Bonneville Power Administration Geodetic Control Data Sheet

Station: WM020 (220) Project: Wallula-Smiths Harbor-McNary Section: SW 1/4 30 Township: 7 North Range: 32 East Meridian: Willamette County: Walla Walla **USGS Quad:** State: WA Zangar Junction, Washington Surveyor: M R Heidecke Date Surveyed: July, 2001

Instrument:

The horizontal coordinates and orthometric elevation were established by GPS observations using six Trimble 4000 SSI dual frequency receivers with Compact L1/L2 antennae with ground plane.

Adjustment:

The Basis of Coordinates for this survey is the Washington State Coordinate System, South Zone, NAD 83 (1998). The horizontal component of the least squares adjustment was constrained by holding NGS Stations B 340 (A), B 502 (B), PENDLETON (B), STANFIELD EAST BASE RESET (B), and BURDEN (B). The vertical component of the least squares adjustment was constrained by holding NGS Benchmarks B 340 (First Order Class II), B 502 (First Order Class II), BURDEN (Second Order Class II), V 203 (Second Order Class 0), G 640 (First Order Class I). The elevation for point 106, 201, 249, and 255 were determined by differential leveling from G 640, D 502, E 525 and F 431 respectively and held.

Horizontal Datum:NAD83 (1998)Linear Unit:U.S. Survey FeetVertical Datum:NAVD88Linear Unit:U.S. Survey Feet

Latitude: N 46-03-22.07452	Longitude: W 118-51-31.50659	
US State Plane Coordinate System:	Washington S	South Zone - 4602
Northing: 267,913.635	Easting 2,057,060.32	7
Orthometric Elevation: 412.95	Ellipsoid Heig	ht: 342.41
Combined Factor: 0.99994060	Convergence	: - 1-11-32
Confidence: 95% Confidence ("1.96 Sigma") Values		
Northing-0.009	Easting-0.006	Elevation-0.098

Monumentation: BPA 3¼-inch Aluminum Cap on 5/8-inch aluminum rod, flush with ground. Stamping: U.S.D.O.E. Bonneville Pwr. Adm., WM020 - FEC-01 - ATB - GPS

To-Reach Description:

Begin on Washington State Highway #12 at the Washington State Truck Weigh Station at Wallula Junction. Go east on Washington State Highway #12, 2.6 miles to the station on the north side of the highway. The monument is 33 feet north of the north fog line, 33 feet east of the end of a guardrail and 275 feet east of mile post 310. Witness post is a yellow carsonite marker inscribed with BPA logo, bearing and distance to station.

MECRIVED BY
Umahilla County Success

No. 02-17-9