

### **CASE STUDY**

MERSEY GATEWAY CROSSING Runcorn, Cheshire for Merseylink CCJV.





# DEEP SOIL MIX NG LTD

#### MERSEY GATEWAY CROSSING RUNCORN, CHESHIRE FOR MERSEYLINK CCJV.

Deep Soil Mixing Ltd has undertaken the innovative ground engineering and soil stabilisation method of soil mixing using a 10 tonne Soil Mixing Cutting head mounted on a 65 tonne RTG rig on the prestigious new Mersey Gateway project between Widnes and Runcorn in Cheshire for Merseylink CCJV.

This is the first time this bi-rotational mixing head has been used for soil mixing in the UK. The use of this technology follows trials carried out by the Deep Soil Mixing team on behalf of Merseylink CCJV.

Deep Soil Mixing Ltd was awarded the multi million pound project to install over a thousand soil mixed panels at a number of locations across the north landside area of the Mersey Gateway project and these panels are designed to stabilise the ground in areas around the various bridge structures so that further construction work can be undertaken.

The contractor, Merseylink CCJV, chose to undertake soil mixing on areas of the Mersey Gateway project due to the benefits soil mixing technology brings. Soil mixing is more environmentally friendly, flexible and adaptable than most other ground improvement methods. Benefits of the technology also include reducing the carbon footprint. Soil mixing improves the geotechnical qualities of the existing soils by reengineering the soil in-situ thus removing the need to excavate or import fill. There is no leaching or binder migration during the installation process, or later as the mixed soil ages and substantially helps to lock in any potential chemical contaminants present within the soils.

By mechanically mixing the existing soil with a cementitious binder, deep soil mixing changes the characteristics of weak soil to achieve a geotechnically modified material for numerous applications. This enables more efficient and effective installation and greater ground stability.

Furthermore, as soil mixing reduces the carbon footprint, this has enabled the project partners to meet key environmental targets. Using the system of soil mixed panels for soil stabilisation on this project has meant that no ground material left the site.

Using Deep Soil Mixing's soil stabilisation technology has meant Deep Soil Mixing Ltd has been able to effectively re-engineer and modify poor or contaminated ground, using environmentally friendly solutions, compared to other traditional ground remediation methods.

#### **FIND OUT MORE**

For further information please contact:

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