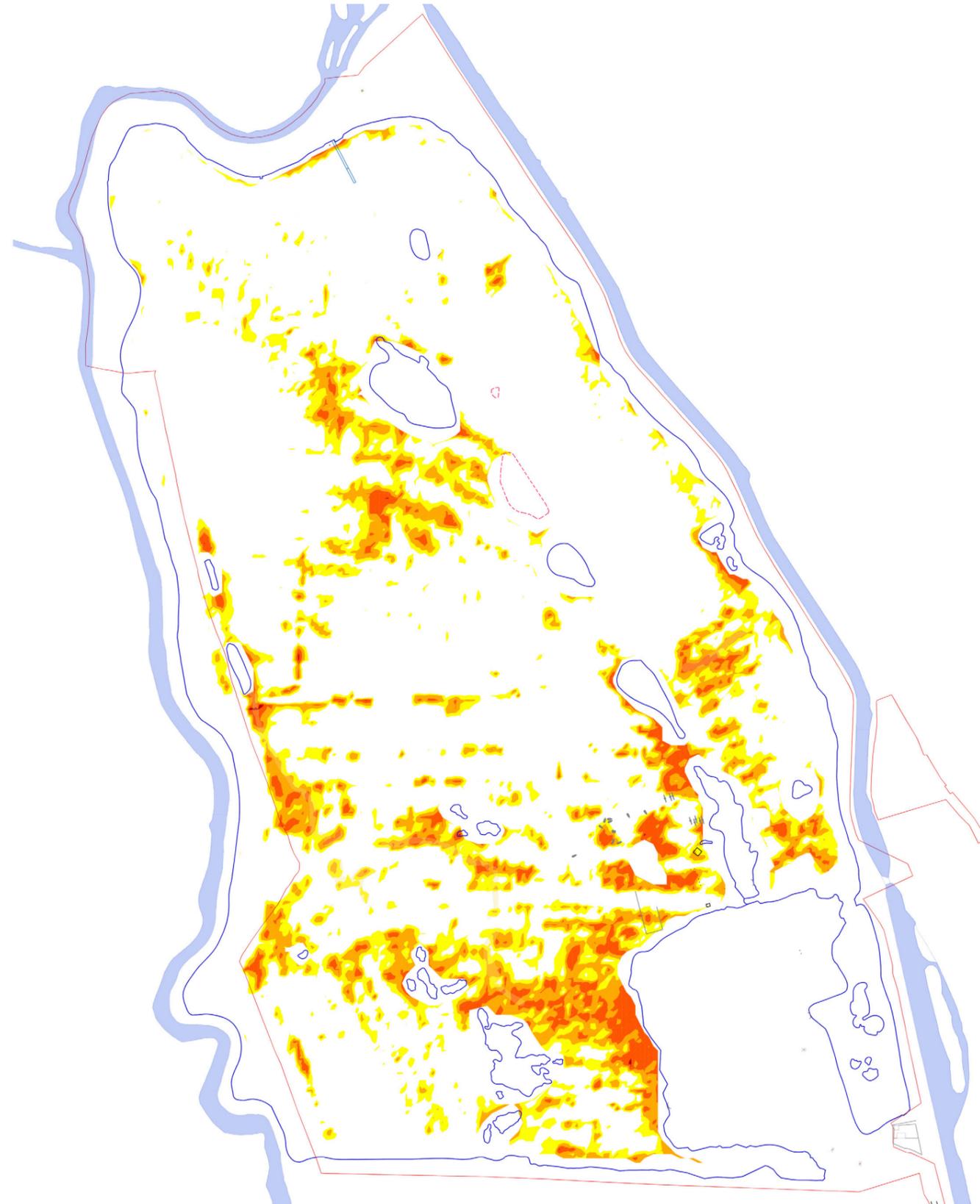




Understanding water depth has been critical to developing the ecological, recreational and landscape masterplan.

A bathymetric survey was therefore undertaken in that:

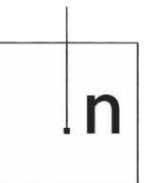
- Water that is 1.5m or deeper is optimal for sailing;
- In addition this also reduces the risk of Summer algal blooms and therefore the amount of water quality management required;
- Land created for ecologically mitigating islands and the main operational uses was guided towards shallower water;
- Working in shallower water eases logistics through minimising the amount of material required so as to reduce energy requirements, duration of construction and cost.



Lake bed level	Winter water depth	Summer water depth
 36.5m	0.96m	0.64m
 36.0m	1.46m	1.14m
 35.5m	1.96m	1.64m
 35.0m	2.46m	2.14m
 <35m	>2.46m	>2.14m

Note:

1. Calculations are based on an average winter/summer water level provided by the surveyor (refer dwg 32578BWLS-01-05)
2. Minimum 2m water depth is preferable for sailing and water activities to minimise algal blooms in summer
3. It was not possible to carry out a survey around the islands, but it is assumed that the water level is less than half a meter





The complex topographic pattern with many sharp level changes, linear edges and flat surfaces as shown on the adjacent plan is the result of the remnant infrastructure and waste piles of the past minerals gravel extraction.

These include the square slurry tank on the western shore which has subsequently developed as wet woodland, bunds across the site and retaining structures.

Areas of particularly challenging level change are reflected by the close contour lines.

In particular most shorelines are very steep, near vertical in places offering minimal beach or ecological opportunities.

