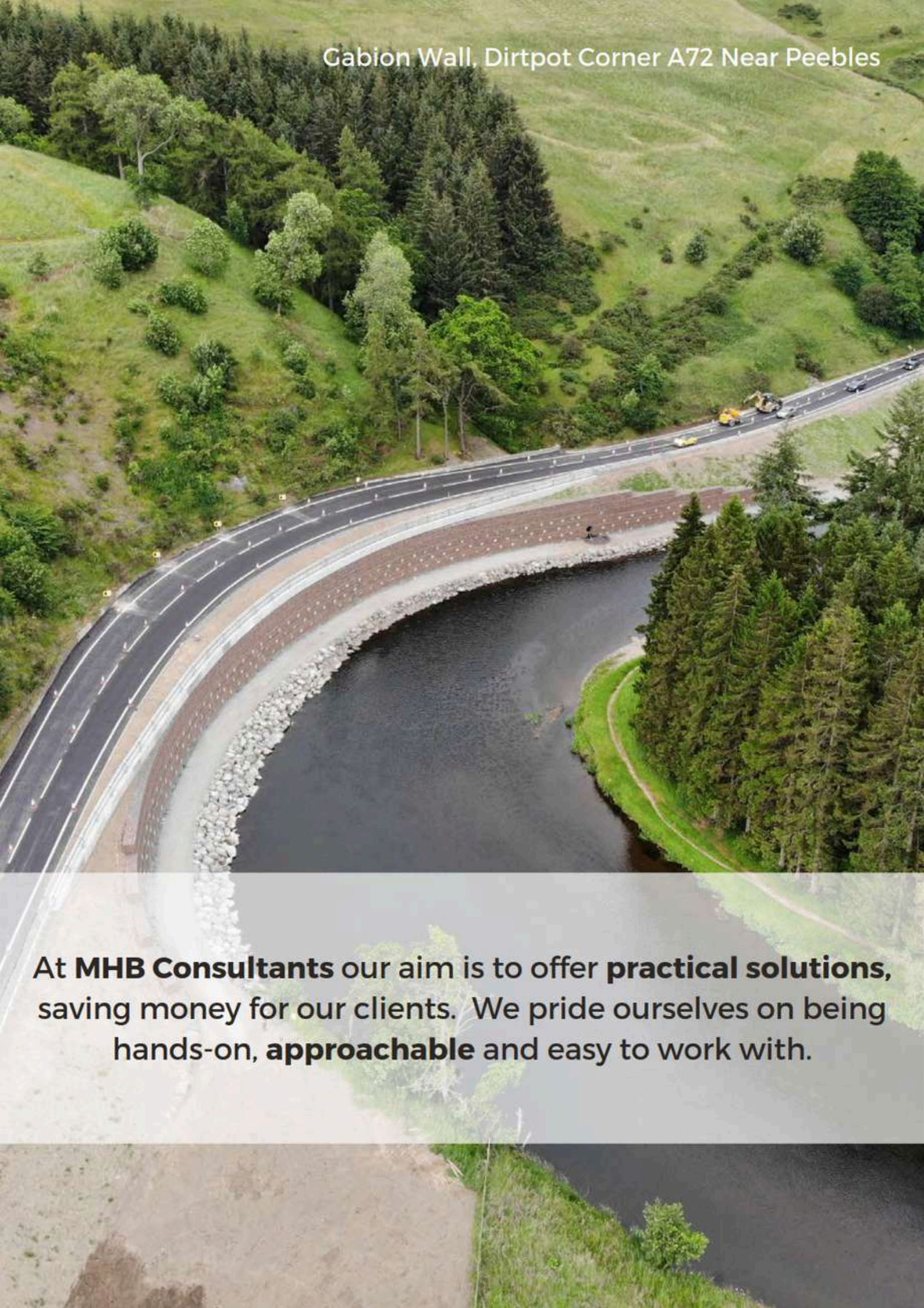




MHB
CONSULTING CIVIL ENGINEERS

An aerial photograph showing a curved asphalt road and a bridge crossing a river. A gabion wall, made of wire mesh filled with stones, runs along the riverbank. The surrounding area is lush green with trees and grass. A few vehicles are visible on the road.

