

ROGERS E. JOHNSON & ASSOCIATES
CONSULTING ENGINEERING GEOLOGISTS
41 Hangar Way, Suite B
Watsonville, California 95076-2458
e-mail: reja@bigfoot.com
Ofc (831) 728-7200 • Fax (831) 728-7218

26 July 2004

Job # G99016

Richard McAdams
5307 Reams Run Road
Durham, NC 27713

Subject: Lot 3, Chelsea Place, Santa Cruz, California
Santa Cruz County APN 067-171-054

Dear Mr. McAdams:

As required by the County of Santa Cruz Planning Department, this letter report updates our geologic report of 28 September 1999 which addresses two building sites on the subject lot; a single-family residence and detached "mother-in-law" unit (Home Site # 2). The chief purposes of our updated investigation were to determine if there had been any changes in the geologic conditions on the subject property and to review the engineering plans for conformance with the recommendations in our report.

Our scope of work included review of our 1999 report, discussions with you and other project professionals, site reconnaissance, review of the project grading and sewage disposal plans and preparation of this letter report.

Our recent site reconnaissance revealed that there have been no discernable changes in geologic conditions at the property since we did our investigation in 1999. We did, however, note that the staked location of the leach field for the secondary unit (Home Site # 2) lay directly above the single-family residence on the neighboring downslope property. Because of possible piping and/or slope stability issues, this is not an acceptable site for the leach field.

This issue has been resolved by moving the leach field site further up slope, away from the neighboring home. The attached map, prepared by Ifland Engineers, shows the revised location of the leach field for Home Site # 2.

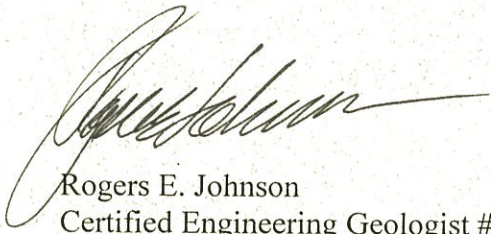
The drainage plan prepared by Ifland Engineers shows that most of the storm water runoff will be conveyed off the property via the access road, as shown on the attached map. This proposed storm water drainage system conforms to the recommendations of our geologic report.

All other recommendations in our 22 September 1999 report should be followed. Notably, the foundations for both residences should be designed to accommodate possible ridge top shatter as described in our 1999 report (4 to 6 inches of horizontal displacement).

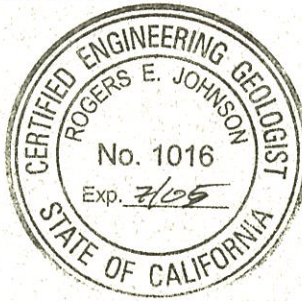
This concludes our updated report. Please feel free to contact us if you have any questions.

Sincerely,

ROGERS E. JOHNSON AND ASSOCIATES



Rogers E. Johnson
Certified Engineering Geologist # 1016



References:

Ifland Engineers, Inc., 17 January 2003, Driveway Plan and Profile for Steve McAdams
(Received by REJA on 12 July 2004), Scale: 1" = 140' (reduced).

Johnson, Rogers E. And Associates, 1999, Geologic Report Addendum, Lot 3, 52-PM-28,
APN 067-171-054, Chelsey Place, Santa Cruz County, California.

attachment

copies: addressee (5)
Ifland Engineers, Inc.; Attn: Duane Smith

