

## VandenBerghe, Alissa (Consultant)

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**From:** Donahue, Jeff  
**Sent:** Friday, March 27, 2009 2:33 PM  
**To:** Lacy, Paul  
**Cc:** Williamson, Alec  
**Subject:** Survey Control set by DEA for the Alaskan Way Viaduct.  
**Follow Up Flag:** Follow up  
**Flag Status:** Red

Paul,

There is up to 0.50 feet difference in Northing and up to a 0.10 feet difference in Easting of the control set by DEA in the Alaskan Way Viaduct project vicinity compared to the control set by Geographical Services and the City of Seattle (COS). According to DEA's record of survey 8 WSDOT stations and 5 (COS) GPS stations were held to constrain the "project box" around the project vicinity. DEA's adjustment has changed the coordinate values from the WSDOT GPS and there is **no** favorable comparison between DEA and WSDOT and the COS.

If a need for a survey is requested to resolve Right of Way issues for the bored tunnel I recommend using DEA's control as a guide only and not use it for primary or tertiary control to set new control by. Even though DEA records state they are on the same Horizontal Datum of 83/91 (adj.) the coordinate values are based on a base station adjustment and not the Horizontal datum based from Washington State Reference Network (WSRN) 83/91(adj.).

The difference in horizontal coordinate values from control set by DEA compared to WSDOT's and COS's control has been verified by Patrick Hastings, COS Chief Surveyor.

The difference in the vertical datum is negligible. (0.003 feet).

Jeff