

Project Profile

sidwell & national harbor

National Harbor is a high profile, mixed use, development just outside of Washington, DC on the Potomac River. The project plans include office, retail, hotel and residential development areas. Sidwell's part in this project was to provide mapping, imagery, and elevation data of the 500 acre site which would serve as base information to support design and construction. The site was photographed and mapped each year over a four year period to reflect the progressive changes to the site.

Sidwell prepared a control plan identifying desired control point locations that required GPS coordinates and aerial targeting.

New color aerial photography of the project area was secured at a negative scale of 1"=500' with the use of Airborne GPS. This site was covered by three flight lines and 20 exposures. Once the photo control was completed, analytical aerial triangulation was used to extend control to each photo and compute the position and orientation values for each. Sidwell photogrammetric technicians then viewed the aerial photography, stereoscopically to collect planimetric and elevation data for the project site. The surface data was used to generate 2 foot contours of the entire project with spot elevations added to further define the surface. The aerial imagery was then draped onto the surface to create an orthographic image view of the project.



Deliverables created for this project include the following:

- *New color aerial photography*
- *Planimetric mapping to include all ground features*
- *Topographic mapping at 2 foot contour intervals*
- *Color digital orthophotography at ½ foot ground pixel resolution*
- *Vector data delivered in Microstation DGN and AutoCad DWG formats*
- *Ortho imagery delivered in TIFF format with TFW*

