

## Options Appraisal Matrix

	<i>Option 1</i>
<b>23. Brief description</b>	<p>The use of an impermeable liner rather than relining with clay will save a considerable amount of earthworks and importing materials. The impermeable liner will be either a geosynthetic clay layer covered with a compacted layer of as dug material. Or a plastic, or rubber 'geomembrane', again the liner would be installed in the same way and protected with as dug ballast. A geo-grid in the ballast may be installed to prevent "punching through" to the membrane.</p> <p>The installation of an impermeable liner is the best option to address the leakage. Therefore this is the only option which has been considered.</p> <p>It is recommended that a design and build contractor is appointed to ensure an appropriate solution is installed and provide single point responsibility.</p> <p>Appointment of a separate design consultant would add cost and may have implications on the programme.</p>
<b>24. Scope and Exclusions (where different to section 3)</b>	N/A
<b>25. Benefits and strategy for achievement (where different to section 10)</b>	N/A
<b>26. Programme (where different to section 11)</b>	N/A
<b>27. Constraints and assumptions (where different to section 12)</b>	N/A
<b>28. Risk implications (where different to section 13)</b>	N/A
<b>29. Stakeholders and consultees (where different to section 14)</b>	N/A
<b>30. Legal implications (where different to section 15)</b>	N/A
<b>31. HR implications (where different to section 16)</b>	N/A
<b>32. Benchmarks or comparative data (where different to section 17)</b>	N/A

<b>Financial Implications</b>	<b>Option 1</b>
<b>33. Total Estimated Cost (£)</b>	£370,000.00
<b>34. Anticipated source(s) of project funding (where different to section 18)</b>	N/A
<b>35. Anticipated phasing of capital expenditure</b>	2012/13
<b>36. Estimated capital value/return (£)</b>	N/A
<b>37. Fund/budget to be credited with capital return</b>	N/A
<b>38. Estimated ongoing revenue implications (£)</b>	Continue payment (circa £500/year) for water abstraction, the current license runs until March 2016. Continued maintenance of pond, primarily through volunteers.
<b>39. Source of ongoing revenue funding</b>	Continue to source this through local risk
<b>40. Fund/budget to be credited with income/savings</b>	N/A
<b>41. Anticipated life</b>	Manufacturers suggest a 20 year lifespan for liners such as a geosynthetic clay layer or a plastic or rubber geomembrane. However this lifespan is dependent on the quality of the installation, maintenance and protection from punching through.
<b>42. Investment Appraisal</b>	Completing the project would create and improve this wetland habitat, which is part of the City of London's environmental commitment. It provides the opportunity to maintain the water in the pond at a level which satisfies the original aspirations, without excessive abstraction from the aquifer.
<b>43. Affordability (where different to section 19)</b>	N/A
<b>44. Proposed procurement approach (where different to section 20)</b>	N/A

<b>45. <u>Recommendation</u></b>	
46. Reasons	<p>The installation of an impermeable liner is the only practical option to address the leakage and therefore the only option considered.</p> <p>It is recommended that a design and build contractor is appointed to ensure an appropriate solution is installed to the City's requirements and provide single point responsibility..</p>