



Alaska Natural Gas Pipeline Route Surveys, Prudhoe Bay to Beaver Creek, AK; URS for the North American Natural Gas Producers Group (NANGPG)

White Shield provided DGPS survey support to the URS Corporation and the North American Natural Gas Producing Group (NANGPG) and the Alaska Gas Producers Pipeline Team (AGPPT) fieldwork effort. The proposed pipeline alignment runs between Prudhoe Bay and Beaver Creek, Alaska. This project supported resource grade mapping efforts by wetland, stream and cultural field teams for GIS mapping and the FERC permit application process. The AGPPT route extends from Prudhoe Bay to Fairbanks, and then continues through Tok to the Canadian border at Beaver Creek. The Alaska Highway Route portion is approximately 700 miles in length.



White Shield’s assignments included assisting the URS environmental study and permitting teams with DGPS training, developing data dictionaries, DGPS equipment configuration and maintenance, performing geodetic grade GPS surveys of base stations, post processing of Trimble Pathfinder daily data files, quality control of DGPS field data, and transmitting data using a web-based project portal. Record research was conducted for existing geodetic grade survey control along the proposed route.

Static GPS observations were observed with Trimble single and dual frequency geodetic grade GPS receivers. Resource mapping grade receivers were Trimble Pathfinder Pro XR/XRS. After Static GPS observations were downloaded, baseline vector reductions and network adjustments were performed in Trimble Geomatics Office. Baselines generated from CORS Rinex files were processed with Trimble WAVE processor in GPSurvey and imported to Trimble Geomatics. Information obtained from the Pathfinders was post processed against the URS Pathfinder PRO XR/XRS base station information. Data point measurements were collected at 5 second intervals with a 10° horizon mask. Differential correction was computed using Pathfinder Office. URS maintained a Base station in Fairbanks and at other times in the Livengood, Coldfoot, and Galbraith Lake areas. As a backup system, data was downloaded from a Continuous Operating Reference (CORS) Station located in Central, AK. In addition to initial processing, additional checks were made from a community base station in Anchorage.

White Shield supported approximately 20 field teams working, at times, over the entire alignment. The main base of operations was located at Fairbanks, with temporary field offices located in Coldfoot and Tok.