suitability of materials for perimeter foundation drains and drainage ditches (with ditch location identified by Palace) at 5124.
- Probe soils adjacent to the foundations at 5124 and rockeries at 5108 and 14148 to evaluate stiffness.
- Write a letter regarding the adequacy of encountered soils at 5124 to support the foundations, and suitability of observed perimeter drainage, grading, and drainage ditches (as present), as well one letter each regarding the suitability of the rockeries at 5108 and 14148.

5136 SE 141st Place - # 05-133028 RS

We observed the house perimeter ground surface and stem wall, and shallow subsurface conditions along the downhill/south side of the house. The house perimeter stem walls included minor shrinkage cracks typical near crawl space vent corners, but no cracking indicative of footing settlement. Siding appeared straight and undistorted, and Palace Construction reported no observation of drywall cracks, windows or doors sticking in frames, or other settlement or moisture intrusion related features. The ground surface was hardscaped or sloped away from the stemwalls. One hand auger exploration at the southwest building corner (the most likely fill area based on terrain) encountered 2 feet of soft silt fill underlain by stiff silt. Angled probes indicated the foundation extended to a depth of at least 2 feet. Probes indicated the presence of perimeter drainage, and the ditch behind the house is configured to redirect surface runoff away from the house.

The adjacent rockery to the south was 8 feet from the corner, and less than 3 feet high, resulting in the footing base being below a 2H:1V projection up from the rockery heel. The rockery consisted of generally 18-inch basalt rock and was suitably battered. The rockery appeared to be backfilled with silt. No distortions of the wall or adjacent ground were noted.

05-133028 RS - Revised

1112 7th Street, Oregon City, OR 97045 p 503.657.3487 f 503.722.9946

Based on the preceding observations, and our previous on-call observations at this development in general, it is our opinion that the intent of the geotechnical recommendations for grading, footing support, drainage and the landscape rockery have been met for this address.

5108 SE 141st Place - permit # 05-100362 RS

A rockery landscape wall is present at the southern side and southwestern corner of the lot abutting the sidewalk. One hand auger exploration at the southwest building corner (the most likely fill area based on terrain) encountered 2.5 feet of soft silt fill underlain by stiff silt. Angled probes indicated the foundation extended to a depth of at least 2.5 feet. The adjacent rockery to the south and southwest was 6 feet from the building corner at its closest point, and less than 4 feet high. This and the depth of the footing result in the footing base being below a 2H:1V projection up from the projected rockery heel. The rockery consisted of generally 24-inch basalt rock and was suitably battered. The rockery appeared to be backfilled with silt. No distortions of the wall or adjacent ground were noted.

Based on the preceding observations, and our previous on-call observations at this development in general, it is our opinion that the intent of the geotechnical recommendations for grading, footing support, and the landscape rockery have been met for this address.

14148 SE Mitchell – permit # 05-100361 RS

Rockery landscape walls are present at the western and eastern perimeter of the building. Rockery heights were less than 3.5 feet, and were not within 6 feet below the building. Angled probes indicated footing depths were at least 2 feet. These observations indicate that the footing bases are below a 2H:1V projection up from the projected rockery heel. The rockeries consisted of generally 24-inch basalt rock, and were suitably battered. The rockery appeared to be backfilled with silt. No distortions of the wall or adjacent ground were noted.

The garage slab did appear to have settled ½ to ¾" relative to the abutting stemwall, likely related to underslab fill settlement and not related to the adjacent perpendicular rockery. No footing stemwall cracks or distortion were observed.

Based on the preceding observations, and our previous on-call observations at this development in general, it is our opinion that the intent of the geotechnical recommendations for grading, footing support, and the landscape rockery have been met for this address.

Limitations

We have prepared this report for use by Palace Construction for this project only. The information herein could be used for bidding or estimating purposes but should not be construed as a warranty of subsurface conditions. We have made observations only at the aforementioned locations and only at the stated depths. These observations do not reflect soil types, strata thicknesses, water levels or seepage that may exist between observations. If any changes are made to the anticipated locations, loads, configurations, or structures on the property, our recommendations may not be applicable, and we should be consulted.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with the generally accepted practices in this area at the time this report was prepared. No warranty, expressed or implied, is given.

1112 7th Street, Oregon City, OR 97045 ph 503.657.3487 fax 503.722.9946

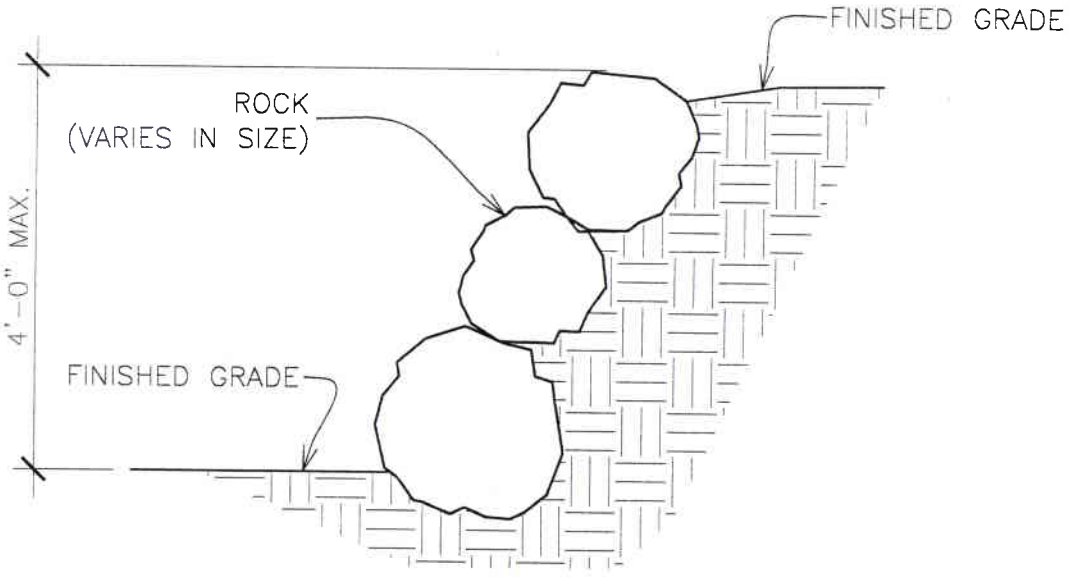
We appreciate the opportunity to work with you on this project. Please contact us if you have any questions.

Sincerely,

Don Rondema, MS, PE, GE
Principal

1112 7th Street, Oregon City, OR 97045

ph 503.657.3487 fax 503.722.9946



ROCK WALL AT POWELL BUTTE (TYPICAL)

SCALE: NTS