

# Havant Thicket Winter Storage Reservoir



## 3 - Technical Requirements of Reservoir

### Reservoir Safety and Long term Monitoring

The reservoir construction and its long term management will be under the supervision of a qualified panel engineer (listed by the Institution of Civil Engineers). Portsmouth Water has ultimate responsibility for the safety of its reservoirs. The Environment Agency is the body with overall responsibility for administration of reservoir safety in the UK. The reservoir will be monitored throughout its life and formally inspected, as specified in the Reservoir Act (1975).

### Reservoir Operation

Surplus water will be pumped from Havant and Bedhampton springs to the reservoir by underground pipeline.

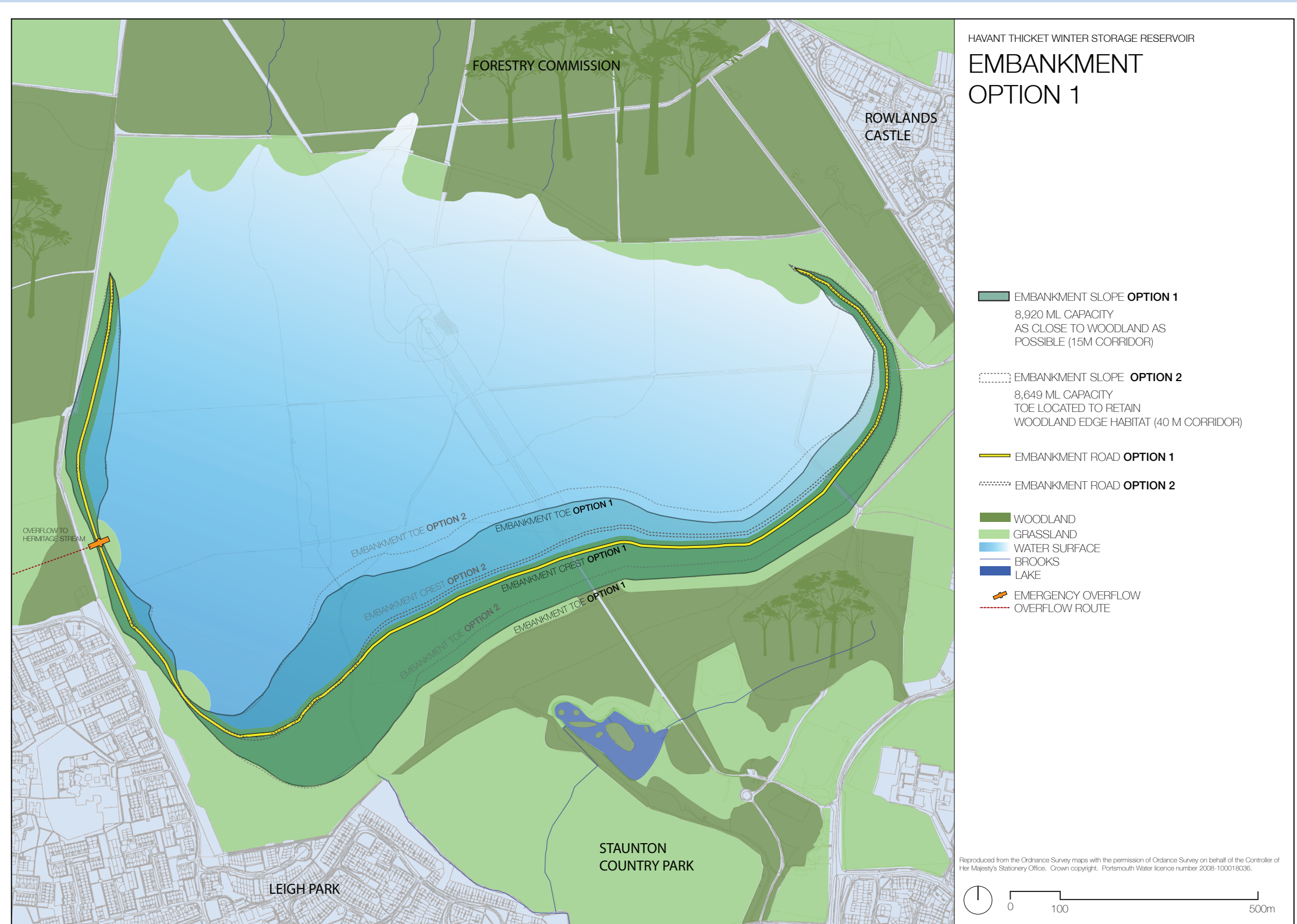
It is envisaged that in most years the reservoir will remain almost full all year round, but in dry years when demand is high, water may be drawn down to augment supplies to customers. In extreme years or if demand increases significantly, the reservoir could be drawn down to very low levels. Providing that there is sufficient rainfall in the following winter, the reservoir could be refilled for the next summer.

