Stevens Ferrone & Bailey Engineering Company, Inc

Geotechnical Engineering
Engineering Geology
Storm Water Management
Construction Observation & Testing Services

September 25, 2013

Mr. Derek Pampe
DeNova Homes
1500 Willow Pass Court
Concord, CA 94520

Re: Supplemental Grading Recommendations
Vine Hill Residential Development, Martinez, CA
SFB Project No.: 155-53

Mr. Pampe:

In accordance with Carlson, Barbee & Gibson's (CBG) request, Stevens, Ferrone & Bailey Engineering Company, Inc. (SFB) has reviewed the geotechnical aspects of the recent grading plan associated with the Tentative Map for the proposed Vine Hill residential development in Martinez, California. Previously, SFB performed a preliminary geotechnical investigation for the project and the results were presented in our October 12, 2011 report.

We previously recommended all cut and fill slopes over 5 feet in height be no steeper than 3:1 (horizontal to vertical) due to the high expansion potential of the onsite clayey soils. Based on our review of the recent grading plan, however, we now understand that substantial cuts will occur in the onsite sandstone materials resulting in fill materials with low expansion potential. Therefore, we now recommend that fill and cut slopes composed of materials of low expansion potential have slopes no steeper than 2:1. We anticipate that most, if not all, of the proposed cut and fill slopes will be composed of materials of low expansion potential. Slopes oriented at 2:1 and composed of soils with high expansion potential can still be used at the site provided the slopes are no higher than about 2:1. We recommend SFB be onsite during the grading operations to assess the resulting cut and fill materials types and provide supplemental recommendations as needed.

The opinions, conclusions, and recommendations provided in this letter are meant to supplement our previous report; all previous conditions and limitation apply.

If you have any questions or need additional information, please call our office.

Sincerely,

Stevens, Ferrone & Bailey
Engineering Company, Inc.

Kenneth C. Ferrone, P.E., G.E., C.E.G.
Civil/Geotechnical Engineer
Certified Engineering Geologist

Copies: Addressee (1 by email)
Mr. Will Carlson (CBG, 1 by email)