

Debbie Beadle

From: Evan Maxim
Sent: Wednesday, April 24, 2013 4:31 PM
To: Kamuron Guroi; Susan Cezar
Cc: Debbie Beadle; Melonie Anderson
Subject: FW: CAO - Interflow and landslide hazard areas
Attachments: E3RA Inteflow.pdf

Public Comment

*Evan Maxim
Senior Planner
City of Sammamish
425.295.0523*

Effective March 1st, my email address is: emaxim@sammamish.us. Emails sent to my old email address are being forwarded temporarily, however please update your email address for me accordingly.

From: Greg Krabbe [mailto:gkrabbe@comcast.net]
Sent: Wednesday, April 24, 2013 4:31 PM
To: Nancy Whitten
Cc: Ramiro Valderrama-Aramayo; John Curley; Don Gerend; John James; Tom Odell; Tom Vance; Kamuron Guroi; larrymartin@dwt.com; Evan Maxim; "Brent Carson"; 'Martin, Larry'; jetosti@msn.com
Subject: CAO - Interflow and landslide hazard areas

Councilmember Whitten,

At the last council work session on the CAO review, you asked about the effects of development and interflow or groundwater on areas within the no disturbance boundary that are also classified as Landslide Hazard areas. Attached is a letter from our Geotechnical engineer, Dean White, that addresses this concern. Dean has significant experience with slope stability issues throughout the Puget Sound region.

Greg Krabbe
GFK Consulting Inc
425 347 2898

EXHIBIT NO. CC 34

9802 29th Ave W Ste B102
Everett, WA 98204
425-356-3372
425-356-3374 fax

E3RA

April 24, 2013
E12023

KKBL No. 575
355 Park Place Center, Ste. G11
Kirkland WA 98033

Attn.: Jim Tosti

Subject: **Slope Remediation Letter**
Propst Residential Development
Sammamish, Washington

Dear Mr. Tosti:

E3RA, Inc. (E3RA) has been asked to comment on the issues related to the proposed hillside development at your project site located in Sammamish, Washington. Our service as the geotechnical engineer for the referenced project and our experience with hillside grading across the western United States over the past 25 years qualifies us to make the following statements, which we understand will respond to some questions raised by the reviewing authorities:

- Residential development is often completed in areas with landslide hazard designations. The landslide hazard designation criteria are relatively conservative since they have their roots in agricultural slope classification criteria. If earthwork is completed by a competent contractor and with the involvement of a qualified and experienced geotechnical engineer, the process typically serves to mitigate the landslide hazard and erosion of the site is significantly reduced or eliminated relative to pre-development conditions.
- Contemporary drainage design criteria results in the collection and control of the vast majority of rainfall on a developed site. Since the stability of hillsides in western Washington is primarily a concern when rainfall is not controlled, the control of the stormwater which is part of the development of the site leads to the improvement of the stability of the remaining slopes on a developed site.
- The portion of the rainfall on a developed site which is not controlled by the stormwater system and enters the groundwater regime can remain a concern with respect to stability of slopes (as interflow). However, the geotechnical engineer involved with the grading as discussed above typically is able to identify the areas in the subsurface where the groundwater is expected to flow and subsurface drainage is installed to mitigate the hazard.

April 24, 2013
E12023 Propst Slope Letter

E³RA, Inc.

In conclusion, with adequate geotechnical investigation and consideration, development in landslide hazard areas can be accomplished safely in most instances.

Respectfully submitted,

E3RA, Inc.



Dean M. White P.E.
Principal Engineer



4-24-13