### Reservoir Layout

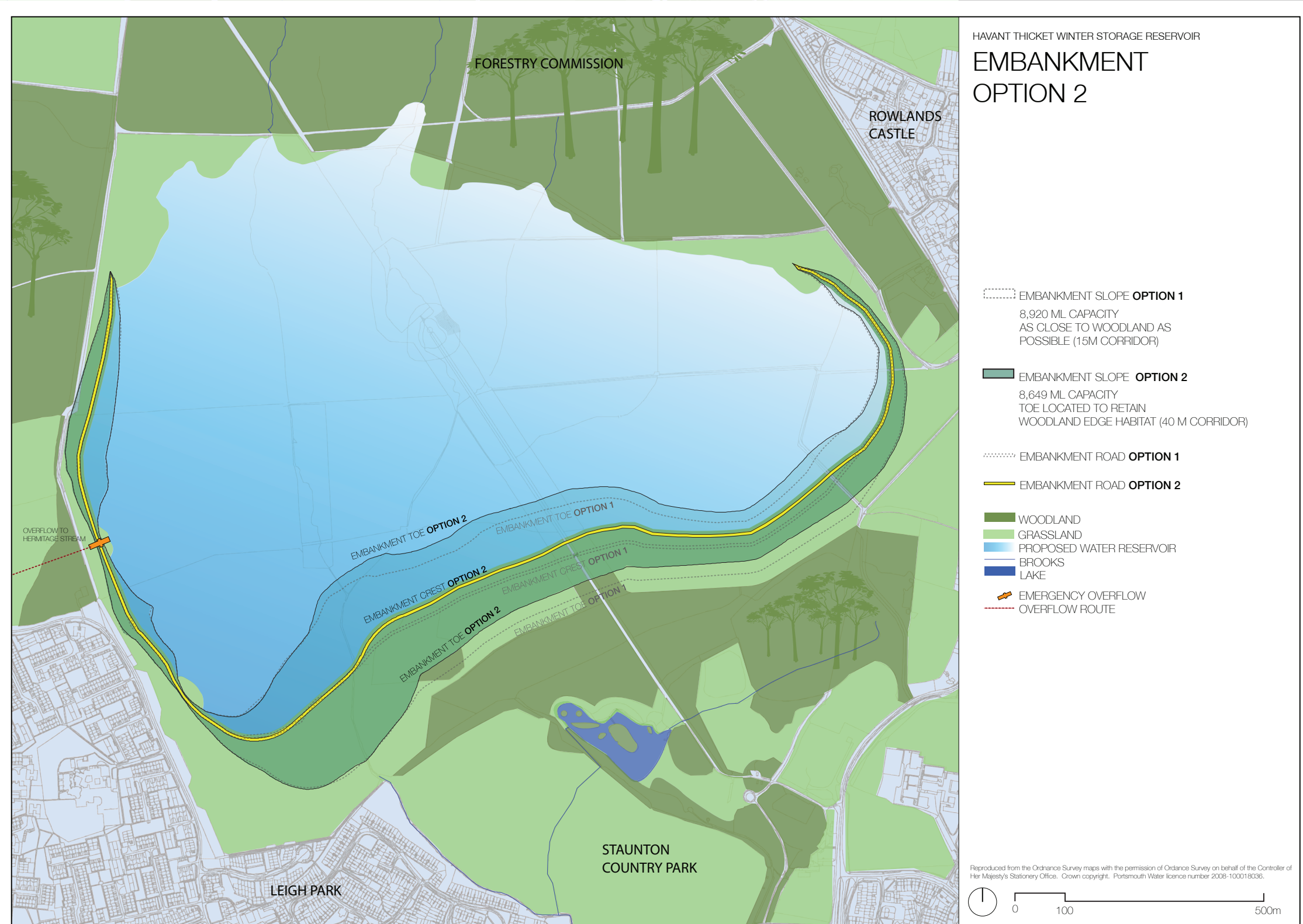
The layout for the Havant Thicket reservoir that was initially proposed in the 1970s has been through a number of iterations. A range of design proposals were considered during consultation with the Havant Thicket Stakeholder Group in 2006.

Two options for the layout have been identified:

- **Option 1** provides a 15 metre 'buffer zone' beside the woodland area, which will be used for construction traffic and to protect tree roots. This option provides the highest volume of water storage (8,920 million litres) and would cost in excess of £36 million.
- **Option 2** allows for a total buffer zone of 40 metres. The purpose of the buffer strip is to protect tree roots and ecologically sensitive habitats. The volume of water storage is less than for Option 1 (8,649 million litres) and the cost of construction is approximately £1 million higher.



Option 1



Option 2