

Wolferton Pumping Station Kings Lynn



The very soft silty clays and high ground water levels presented difficult conditions to prepare an adequate working platform for the heavy plant required for the works including CFA Piling and Sheet Pile installation.

We were approached by Kevin Lait Senior Estimator for Breheny Civil Engineering to design and construct a safe, heavy duty crane operating platform to cope with loading up to 5.7kg/cm².

RoadCem soil concrete was also used for the piling mats, site access roads and site compound.

A RoadCem construction was made using just the existing soils to provide a strong and durable working platform.

The use of RoadCem reduced the working platform preparation time, and achieved cost savings compared to a more traditional approach to remove soils and import stone.



Visco-Elastic behaviour

Delft University of Technology, simulated the properties of absorption of dynamic forces such as driven piles in to soils stabilised with PowerCem Technology. Based on other RoadCem soil concrete projects such as the piling platform at Clay Mills.

The result clearly showed that these stabilisation's could bear high intensive dynamic forces such as the driving of piles through the RoadCem soil stabilisation.

No cracks occurred in the periphery of the piles, nor in the complete RoadCem treated structure.

By observing the longitudinal displacement mode after excitation, the dynamic modulus is obtained. Which gives you the dampening characteristics and the visco-elastic properties of the mat.

It is clear that adding RoadCem to cement bound materials reduces vibration, an essential property for piling mats, road base and rail track applications.

Auger drilling through the RoadCem stabilised soils was fast and safe.

With no deflection and easy set up.