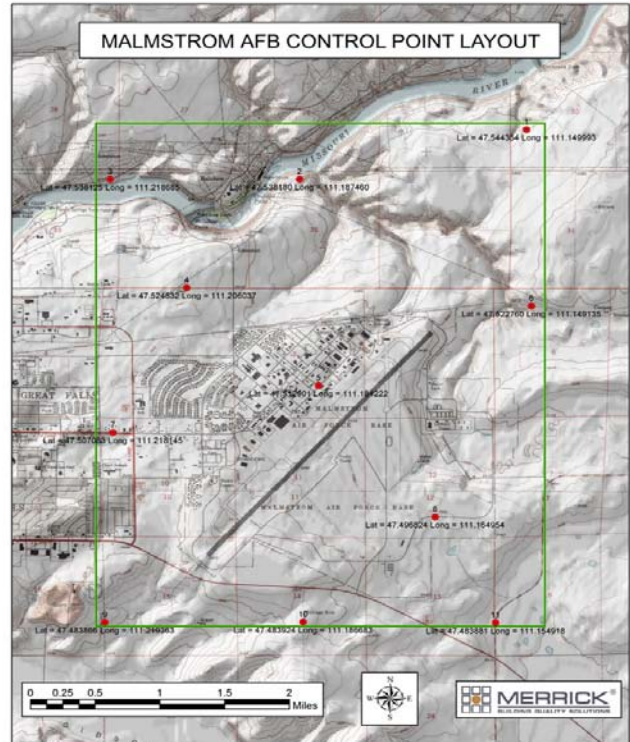




Malmstrom Air Force Base Aerial Panels, Great Falls, MT; Merrick and Company for the US Army Corps of Engineers Omaha District

White Shield established 11 aerial panels at Malmstrom Air Force Base, Great Falls, Montana in support of Merrick and Company for the US Army Corp of Engineers Omaha District. The US Army Corps of Engineers managed the mapping services and used the data for utility surveying and development on Malmstrom Air Force Base. The LiDAR generated surface model was used as the input for the elevation model in the orthophotography solution along with the GPS ground control data. The locations for surface utilities were digitized in 3D on the digital orthophotography. The area covered encompassed approximately 15 square miles lying south of the Missouri River and north of State Highway 89. Ground control was established by Static GPS methods. The control was in support of 0.5' pixel orthophotography and 0.5' LiDAR mapping. Coordinate system was based on the AFB established network (WGS84, UTM Zone 12 North, Meters).



LiDAR data was obtained for the 10 square mile area, and a digital terrain model (DTM) was generated using the LiDAR bare-earth elevation data and breaklines. Deliverables for the elevation data include point cloud, bare-earth surface, and 1-ft contours. In addition, digital color aerial imagery was collected at the same time as the LiDAR at 6 inch resolution as a scale of 1"=100' and meets ASPRS class 1 accuracy specifications. Topographic mapping was provided in ArcGIS format. Final deliverables included the LiDAR first return and canopy datasets, 0.5' pixel color digital orthophotography, and 1' contours.