

Bonneville Power Administration  
Geodetic Control Data Sheet

Station: WM026 (226)  
 Project: Wallula-Smiths Harbor-McNary  
 Section: SE 1/4 16      Township: 6 North      Range: 31 East      Meridian: Willamette  
 County: Walla Walla      State: WA      USGS Quad: Wallula, 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 Feet  
 Vertical Datum: NAVD88      Linear Unit: U.S. Survey Feet

Latitude: <u>N 46-00-01.85715</u>	Longitude: <u>W 118-55-58.39726</u>
US State Plane Coordinate System: <u>Washington South Zone - 4602</u>	
Northing: <u>247,254.152</u>	Easting: <u>2,038,645.692</u>
Orthometric Elevation: <u>1548.53</u>	Ellipsoid Height: <u>1478.22</u>
Combined Factor: <u>0.99989578</u>	Convergence: <u>- 1-08-18</u>
Confidence: 95% Confidence ("1.96 Sigma") Values	
<u>Northing-0.010</u>	<u>Easting-0.007</u> <u>Elevation-0.100</u>

Monumentation: BPA 3/4-inch Aluminum Cap on 5/8-inch aluminum rod, flush with ground.

Stamping: U.S.D.O.E. Bonneville Pwr. Adm., WM026 - FEC-01 - ATB - GPS

To-Reach Description:

Begin on Washington State Highway #12 at the Washington State Truck Weigh Station at Wallula Junction. Drive west on Washington State Highway #12, 0.1 miles to the intersection of Hatch Grade to the left (south). Drive southeasterly on Hatch Grade Road 1.5 miles to intersection of BPA Lower Monumental- McNary 500kV transmission line. Continue southeasterly on Hatch Grade Road 1.0 miles to intersection of Braden Ranch Road to right (south). Drive south on Braden Ranch Road 0.4 miles to intersection of a semi-permanent wheat field access road to the right (west). Drive southwesterly on the private wheat field access road 0.4 miles to a fork. Drive on right fork northwesterly 0.8 miles to a fork. The left fork is graded and graveled road. Drive the graveled road southwesterly 1.3 miles to a fork in the bottom of Spring Gulch. Drive the left fork parallel to Spring Gulch 100 feet to a fork. Drive the right fork south and southwesterly and uphill through wheat field 0.9 miles to intersection with BPA 500kV transmission line and the Washington-Oregon State line. Continue east on dirt road along state line 0.3 miles to station. Station set in the fence line on the south side of the dirt road.

Witness post is a yellow carsonite marker inscribed with BPA logo, bearing and distance to station.

Date: 7/10/01  
 Station: WM026  
 Drawn By: \_\_\_\_\_  
 No. 02-19-9