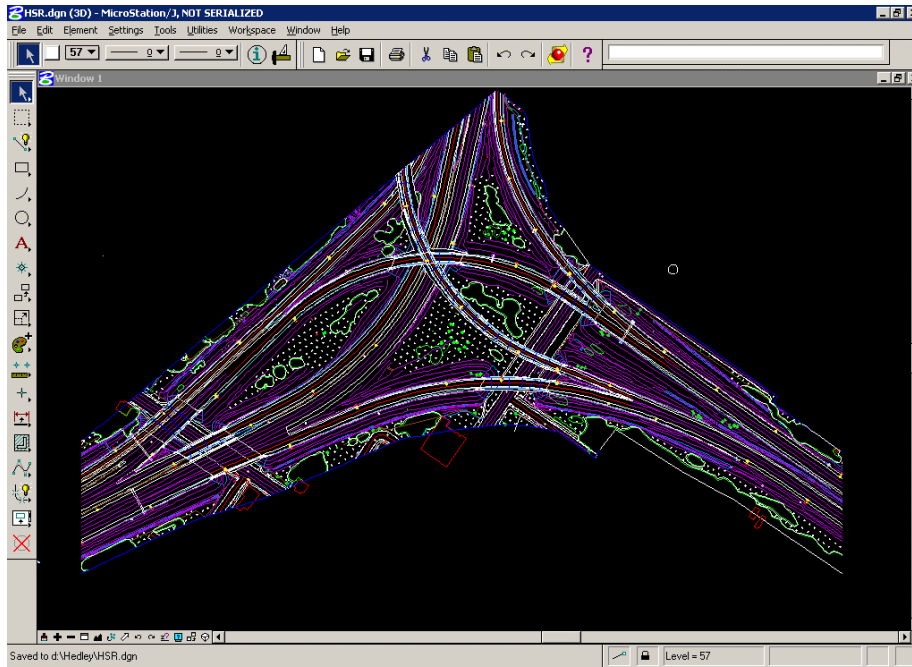


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# Florida High Speed Rail

# GPI



Precision Mapping

**Client/Owner:** Florida High Speed Rail Authority  
**Project Location:** Tampa to Orlando, Florida

GPI was contracted through their Florida location to provide precision mapping, of 27.2 miles along the Tampa to Orlando High Speed Rail proposed alignment in Florida. This mapping, meeting design accuracy requirements, was accomplished through precision photogrammetric means in significantly less time and fee than would have been required by conventional survey means. The project was assigned on a “fast-track” basis to assist with the future alignment designs. The 27.2 miles of photogrammetric mapping comprised of over 180 individual stereo-models of data capture and was compiled, edited and delivered within a 60 day timeframe.

GPI provided all required personnel for the photogrammetric mapping. The area was flown in black and white with a fixed wing airplane at an altitude of 1,200 feet. From the 1,200-foot photography GPI’s in-house photogrammetric personnel generated 30 scale mapping with a 1’ contour interval for all traveled portions of the highway as well as an average bandwidth of 300 feet, centered on the highway, providing photogrammetric mapping for the complete right-of-way. The photography at 1,200 feet was also scanned on a high precision scanner at 600 dpi in TIF format. These scans were rectified in conjunction with the DTM surface and aerotriangulation data to provide coordinately and geographically accurate digital orthophotos in TIF with TFW world files. Survey control was placed outside the traveled way, reducing lane closures and increasing safety to workers. Final deliverables for the mapping were in VrOne format with subsequent DTM surface, to Florida State Highway specifications in feet as the unit of measurement.

Completion Date: 2002