Gabion Wall, Dirtpot Corner A72 Near Peebles

At **MHB Consultants** our aim is to offer **practical solutions**, saving money for our clients. We pride ourselves on being hands-on, **approachable** and easy to work with.



About Us

Contact Us

Fergus Aitchison
Managing Director

fergus.aitchison@mhbconsultants.com

Alistair Gray
Director

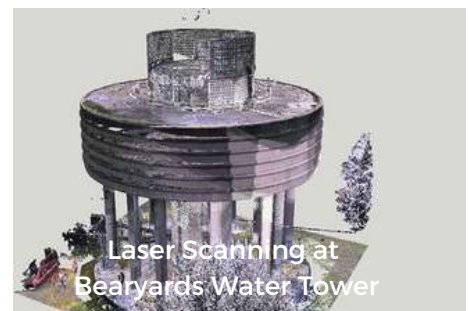
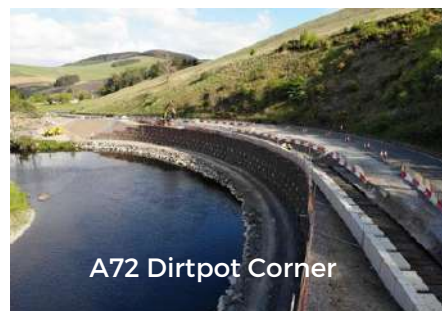
alistair.gray@mhbconsultants.com

Hendrie Barbour
Chairman

hendrie.barbour@mhbconsultants.com

MHB Consultants is an engineering design consultancy specialising in bridge design, civil, geotechnical and foundation engineering. With our head office in Glasgow, and regional offices in Edinburgh, York and London, the consultancy provides technical services to clients including construction firms, transport agencies, local authorities, engineering consultants and private clients throughout the UK.

- Civil & Geotechnical Design
- Bridge & Structure Design
- Temporary Works Design
- Land Survey Services
- Land Quality Services



Bridges & Structures

Contact Us

Jordan Brownlee
Discipline Director,
Bridges & Structures

jordan.brownlee@
mhbconsultants.com

0141 248 5154

Services

- Bridge Assessment
- Bridge Inspection
- Feasibility Study
- Detailed Design
- Railway Structures
- Highway Structures
- Footbridges
- EX2502 Scour Assessment
- Structural, Strengthening and Refurbishment
- Arch Analysis (Mexe)

Capabilities

We provide full bridge engineering services in support of our transportation infrastructure practice.

Our project experience encompasses complex multi-span steel and concrete structures, culverts and retaining walls for roads and heavy rail. We have particular expertise in the rail bridge refurbishment sector.

Our expertise includes planning, assessment, feasibility studies and detailed design for new and rehabilitated structures.

MHB Consultants has the complementary in-house disciplines to support bridge engineering projects from start to finish including topographical surveys, geotechnical, drainage design and temporary works.



Auch Viaduct, Tyndrum



Bridge of Orchy, Argyll & Bute



Civil & Geotechnical

Contact Us

George Marjane
Discipline Director,
Civils & Geotechnical

george.marjane@
mhbconsultants.com

0141 248 5154

Services

- Feasibility Studies
- Site Investigation
- Interpretative Reporting
- Drainage Schemes
- Culvert Replacement
- Foundation Design
- Pile Design
- Ground Improvement
- Mineworking Consolidation
- Slope Stability Assessment
- Soil Nail Design
- Permanent Retaining Structures
- Temporary Excavation Support
- Ground Anchorages
- Transportation Geotechnics
- Tunnelling
- Temporary Works Design
- Material Suitability Studies
- Site Supervision

Capabilities

MHB Consultants provide civil and geotechnical engineering services across a range of market sectors and to a variety of clients.

