

TechnikGS

GROUND SOLUTIONS

ISM Krakow, Poland 2014

Paul Woodfield

Retail Project South Wales (Atlantis Found !!)

Mezzanine Foundations



Retail Project South Wales

Escalator Excavation



Retail Project South Wales

Underground Void



Retail Project South Wales – Never Give Up !!

Some of them made it to the virgin ground



Aluminium Recycling Plant, Northwest UK

Sonic Micropiles & Ground Consolidation to support crane base



St Georges Road, London

Grouted Micropiles for five storey mixed use building



Hexel Composites Factory, Cambridge

Grouted Micropiles (modified)



Hexel Composites Factory, Cambridge

Grouted Micropiles (modified)



Glen Lyon

Grouted Micropiles



Glen Lyon

Grouted Micropiles



Conclusion

- Variety is indeed the spice of life.
Versatility / flexibility is the key
- Solutions featured include:
 - Sonic resonance installation techniques
 - Modified Hollow Bar / Self Drill
 - Water / Grout / Air Flushing Mediums
 - Diamond Coring / Head & DTHH
Percussion

Micropiling

- Key ingredients are:
 - The use at some stage of grout (for best results throughout - modified).
 - For best geotechnical enhancement the presence of non-cohesive soils.
- Case Studies highlight the importance of good quality SI and procurement procedures.