Case

STUDY

TENAX, HM3, EKOTEX 10 Royal Albert Docklands Working Platform



LOCATION: Roval Albert Docklands Off Royal Albert Way Newham ,E16 2QU



CONTRACTOR:

MERCHANT: Burdens - West Thurrock

CONSULTANT: Keltbray Piling

The

BACKGROUND

The latest development at the historic Royal Albert Dock will create London's third business district.

London City airport is situated adjacent to the Docks which offers excellent opportunities for business professionals looking to take advantage of the Royal Albert Docks perfect location.

Phase one of the project delivers prestigious office buildings that overlook the docks along with a vibrant waterside of cafés, restaurants and a mixture of high street and high end shopping.

Our Client's REQUIREMENTS

A sustainable solution for a reinforced working platform using geogrids.

Geosynthetics worked with Keltbray Piling to provide a solution for the reinforcement of working platforms.

The geotechnical joint venture approached Geosynthetics to provide a technical and sustainable solution for a reinforced working platform using geogrids.



Our Value Engineered SOLUTION

Utilising Tenax geogrids enabled us to reduce the amount of aggregate required to be imported to site and reduce the amount of excavation required.

Based on the soil properties and loading information provided to us, we were able to calculate a platform thickness of 760mm stone using 4 layers of Tenax Geogrid.

Ekotex Non-Woven Geotextile was used as a separation layer at formation to prevent the upward migration of fines into the granular layer.Geosynthetics were flexible and worked with Keltbray Piling's engineers to develop the final solution.

By utilising Geosynthetics' merchant policy the contractor was able to process the order via their chosen merchant, giving the contractor the ultimate control over the supply chain. "We worked with Geosynthetics to develop a solution that would minimise the carbon footprint and optimise efficiency. The resulting solution saved around 550 lorry loads and 8000 tonnes of CO2. This also positively impacted on the economy of the contract and enabled the temporary works programme to be executed on time and below budget."

PAULO BATISTA Senior Design Engineer Keltbray Piling

CROSS SECTION - PILING MAT REINFORCEMENT - SOILMEC SR90 4 LAYERS - WORST CASE SCENARIO EXTRACTING



