

Charting public access to England

Digital solutions including specialised mapping software and wide format printers have been recruited to help perform the largest mapping process which has been undertaken in England since the Napoleonic Wars.

Following the Countryside and Rights of Way Act 2000, the Countryside Agency (CA) are preparing maps of all open country and registered common land in England, providing an accurate map of areas where the public have right of access.

Binnie Black & Veatch (BBV), an international multi-disciplinary firm of consulting engineers was chosen for the project. Ian Bush, BBV's Technical Director, felt that the company was perfectly suited for the contract as it was already highly experienced in handling demanding surveying, environmental and countryside projects all over the world.

Eight mapping areas were designated for a rolling programme, using existing National Park and local authority boundaries as the main criteria.

Specialist software

The Geodata Institute, part of the University of Southampton, worked with BBV to source, capture and integrate over 400 existing datasets. These are used in association with 'MasterMap', the latest digital topographic mapping data supplied by the Ordnance Survey, to identify areas of Open Country.

BBV has developed specialist software, based on MapInfo GIS technology and products, to facilitate the mapping and consultation process. The Desktop Access Management System (DAMS), speeds up the mapping process, records public comments and consultation decisions and keeps a complete audit trail of decisions made against each parcel of land. The company has also set up the CA's powerful and interactive mapping website which allows the public to see the maps.

HP rises to the printing challenge

Production of the draft maps is being achieved using Hewlett Packard (hp) computers and large format printers.

City & West End Group (CWE), long-term IT partner of BBV, worked to specify and deliver the hardware needed. They are supplying an HP LH 3000 computer server to each of eight regional offices driving three HP VL 800 workstations and a colour 42in HP 800 large format inkjet plotter, and providing full support. HP CP 1700 desktop A3 printers at each site are used to produce draft proof maps for internal use.

Doug Gilbertson, Director of CWE said: "The sheer scale of the printing task for the first two areas was huge and similar large-scale print runs will be required as future

areas are completed. Whilst the public has been able to consult on the draft maps via the web, most of the consultation has been at local council offices, libraries and roadshows. For the first two mapping areas, nearly ten thousand maps were produced and distributed in less than 15 days. This included 2000 laminated maps and display hangers per mapping area, 1500 paper maps per area sent to statutory consultees, and a further 700 unique maps per area covering individual parish councils.”

This massive print and logistics operation, managed by CWE was carried out by Map Marketing, contracted by CWE to produce the maps. Four hp designjet 5000s, installed at Map Marketing’s site in Devon gave the project the speed and output capability to achieve this.

The HP DesignJet 5000 series printing systems delivers a combination of production speeds of up to 569 feet-squared per hour, and image quality with an impressive maximum print resolution of 1200 x 600 dpi. This is achieved using its huge onboard 300MHz processing power and 256Mb of Ram. The 5000 series was specifically designed to meet the very detailed rendering, colour line drawing and connectivity needs of, among others, GIS professionals.

Doug Gilbertson added: “To speed up the map production process we developed some time-saving solutions including reducing the time to convert the 70Mb MapInfo files to PDFs from 20 minutes to 2 minutes by pre-Ripping the file via a Compose RIP. Plus, the media was specially converted to a 1180mm width roll that removed the need to trim the final maps.”

The project is due for completion in 2005 after the consultation and hearing of any appeals by the Secretary of State followed by production of conclusive maps.

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