March 26, 2012

BRADIEY I CARD, P.E. DAIFR NORFL PE SCOTT GARLAND, P.E.

LOUIE W. WISHERT, JR., PLS RICHARD L WEHR, PLS JOSEPH W. BAKER, PLS

Mr. Mark Berger 13524 174th St. Ct. E. Puyallup, WA 98374

> 1121 Lower Peoh Point Road, Cle Elum, Washington Re:

Dear Mr. Berger:

On March 14, 2012, geotechnical engineer from PLSA examined your property located on the west side of the referenced address. Unfortunately you were not able to be present. A nearly level area extends north from the Lower Peoh Point Road to the top of a slope averaging a rise of approximately 1 foot vertical to 1.5 feet of horizontal distance. This is typically referred to as a one and a half to one slope or (1.5 to 1). Total height of the slope is estimated to be 50 feet. Estimated height of the slope was confirmed using a satellite photo of the property. See enclosed photo. The nearly level area is clear of trees and the slope has a substantial growth of coniferous trees estimated to be as much as 100 years old. Most of the trees are straight and vertical which is indicative of lack of slope movement. Only three of the trees appeared to be leaning or slightly bent and don't appear to be indicative of slope movement.

The neighbor living at the referenced address reported that their house was constructed n 1989, 23 years ago. The PLSA engineer was allowed to inspect the property. Their house is constructed approximately 25 feet back from the top of the slope, which had been cleared of vegetation at that location. A large stone masonry fireplace and chimney extending more than two stories is located between the north wall of the house and the top of the slope. The house and chimney appeared to be in excellent condition with no evidence of cracks or settlement.

Assuming a 50 foot high, 1.5 to 1 slope, the top of the slope would extend back 75 feet from the slope toe. Slopes of 2 to 1 have proved to be stable in the cohesionless soils typical of the Lower Peoh Point location. At 2 to 1, the top of the slope would be 25 feet further back than the present top of slope location. Therefore, construction setback for slope stability should be a minimum of 25 feet back for the existing top of slope. Construction of a deeper footing or basement is recommended since this will have the effect of further reduction in slope height and thus providing for enhanced slope stability.

Sincerely,

Brad Card, P.E. Principal Engineer

BC:jc **Enclosure**  PLSA

## **ENGINEERING & SURVEYING**

BRADLEY J. CARD, P.E. DALE R. NOBEL, P.E. SCOTT GARLAND, P.E. LOUIE W. WISHERT, JR., PLS RICHARD L. WEHR, PLS JOSEPH W. BAKER, PLS

Federal Tax ID #91-1014702

MARK BERGER 13524 174TH ST. CT. PUYALLUP, WA 98374

4/11/2012

PLSA Invoice No. 1365

## 1121 LOWER PEOH POINT RD, CLE ELUM

**SERVICES DURING FEBRUARY AND MARCH 2012** 

SITE INSPECTION SLOPE STABILITY LETTER 890.00

PLSA Job Number 12038

\$890.00

## PLSA Engineering & Surveying

1120 W. Lincoln Ave. Yakima, WA 98902

## **Statement**

Date

6/1/2012

To:

MARK BERGER 13524 174TH ST. CT. PUYALLUP, WA 98374

			Account #	Amount Due	Amount Enc.
		12	2038 CLE ELUM	\$903.35	
Date	Transaction			Amount	Balance
04/30/2012	Balance forward  12038- Due 06/01/2012. Finance	ce Charges on Overdue	Balance	13.35	903.35
CURRENT	1-30 DAYS PAST DUE	31-60 DAYS PAST DUE	61-90 DAYS PAS DUE	T OVER 90 DAYS PAST DUE	Amount Due
13.35	0.00	890.00	0.00	0.00	\$903.35