



## Case

# STUDY

## LANDLOK

Lower Hall Pumping Station  
Erosion Control



### MARKET SECTOR:

Environmental



### LOCATION:

Hall Lane  
Chingford, London



### CONTRACTOR:

Optimise / J Murphy & Sons Ltd

## The

# BACKGROUND

**Along this section of the River Lea at King George's Reservoir, there was a need for the flood defences to be reinforced.**

This led to a requirement for an erosion control mat to be used on the embankment protection works. The River Lea flows directly past the King George's and the William Girling Reservoirs: down to the Lower Hall Pumping Station, Chingford.

## Our Client's

# REQUIREMENTS

A sustainable solution for flood defence reinforcement

**The pumping station is disused and the site earmarked for low density housing, currently expected to take place 2017-2021.**

In preparation for this the flood defences are being reinforced and upgraded along the route of the River Lea. The contractor and our technical sales team liaised with the consultant (MWH Global) to ensure compliance with the performance specifications required. The requirement was for an erosion control mat capable of withstanding a velocity of 2.0m/s in a vegetated state and a safety factor of 2.75.





## Our Value Engineered **SOLUTION**

**We recommended our Landlok® TRM 450 erosion control mat which can cope with velocities as high as 5.5m/s in a vegetated state: to meet the requirement of the specification.**

This enabled the contractor to provide a solution in compliance with the needs of the application and performance specification. We were able to meet the delivery requirement of 131 rolls along with 10,500 fixing pins from our extensive warehouse stock without any delays.

The works were carried out by J Murphy & Sons Ltd.



**“We encountered little to no trouble when installing the Erosion Matting and we expect the Geosynthetic Matting to provide a high standard of protection to the reservoir embankment.”**

**ASIRI BAMUNU ARACHCHI**

**Deputy Project Manager**

J Murphy & Sons Limited

