

John Hall Koi Pond Revamp

This fantastic Koi pond is over twenty years old and has gone through numerous add ons. We were recommended to the client and he contacted us with a view of finally getting the Koi pond to work properly.

During the initial visit we found numerous flaws and a fundamental design error. Our report consisted of the following.

1. Three bottom drains joined into a common prime vortex – this, in reality, means that only 1.5 drains are probably working.
2. The pond returns were incorrectly located giving conflicting flows.
3. The diffuser drain membranes had rotted.
4. The rocks around the Koi pond perimeter were hideously lined with British Racing green topcoat.
5. The prime vortex was unable to be discharged to waste completely.
6. The multi bay biological filter was unable to be cleaned and flushed to waste correctly.
7. The electrical wiring was non compliant.
8. Access to the filter was poor – making routine maintenance a chore.
9. The GRP laminate had degraded and was peeling leaving razor sharp edges.
10. The timber logs had rotted.
11. The UV lights were leaking.

Our usual method of a design process does not include price. We start with an ultimate wish list and then, if necessary, work backwards to an affordable solution specific to client requirements.

In this instance the client wanted it right

We put forward a proposal that addressed all the issues that were raised at the initial visit and were very pleased that the client bought into our vision of how the problems could be rectified to produce a Koi pond that was not only visually stunning but delivered high end performance.

We wanted the Koi to be kept in the Koi pond for as long as possible due to the fact that they were in very good water. So the first step was to get our diver to blank off the three aerated diffuser drains. Once this was complete we removed the existing decking and filter equipment.

The chosen filter system consisted of the following

- Two Nexus 300 units
- One Cetus sieve
- One Pro-Clear 110 watt ultraviolet clarifier
- Three Sequence 18,000 pumps
- One Sequence 15,000 pump
- Five 80 litre per minute airpumps

We excavated the filter room to the required depth and then poured a RC35 concrete base. Located in this base was the discharge sump to facilitate pumped discharge water to the sewer system.

Concrete block wall were constructed to retain the ground around the filters. One wall was tied to the existing Koi pond wall and then 393reinforcing mesh was placed in the cavity and then the cavity was filled with RC30 concrete.

The filter system was installed and as much of the existing pipework was removed and replaced with PVC pressure pipe. All the equipment had double union ball valves located in strategic positions to allow removal if necessary.

The Koi were then removed from the Koi pond and placed into a temporary holding vat to allow the removal of the GRP from the rocks. Upon close inspection the whole of the Koi pond laminate was degraded due to poor initial application. This was rectified by applying a correctly specified laminate. The Topcoat that had to be replaced over the rock edging was a mixture of various pigments to try and blend the Topcoat with the rocks thus making the Koi pond aesthetically pleasing.

New diffuser drain covers and new 15mm airlines were added and then system was filled through a Spark – I – Pure water filter and using a flow meter the systems volume was measured. We left the system turning over for a week and then raised the temperature to 65f . The Koi were then returned and to date there have been no problems with the Koi or equipment.