At the current time the majority of our work is in the rail sector, however we are also active in roads, water and power.

Typical rail jobs include design of drainage schemes, slope stabilisation works, rail platform improvements and structural works at railway stations.

Our clients are civil engineering contractors, transportation authorities, local authorities and private clients.

We also provide specialist geotechnical input to our bridges department.



Rock Catch Fences at
The Rest & Be Thankful



Soil Nailing at
Mill Timber



Temporary Works

Contact Us

Gillian Pettigrew
Discipline Director
Temporary Works

gillian.pettigrew@
mhbconsultants.com

0141 248 5154

Services

- Crane Outrigger Foundations
- Temporary Bridge Foundations
- Slope Stability Analysis
- Abutment Stability
- Formwork Checks
- Precast Lifting Solutions
- Excavation Support
- Precast Concrete Unit Stability Checks
- Temporary Service Bridge
- Piling Platforms/Working Platforms
- Temporary Access Cradle System Supports
- Hoarding Design
- Abutment Saw Cuts
- Edge Protection
- Arch Analysis (Mexe)
- Scaffold Foundations
- Crash Decks
- Bridge Slides/Stability of Units
- Temporary Propping

Capabilities

We provide temporary work designs for a variety of projects and environments.

Working mainly in the railway sector, our project experience comprises a wide number of designs required to facilitate the safe implementation of permanent works designs.

Our expertise include detailed design and site support from planning through to implementation.

We have the capabilities to react to emergency works.

We are an active member of the Temporary Works Forum.



Footbridge Removal at
 Stirling Station



AWPR Sheet Pile Wall



Surveying



Contact Us

Aaron Harrison
Survey Co-ordinator

aaron.harrison@
mhbconsultants.com

0141 248 5154

Services

- Topographical Surveys
- Laser Scanning
- UAV Surveys
- Measured Building Surveys
- P-Way Surveys
- Elevation Surveys
- Site Setting Out
- Monitoring Surveys
- Clear Route Analysis
- Height & Stagger Surveys
- Utility Surveys

Capabilities

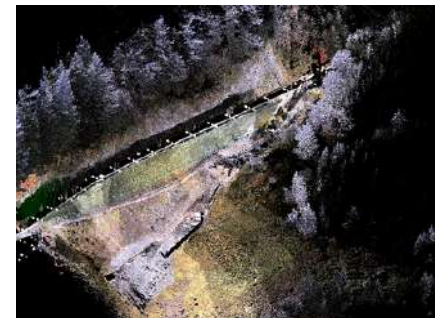
Our surveying team is led by Aaron Harrison who is available to discuss your surveying needs.

We have undertaken numerous topographical and p-way surveys for a wide range of projects including housing, car parking, engineering infrastructure, slope stabilisation, building surveys, station platform rebuilds, drainage solutions, bridge & tunnel maintenance, elevation surveys, and laser scanning a series of concrete water towers as part of upgrade maintenance works.

At MHB the direct partnership between our consulting civil engineers and surveyors ensures all projects are carried out efficiently and to the highest standards, offering the best value to our clients.



Parapet Repairs, Kilmore



Carlock Wall Pointcloud



Land Quality Services

Contact Us

William Warnock
Principal Land Quality
Consultant

William.Warnock@
mhbconsultants.com

0141 248 5154

Services

- Preliminary risk assessments
- Contaminated land investigations and risk assessments
- Site remediation and verification
- Site supervision
- Ground investigation design, scoping and management
- Waste characterisation and classification
- Peer review services
- Consultant support services
- Environmental data reviewing and reporting
- Materials management plans
- Water pipeline risk assessments
- Environmental risk assessment

Capabilities

Land quality issues have a significant impact on everyone. From property values and the safety of children in our homes and schools, through to the impacts on construction costs and the ability to mitigate the climate crisis. The nature of the soil and groundwater beneath our feet has a huge influence on everyday life.

MHB Consultants Land Quality department works in tandem with the practice's established civil, geotechnical and surveying teams to provide a full range of ground and development related services to existing and new clients.

