



Gwalia
SURVEYORS

OUR VALUES

At Gwalia Surveyors, we have built our reputation on a set of unwavering values.

- Genuine:** Open and honest, we pride ourselves on offering the best solution for the job in hand.
- Winning:** Our results speak for themselves. We build partnerships with our clients, exceeding their expectations.
- Accountable:** Investing in staff, training and equipment, you can always trust our expertise and knowledge.
- Legacy:** Based on the diligent principles of our founder, Bruce Lane, we strive to maintain his high standards.
- Integrity:** Our clients rely on us to be transparent and truthful, never cutting corners.
- Accomplished:** Embracing new technologies and philosophies, we always focus on innovation and improvement.

About Us

During 2017, we worked on over 250 projects for over 70 clients, covering all sectors of construction: industrial, institutional and commercial as well as civil engineering, roads, and residential. The gross value of these projects exceeded £1billion.

Having participated in Government trade missions around the world, including New York and Dubai, we have generated some exciting opportunities. This, together with continued diligent evolution, has grown our staff by over 25%.

We always take our environmental responsibilities seriously and, in 2017, took measures to reduce our Carbon footprint.

35 YEARS AND BUILDING

As we celebrate our 35th anniversary, we take a look back at what we have achieved over the last four decades.

Gwalia's enviable reputation grew from the vision and endeavour of our founder, Mr. Bruce Lane. His initial surveying experience was gained as a Royal Engineer before studying in South Wales and taking a senior role on topographical excursions around the UK and in Iran.

In 1982 he founded Surveys Gwalia, which was renamed in 2008 as Gwalia Surveyors. The rest, as they, is history.

Over the years, Gwalia has worked on prestigious projects throughout the UK:

- Navigation work for North Sea pipe laying
- The first survey of Brecon Beacons National Park
- Subterranean studies for the Principality Stadium in Cardiff
- Topographical mapping for the set of EastEnders at Elstree Studios
- Point cloud mapping and PAS 128 underground mapping for Harrods department store in London

Using cutting-edge survey technology, including GPS mapping, PAS 128 undersurface utilities surveys (GPR), point cloud laser-scanning, mass modelling, drone surveys and BIM (building information modelling), innovation will always be at the forefront of the services we offer.

Although the future will focus on integrating traditional skills with 3D digital mapping for Smart City, Smart Environments and Smart Stadiums, some things never change. The attention to detail and high standards set by our Chairman, Mr. Bruce Lane, are as relevant today as they were 35 years ago and we shall continue to keep them alive.



SMART CITIES WORLDWIDE

Gwalia Surveyors is an innovative developer of hardware and software that maps, navigates and digitises both indoor and outdoor environments.

Using a mobile 3D scanning trolley with six high-resolution cameras, ultra-photosensitive lenses and three high-definition laser scanners, we capture all the data needed for fully immersive indoor visualisation and navigation.

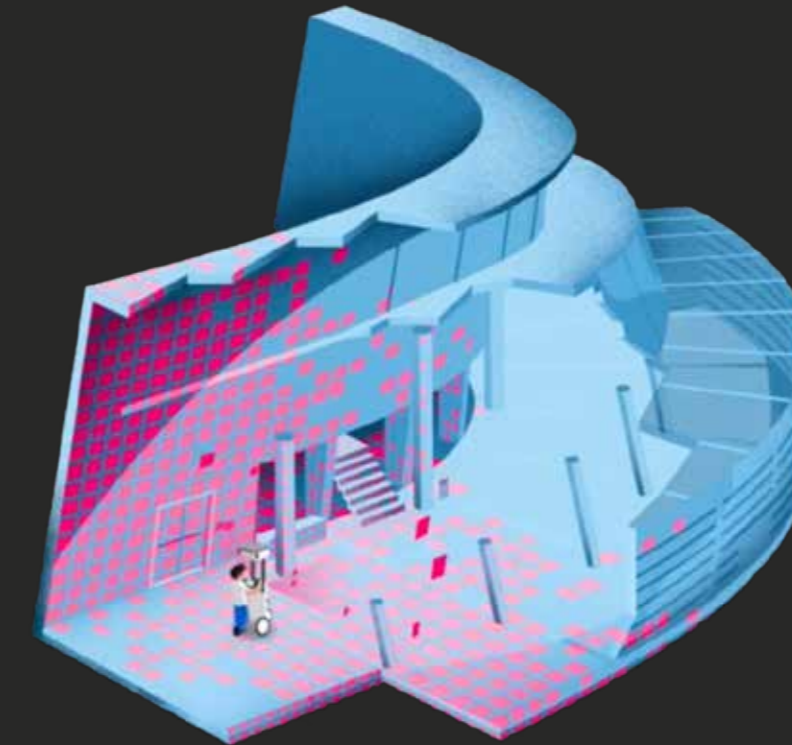
Recording up to 40,000 points per second, the camera can create 360° panoramic images, point clouds and location data, such as Wi-Fi, and Bluetooth.



