



CASE STUDY

RIVER HUMBER PIPELINE REPLACEMENT

SECTOR:	UTILITIES
CLIENT:	NATIONAL GRID
CONTRACTOR:	SKANSKA, PORR BAU GMBH AND A.HAK
CONSULTANT ENGINEER:	SKANSKA
MGF DEPOT:	M
PRODUCTS HIRED:	406UC HYDRAULIC BRACE, 10M LARSEN PILES

SCOPE OF WORKS:

The purpose of the job was to design and supply temporary and permanent support for a hydro power house and turbine chamber (plus associated inlet channel and tailrace) constructed at the side of an existing weir on the banks of the River Derwent in the centre of Derby.

ISSUES & SOLUTIONS:

The design incorporated a single level of modular 406UC Hydraulic Brace system in conjunction with Larssen piles up to 10m in length, toed in mudstone, covering a perimeter of over 150m.

MGF's design allowed early removal of the brace by using a permanent concrete base slab as a low propped cantilever. The design had to take into consideration the complicated construction sequence; and the location of a large crane during installation and removal of the river piles.

During the project Balfour Beatty and MGF collaborated to develop the Stairsafe system (the UK's first temporary steel stair system designed specifically for excavations). The system proved a great success in providing rapid and safe access into excavations leading to greater site productivity. The system is now being used throughout the UK on excavations up to 6.5m in depth.

THE VERDICT

From early in the tender process MGF have been heavily involved with Balfour Beatty to develop an innovative, cost effective and highly complicated cofferdam design; which helped make Balfour Beatty's tender attractive to the client, Derby City Council.

MGF were brought in at tender stage to assist in the value engineering of the cofferdam and support frames. Upon contract award, MGF's technical team were extremely proactive in producing a workable design in line with the projects requirements. The professional, amenable and expedient attitude continued throughout the process from design, technical support, plant hire and delivery and site assistance.

Michael Rummens, Balfour Beatty Site Agent



LUNCH & LEARN

Lunch & Learn sessions are tailored to you, serving as a platform to demonstrate our products, projects and industry developments relevant to your sector.

The key focus is to provide a comfortable environment where your employees can better understand key topics related to shoring:

- Health and Safety
- Research and Development
- Design and Engineering
- Shoring Systems

Further educate your employees and improve safety on site. Request a Lunch & Learn at mgf.ltd.uk/lunch-learn



T: 01942 402 700

E: enquiries@mgf.ltd.uk

W: mgf.ltd.uk



Head Office

T: 01942 402 700

Engineering Centre

T: 01942 402 704

North West - Astley

T: 01942 896 282

North East - Durham

T: 01913 782 100

Yorkshire - Castleford

T: 01977 521 930

Midlands - Rugeley

T: 01889 574 777

East Anglia - Stanton

T: 01359 252 204

South East - Tring

T: 01296 663 250

London - Dartford

T: 01322 344 520

South West - Exeter

T: 01395 233 194

South West - Bristol

T: 01179 820 706

Scotland - Grangemouth

T: 01913 782 100

youtube.com/MGFLtd



uk.linkedin.com/company/mgf-ltd



@MGF_Ltd



facebook.com/mgfltd

