December 3, 2010

Angela Freudenstein

Alaskan Way Viaduct Replacement Project

Wells Fargo Building

999 Third Avenue, Suite 2424

Seattle, WA 98104-4019

Dear Ms Freudenstein:

I-070-001

Re: Comments to the 2010 SDEIS SR-99 Alaskan Way Viaduct Replacement Project.

Erroneous statement in Appendix P Earth Discipline Report: 4.4 Geologic Hazards

Page 34 and 35, quote: "The City of Seattle has developed regulations for
environmentally critical areas and associated maps (Seattle 2002)

- 1. On December 11, 2006 the Central Puget Sound Growth Management Hearing Board ordered the City of Seattle to comply with RCW 36.70A.040(2), 170(1) and 130(1), after finding that the City of Seattle had erroneously failed to designate geologically hazardous areas using the Best Available Science. City Officials had fail in their duty and obligation to protect the public, all the while advocating for a bored tunnel and other structures within these hazardous zones without fully disclosing their location or the implications to the dangers to the public.
- 2. On February 27, 2007 The Mayor of Seattle proposes a Council Bill to the City Council that requires Seattle to designate the Seattle Fault Zone, Elliott Bay Tsunami and Lahars as Geologic Hazards. Issues raised in the Final Order and Decision of the Central Puget Sound Growth Management Hearing Board.
- 3. The records show that on April 2, 2007 the City of Seattle Amended the Environmentally Critical Areas Ordinance 122050 Related: Clerk file 309864 to designate the Seattle Fault zone area, areas susceptible to tsunami inundation and Volcanic hazards. This was to Complied with the order of Dec 11, 2006 by the Central Puget Sound Growth Management Hearing Board. (April 2, 2007, Critical Area Amended Ordnance 122050 Attached).

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The bored tunnel is north of the Seattle Fault Zone (as defined by the 2007 Seattle Fault Zone map). Geologic explorations have not shown evidence of an active fault splay through the tunnel alignment therefore the bored tunnel will not be designed for fault rupture.

The average recurrence interval for large earthquakes on the Seattle Fault that are capable of generating large tsunamis is 3,000 to 5,000 years. This recurrence interval is longer than the ground motion return period required in the seismic codes applicable to this project.

Final design of the proposed action will take into account earthquakerelated issues based on applicable seismic design codes and reasonably expected events that could occur during the life of the project. December 3, 2010 AWV 2010 SDEIS Page 2

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- a. Excerpts from The Pacific Northwest Center for Geologic Mapping Studies show that "The City of Seattle now has the most detailed Geologic map and digital database in the country", (ESS document and 2007 Seattle Fault Map are Attached)
- b. The 2007 City of Seattle Fault Zone Map and USGS Map clearly shows the Northern Seattle Fault Zone approximately 1 miles further north than the 1999 Johnson Map in the 2010 DEIS Appendix P WSDOT is using in its plans for the Bored tunnel.
- c. "WSDOT "APPENDIX P Earth Discipline Report, October 2010" quote "...surface rupture of this fault zone occurred as recently as 1,100 years ago with as much as 22 feet of vertical displacement...Also, fault splays in the northern portion of the zone appear to be the most recently active and capable of rupturing the ground surface, resulting in several feet of vertical offset."
- 4. The WSDOT Bored Tunnel will now be located in and across a very dangerous Seattle Fault Zone as defined by the USGS and Seattle Fault Map 2007 which is the latest and best Best Available Science is consistent with the Growth Management Hearing Board's imperative that the City use the Best Available Science when making decisions and planning projects.
- 5. WSDOT has failed to follow RCW 36.70A.040 and 170 the Best Available Science by not using the most up-to-date Seattle Fault Maps. The State is ignoring the City of Seattle 2007 Amended Critical Areas Ordinance that now also includes volcanic hazard areas.
- 6. The State has a duty and obligation to protect the public from potential injury or damage that may occur if development is permitted in geologically hazardous areas without protections and designs standards that are appropriate for such things as Earthquake Fault Zones or Tsunamis Hazard Areas. (2003 Tsunami Hazard Map of the Elliott Bay is listed on in page 37, October 2010) quote: "...a 7.3 to 7.6 earthquake caused from a rupture of the Seattle Fault may result in a wave that would inundate much of the waterfront in excess of 6 feet...

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In summary, I believe there is a lack of oversight and concern for the public's safety by our public officials, both State and the City of Seattle. It should be noted that the City and State are partners in support for the Waterfront tunnel and both have tried for reasons yet to be known to ignore these seismic hazards and there locations in the 2010 SDEIS.

Sincerely,

Eugene Hoglund 3503 30<sup>th</sup> Ave West Seattle WA 98199

cc:

Mike McGinn, Mayor, City of Seattle