Intelligent spatial mapping by design

Globally we can deliver:

- Surveying
- Construction Monitoring
- Digital Floorplans
- Digital Building Management
- Maps and Navigation
- Virtual Exhibits



Mobile 3D scanner



Point cloud on web-based viewer



App-based HD imagery



App-based indoor navigation



OUR SERVICES

BATHYMETRIC



UTILITIES

Concrete scanning
CCTV



TOPOGRAPHICAL

Monitoring
Setting out



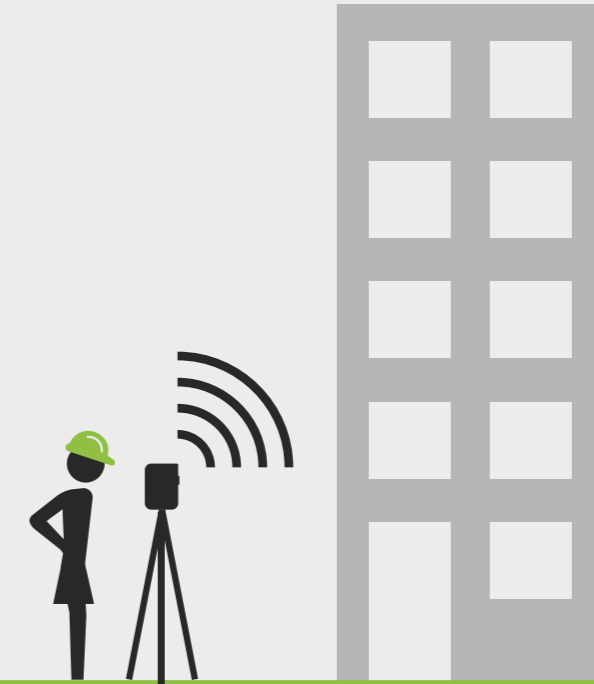
MBS

Floor plans
Elevations
Sections



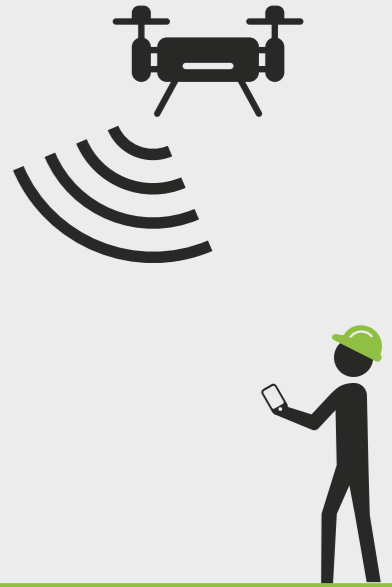
LASER SCANNING

Point clouds
Revit
Culverts



DRONE

Photography
Inspection
Monitoring



BATHYMETRIC SURVEYS

A specific subset of hydrography, bathymetric surveys deal with the mapping of the underlying bed of water features, including rivers, estuaries, harbours, lakes, canals, culverts, tunnels, coastlines, and beaches.

Our bathymetric surveys offer:

- Single beam and multi-beam echo sounders linked to GPS systems or total stations, giving real-time accurate results
- Drone (remote control vessel) capability
- Deliverables referenced to either Ordnance Datum (OD) or Chart Datum (CD)
- Deliverables printed in formats such as AutoCAD 2D & 3D, PDF, etc
- Boat-based culvert scanning



UTILITIES SURVEYS

This covers the detection and mapping of buried pipes and cables using EML & GPR.

Our utilities surveys include:

- Desktop surveys (STATS)
- On-site "mark-up", borehole & trial pit clearance
- Manhole inspection
- Drainage surveys
- PAS 128 compliant surveys
- All information added to topographical/land surveys for a comprehensive overview of the site
- Deliverables presented in formats such as AutoCAD 2D & 3D, PDF, etc
- Concrete scanning - surveying, mapping and reporting on the reinforcement within a concrete structure
- CCTV surveys - producing detailed reports of drainage systems complete with video evidence



TOPOGRAPHICAL LAND SURVEYS

Our high-scale land and topographical surveys can be produced at specific scales and presented in 2D and 3D deliverables to RICS standards: “*Measured surveys of land, buildings, and utilities 3rd edition*”.

Our topographical surveys include:

- Level, rural, urban, road, pipelines, rail, and river surveys
- Specialist surveys, such as monitoring regimes, setting-out, boundary surveys, volume calculations, and precise levelling
- The latest technology, from robotic total station and network GPS receivers to laser scanners and drones
- Deliverables presented in formats such as AutoCAD 2D & 3D, 3D DTM, PDF, etc



MEASURED BUILDING SURVEYS

These are accurate measured surveys of buildings or structures which clearly display the structure, services, and internal/external features. This could include everything from single storey, single room structures to offices or residential tower blocks and even historical theatres or castles.