The Land Quality Services team provide pragmatic and evidence-based assessments of soil and groundwater quality issues to meet our clients' requirements in line with our common practice goal to provide practical solutions to save money for our clients. We can provide the complete range of geoenvironmental consultancy services through all stages of your development from preliminary assessment to intrusive site investigations, remediation appraisals and verification of remedial measures.



3D Modelling & Visualisation

Suggits Lane Footridge, Cleethorpes

Contact Us

Craig Brash
Principal Engineer

craig.brash@
mhbconsultants.com

0131 374 4011

Capabilities

MHB is increasingly asked to provide 3D-models of schemes throughout the project lifecycle. For instance, at planning stage, rendered models can bring a project to life and assist non-technical stakeholders to see how the finished project will look and how it fits in with the surroundings.

The accurate and clear presentation of design information is vital to the success of any construction project. Traditionally this has been done through the use of 2D-drawings and this is likely to continue for the foreseeable future.

Having said that, 3D-modelling has advanced hugely in recent years and can offer many advantages - either through clearer visualization of the project or individual components, or as a central part of a Building Information Management (BIM) system.



Cill Beam, Cockies Yetts Underbridge



3D Modelling & Visualisation



Suggits Lane Footridge, Cleethorpes

Capabilities continued

At construction stage, 3D-models of complex components can be used to assist the construction team to plan construction sequences, develop method statements, clash detection and so on. The model can also be used to generate conventional construction drawings, and with any underlying 3D-model, any changes made will automatically update the construction drawings.

After the project has been built the client will also inherit a valuable tool to manage their asset for the years to come. The investment cost in developing the 3D-model pays for itself through more efficient design, increased collaboration with stakeholders/project teams, and reduced construction costs by adopting 4D programming and scheduling. This has proved invaluable during COVID-19, allowing greater project collaboration with stakeholders by attending virtual design reviews.



Cockles Yetts U-deck



Balnagown, Invergordon



Balnagown, Invergordon

The 3D model (digital twin) can be used with asset management systems allowing the owner to manage maintenance scheduling to reduce operational costs.

The involvement at an early stage of our in-house surveying team can provide the baseline information through traditional survey techniques or laser scanning. This provides the base data for modelling the proposed structure and how it will fit into its surroundings.

We can work with any preferred software and BIM systems to provide a cost-effective solution to any project.





Let us make a difference to your next project,
we'd love to hear from you.

info@mhbconsultants.com or call us on 0141 248 5154.

Testimonials



Excellent company to work with. I find MHB to be willing to work with the contractor to find practical and workable solutions in often short timescales.

Fraser Boyd, BAM Nuttall

I have worked with various members of MHB over the past 8 years and have always found them to be competent, professional, able and responsive. I would always go to them for our temporary works design in the first instance.

Frank Young, BAM Nuttall

MHB is a great consultant to work with, they provide practical design with great understanding of issues in construction.

Ross McCaffer, AmcoGiffen

MHB are professional, pragmatic and collaborative in their approach to all projects, regardless of size or scale. The team are approachable and easy to work with and always happy to discuss any element of design solutions. It is clear that they take pride in their projects, and delivering right first time solutions that meet client requirements.

Craig Robertson, Network Rail

MHB have risen to these challenges and not only provided the quality of design we have come to expect but have went above and beyond when it comes to providing levels of business service. We are only as good as our partners and you have been a major part of our success story this year. Looking forward to 2021 I hope a semblance of normality will return and we can continue to grow our mutual businesses.

