ABPB CONSULTING

GEOTECHNICAL/EARTH SCIENCES

PAUL BONIFACI, P.E.G.
ANIL BUTAIL, P.E.

12525 Willows Road, Suite 80
Kirkland, WA 98034
Phone: 425-820-2544
Fax: 206-418-6448

March 18, 2015
Project No. 1379

Mr. Leo Suver
Steve Burnstead Construction
11980 NE 24th St., Ste. 200
Bellevue, Washington 98005

Subject: Geotechnical Review
Portofino
NE 43rd Street
Kirkland, Washington

Dear Mr. Suver:

As requested, we reviewed conditions at the Portofino project site in Kirkland. The project is located at the uphill end of NE 43rd Street, which heads uphill from Lake Washington Boulevard in Kirkland. It is proposed to construct a single family residence on each of the nine lots which are included in this project. The proposed layout is shown on the topographic map (January 28, 2015) and short Plat Map (January 24, 2015), Portofino II, prepared by MS Webb.

A geotechnical report dated July 10, 1997 was previously prepared for this site by Geotech Consultants. The lot configurations were different than those currently proposed. Ten test pits were excavated on the property and indicated that the site is generally underlain by medium dense silty sands near the surface followed by dense glacial till soils at depths of 3 to 4 feet below the ground surface. The report provided recommendations for site preparation, grading, and design and construction of foundations, as well as an analysis of the slope stability.

We were requested to evaluate the prior report and conduct additional exploration so as to verify the consistency of the soil conditions on the property.

For this purpose, we excavated two additional test pits, Test Pits TP-11 and TP-12, at the locations shown on the attached Figure 1, which also shows the locations of previous test pits. The test pit logs are attached as Figures 2 and 3.

The test pits showed soil conditions similar to those previously reported. Below a surface layer of medium dense silty sand, the test pits encountered dense glacial till soils. No groundwater was encountered.

Based on our review of the previous work and our current field exploration, it is our opinion that the recommendations contained in the earlier Geotech Consultants report are appropriate and may be followed in design and construction.

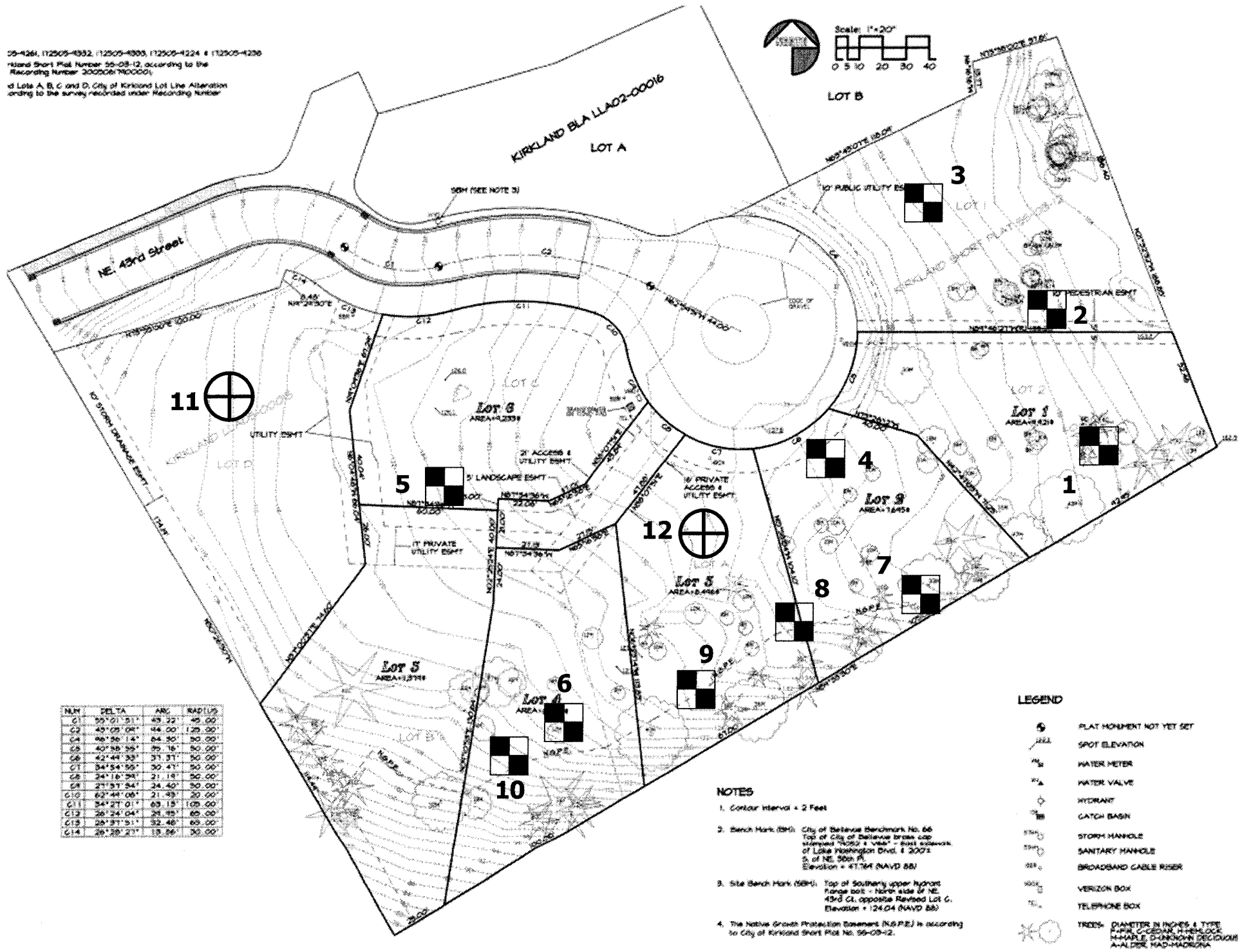
Please call if you have any questions regarding our exploration or review comments.

