

VandenBerghe, Alissa (Consultant)

From: Donahue, Jeff
Sent: Monday, March 30, 2009 11:33 AM
To: Lacy, Paul
Cc: Williamson, Alec; Iverson, Kurt
Subject: RE: DEA control
Follow Up Flag: Follow up
Flag Status: Red

Paul,

I just spoke with City of Seattle's Parick Hastings, PLS, regarding the method DEA arrived at holding horizontal control. The primary control DEA held consists of 8 WSDOT control, 5 C.O.S. and 2 NGS points. The 5 COS points were adjusted in a 1993 Parametrics survey using HARN control. The network DEA established was adjusted holding these points with a least squares adjustment program. DEA's horizontal datum is 83/91. There is some question to the positional accuracy of the HARN points that were established and used in 1993.

Kurt, could you give me feedback on this?

My experience with the way DEA established their network says that it will compare favorably with today's surveyor verifying the positions of DEA's held primary and tertiary control points using the Washington State Reference Network (WSRN). However, I would not retrace it to create the primary and tertiary control needed for all the surveys that will describe, monitor and build the bored tunnel project.

My recommendation to you is to do all survey work holding the network established by WSRN in horizontal datum 83/91 and comparing the work to DEA's survey.

Jeff

From: Lacy, Paul
Sent: Monday, March 30, 2009 8:54 AM
To: Donahue, Jeff
Cc: Williamson, Alec; Iverson, Kurt
Subject: RE: DEA control

Jeff,

The city uses their own datum. They have some adjustments.

Talk to Kurt Iverson. He has worked with the city establishing control points and I think is up to speed on the adjustments.

Paul

From: Donahue, Jeff
Sent: Friday, March 27, 2009 3:15 PM
To: Lacy, Paul
Cc: Williamson, Alec
Subject: DEA control

6/23/2009

Paul,

Sorry about the first e-mail regarding DEA's control, but I checked my work again and found out that the current horizontal datum on the WSDOT published control sheets are not the 83/ 91 (adj) that DEA used. Instead it is 83/07. So now when I used the 83/91 (adj) datum to compare DEA's control to Geographical Services control there **is** a favorable comparison. I am waiting for Patrick Hastings to get back to me regarding his comments about the differences DEA had with City of Seattle's control. Maybe Pat used the wrong datum as well.

Jeff