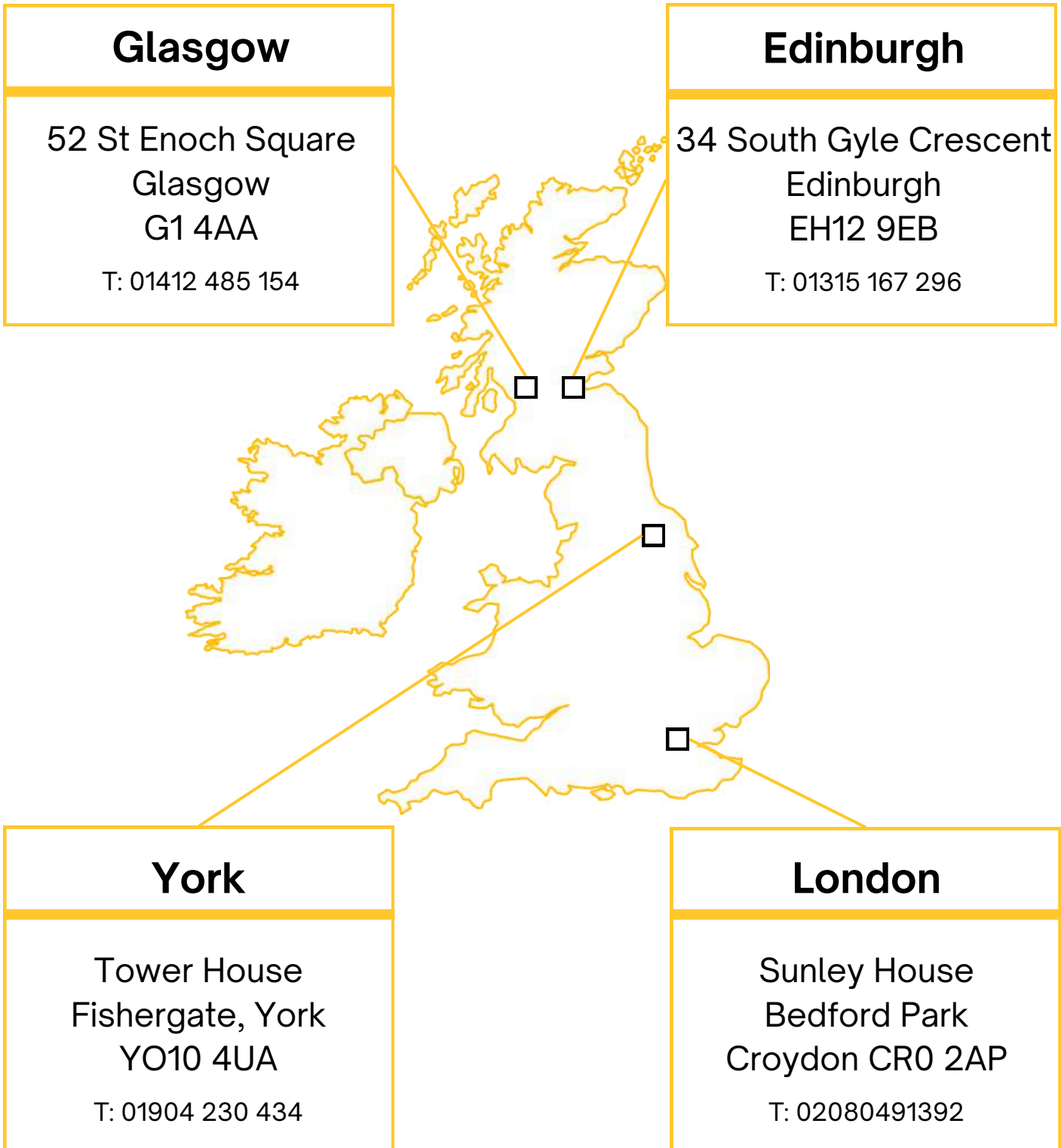
Graeme McInnes, Engineering Director, Story Contracting, Dec 2020

The speed and professionalism of MHB is a marked contrast to the service provided by others.

Stephen Murray, CP5 Framework Delivery Partner

Providing Practical Solutions | Saving Money for our Clients

Office Locations



Providing Practical Solutions | Saving Money for our Clients



Glasgow | Edinburgh | York | London

**MHB Consultants Ltd
52 St Enoch Square
Glasgow, G1 4AA**

mhbconsultants.com

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