

## Appendix 1

### RECOMMENDATION SUMMARY

Furness Partnership made the following recommendation:

From what has been observed, we have no concerns regarding the pool tank itself. We believe the building fabric and filtration etc. will give up before the tank does, however from a Professional Indemnity perspective, we cannot give a definitive lifespan due to amount of unknowns/variables/inaccessible areas that we may not be aware of.

We would expect if nothing changes and our findings are a reasonable reflection of the condition of the tank, the tank would be okay for 10-15 years, but we cannot guarantee this.

Any signs of defects will show themselves in the form of cracking to the finishes or tiles popping off, hence the need to monitor, survey the water use etc. If any changes are noted then an Engineer should be contacted. As a minimum we would advise a similar set of surveys are carried out in ten years' time if there has been no sign of change in the finishes or water use.

### CONCLUSION/RECOMMENDATIONS

#### 5.1 Conclusion

The pool tanks appear to comprise reinforced concrete construction with tiled finishes. The exact depth and reinforcing details of the tank slabs and walls themselves was not possible to determine without intrusive investigation which would likely compromise the water-retaining properties of the tanks. The cover meter surveys suggest that there is no reinforcement within the top face of the pool slabs and that the pool walls may only have vertical bar reinforcement with approximately 100mm cover although it should be noted cover meter surveys are limited.

The pool surround slab appears to comprise a 160mm ground-bearing concrete slab reinforced with 6mm dia. mesh in the bottom face. The slab is overlaid by a fine sand cement screed laid to falls and a 5mm tile direct to the screed.

A visual inspection of the pool tanks and surround showed no significant structural defects of either the pool tanks or the surround slab. Both tanks and surround slab showed signs of cosmetic wear typical for a building of this age.

A static water test indicated that water loss from the tanks themselves was minimal and that due to the small amounts of water loss recorded it would be virtually impossible to determine if this is from defects in the tank or just evaporation.

Whilst the pool tank construction is unlikely to comply with current water retaining concrete requirements in accordance with current standards the tanks and finishes are holding water adequately and as such are suitable for continued use.

### 5.2 Recommendations

Based on the report and conclusions drawn above it is recommended that whilst the pool tank construction is unlikely to comply with current water retaining concrete requirements in accordance with current standards the tanks and finishes are holding water adequately and as such are suitable for continued use.

At this stage in a pool tanks design life and having only limited information on the exact construction it isn't possible to definitively state a remaining lifespan. However as stated above the tanks are still functioning adequately and as such are suitable for continued use. It is recommended that following the refurbishment project clear records of any water loss/top ups are kept and reviewed annually as any significant defects that do develop in the tanks or finishes in the future are likely to manifest themselves as increased loss of water in the first instance.

It is likely the finishes to the pool tank add the water-retaining properties of the tank and as such it is recommended that any refurbishment works to the pool tanks themselves to improve aesthetics are done so with minimal disruption to existing finishes.