Our measured building surveys include:

- Data capture by reflectorless total station, traditional tapes and distos or laser scanners
- Refurbishment, lease plans, planning, rights of light, and extension projects
- Floor plans, internal and external elevations, and cross and longitudinal sections
- Deliverables presented in formats such as AutoCAD 2D & 3D, PDF, etc

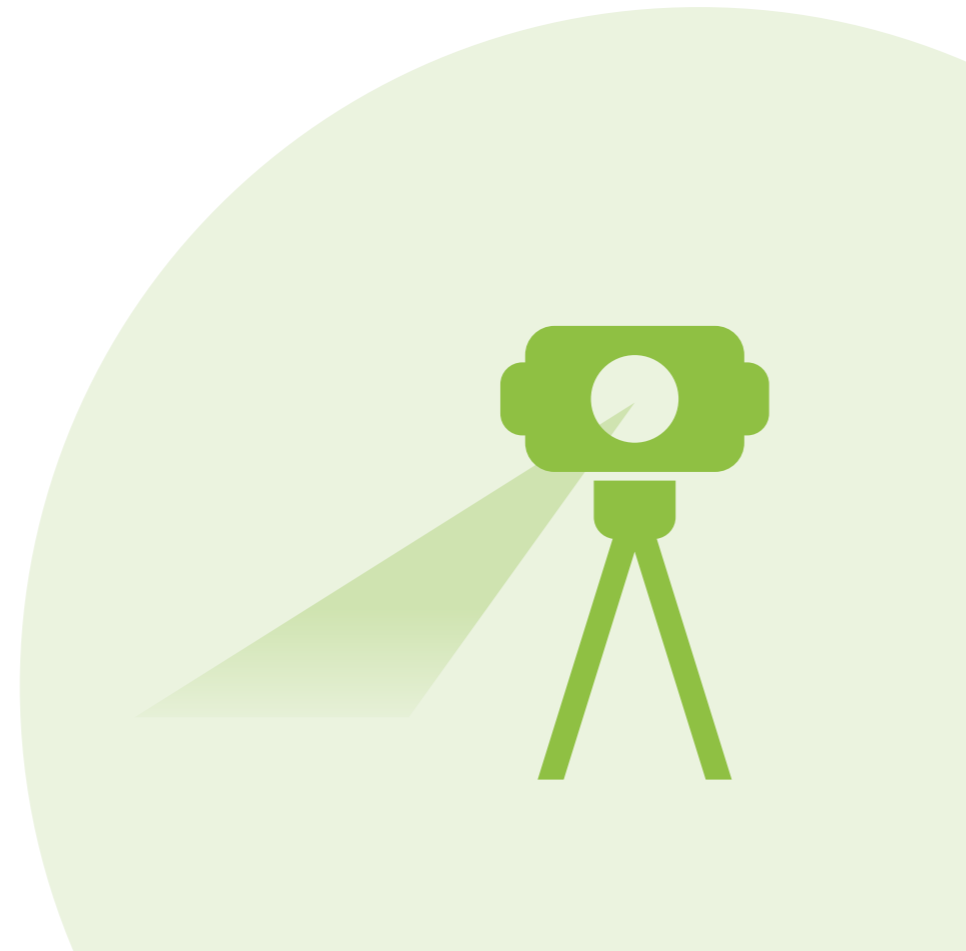


LASER SCANNING

This captures large volumes of 3D survey points, automatically and remotely, on the surface of buildings, structures, and highways.

Our laser scanning services include:

- High-speed data capture of up to 1 million points per second with an accuracy of $\pm 3\text{mm}$
- A range of laser scanners to suit any project-specific requirements or weather conditions
- Production of measured building surveys
- Surveying hazardous areas safely from a distance
- Data so detailed it can eliminate the need for future site visits, reducing costs
- Hand scanner capability



POINT CLOUD

This can be generated from high-resolution imagery as a result of laser scanning or drones (UAVs - unmanned aerial vehicles). Drone data can be used in site inspections, roof/building inspections, construction analysis and marketing.

Our point cloud services include:

- The production of measured building surveys (floor plans, elevations, sections, etc)
- Plane deformation - verticality investigations, floor deformation heat maps, and massing models
- 3D wire frame or rendered models
- 3D massing models
- 3D digital terrain models
- Animated visualisations
- 3D Revit models for applications in BIM



CHARITY SUPPORT

Gwalia supporting 2 prestigious cancer charities trekking the Great Wall of China.



GWALIA GLOBALLY



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