Sincerely yours,

ABPB CONSULTING

Paul K. Bonifaci, P.E.G.
Project Engineering Geologist

Anil Butail, P.E.
Principal Engineer



NUM	DELTA	ARC	RADIUS
C1	55°01'51"	49.22'	45.00'
C2	45°05'08"	94.00'	125.00'
C4	96°36'14"	84.30'	50.00'
C5	40°38'35"	35.16'	50.00'
C6	42°44'33"	37.37'	50.00'
C7	34°54'55"	30.47'	50.00'
C8	24°16'39"	21.19'	50.00'
C9	27°37'54"	24.40'	50.00'
C10	62°44'08"	21.49'	20.00'
C11	34°27'01"	63.15'	105.00'
C12	26°24'04"	29.95'	65.00'
C13	28°37'51"	32.48'	65.00'
C14	26°28'27"	13.86'	30.00'

NOTES

1. Contour Interval = 2 Feet
2. Bench Mark (BM): City of Bellevue Benchmark No. 66 Top of City of Bellevue brass cap stamped "N052 & V66" - East sidewalk of Lake Washington Blvd. & 200'± S. of NE 58th Pl. Elevation = 47.764 (NAVD 88)
3. Site Bench Mark (SBM): Top of Southerly upper hydrant flange bolt - North side of NE 43rd Ct. opposite Revised Lot C. Elevation = 124.04 (NAVD 88)
4. The Native Growth Protection Easement (N.G.P.E.) is according to City of Kirkland Short Plat No. 55-03-12.

LEGEND

- PLAT MONUMENT NOT YET SET
- SPOT ELEVATION
- WATER METER
- WATER VALVE
- HYDRANT
- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- BROADBAND CABLE RISER
- VERIZON BOX
- TELEPHONE BOX
- TREES: DIAMETER IN INCHES & TYPE F-FIR, C-CEDAR, H-HEMLOCK, M-MAPLE, D-UNKNOWN DECIDUOUS, A-ALDER, MAD-MADRONA

LEGEND

TP-1 Approximate Location of Test Pits by Geotech Consultants (7-97 and 2003)

TP-11 Approximate Location of Test Pits by ABPB Consulting (3-15)

Ref: Topographic Survey and Lot Lines, MSWebb, dated 1-28-15

ABPB Consulting
Geotechnical Consultants
Kirkland, Wash.

Exploration Location Plan
Portofino Project
Kirkland, Washington

Proj. No. 1379	Date : March 2015	Figure 1

Project :	**Portofino Project**		Test Pit TP - 11
Project No.	1379	**Date :** 3-13-15	
Client :	Burnstead	**Elevation**	
Location:	Kirland	**Logged By:** AB	

SUBSURFACE PROFILE			SAMPLE			Field Strength Tests	**Laboratory Results**
Depth (ft)	Soil Lithology	Soil Description	Water Level	Sample	USCS		Moisture Content
0		Silty Sand: (6 inches Topsoil and organic silty Sand) Reddish tan to tan brown , silty fine to medium SAND, with some gravel, loose grading to medium dense, slightly damp			SM		
-1							
-2							
-3							
-4		Silty Sand: Gray brown, silty SAND with gravel, dense to very dense, moist (Glacial Till) No groundwater encountered			SM		
5							

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Date : March 2015	Project Name : Portofino	Figure 2

Project :	**Portofino Project**		Test Pit TP - 12
Project No.	1379	**Date :** 3-13-15	
Client :	Burnstead	**Elevation**	
Location:	Kirkland	**Logged By:** AB	

SUBSURFACE PROFILE			SAMPLE			Field Strength Tests	**Laboratory Results**
Depth (ft)	Soil Lithology	Soil Description	Water Level	Sample	USCS		Moisture Content
0		Silty Sand: (6 inches Topsoil and organic silty Sand) Reddish tan to tan brown , silty fine to medium SAND, with some gravel below 2 feet, medium dense, slightly damp			SM		
-1							
-2							
-3							
-4		Silty Sand: Gray brown, silty SAND with gravel, dense to very dense, moist (Glacial Till)			SM		
-5		No groundwater encountered					

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Date : March 2015	Project Name : Portofino	Figure 3