

Princes Park Lake Improvements

Meeting with Alan Smith (AS from LCC); Becky (Project Manager - WSP); Pat (Site foreman); Contract Manager; Quantity Surveyor; Katy Gardner; Ingrid Watts; Marilyn; Robert Marten on Thursday 21st March at 2:00pm in Princes Park
The works are being overseen by Becky every week or so and by Frank (Habitat Manager) most days – both employed by WSP (who develop creative, comprehensive and sustainable engineering solutions for a future where society can thrive).

AS is still not certain exactly what will be done for the available budget. It is estimated that the works will take three months, but weather conditions and unforeseen items requiring extra work may extend this period. FOPP will be notified if the timescale changes significantly.

AS hopes that they will be able to:

1. Repair the worst of the leaks along the eastern shore – installing a recycled plastic ‘wall’ 500mm out from the existing concrete apron along more than half of the eastern (Windermere Terrace) shore of the lake; they will back fill behind this wall with hard-core; they will then top up behind the plastic wall with soil and then grass over the soil so that the shore of the lake will look similar to the shore on the eastern (Windermere Terrace) side of the lake at the roly-poly end of the lake – which consists of a strip of mown grass more or less horizontal back from the wooden wall forming the edge of the lake then a few courses of dressed stone sloping up at about 45 degrees then gently sloping mown grass to the path running along the lake. To further reduce the leakage from that side of the lake the contractors will lift a 1.5 metre wide and 300mm deep strip of puddle clay then line that area with a watertight layer of GCL (Geosynthetic Clay Liner) which is supposed to be self repairing – if it gets wet it expands. The strip will be parallel to the shore – one edge will be the new plastic wall – the other edge will be about 2 metres out into the lake from the existing concrete margin. They will then reinstate the puddle clay – so the plastic wall and the resealed 1.5 metre strip will hopefully significantly reduce the leakage from that side of the lake. The surveys showed that there were two or three significant holes on that side allowing lake water to leak away into the nearby sewer. To do this work the contractors may have to build a temporary dam along the eastern (Windermere Terrace) side of the lake. **Attached are copies of the Princes Park Lake Improvements - General Arrangement and Piling / Edge Detail Section drawings from Becky (which is subject to change as the works progress).**
2. Build a new overflow to ensure the level of the lake does not rise too high – the plan is to adapt an existing drain into the sewer that runs along the Windermere Terrace side of the lake as an overflow. Investigations suggest that this drain originally had a pipe out to the bottom of the middle of the lake – so that the lake could be drained. The contractors are currently using this drain to pump water out of the lake to reduce the level so that the repair work can proceed. The level will not be pumped lower than it was last summer.
3. Create a borehole and pump system so that the lake level can be automatically maintained such that there will be water right round the island at all times – this is being negotiated as a separate contract – a bore hole up to 100 metres

deep with a large pump which comes on automatically if the water drops below a certain level. The preferred contractors put in a very high quote – so Alan is looking for a more reasonable price for the job.

4. Investigate the existing land drains so that run off from the playground area, the big field and the donkey grave areas are fed into the lake (as they originally were). Install a new French drain at the edge of the path from the playground area, across the crossroads at the centre of the park into the lake to reduce flooding.
5. Fishing platforms – these will be 4 created using a ground reinforcement (grass) paving system along the eastern shore as part of this work.
6. Amphibian friendly area – there will be 3 amphibian friendly areas and a permanent reed bed created as part of this work. The permanent reed bed will be where the big area of reeds is now. They are going to build low walls or dams (just below water level) using sand bags or clay to retain mud at the right level for reeds and nesting birds and to protect other amphibians and other wild life.
7. The bridge design is being developed by another contractor – CTS – price for design and install – working with the Mandela Memorial designers so that the two things link together – AS said he has made the bridge design more complicated by insisting that it be suitable for maintenance vehicles and pedestrians (this may causes problems by allowing motor bikes and trail bikes onto the island). The bridgework is being funded by the Mandela Memorial project.
8. The narrow part of the lake around the island has already been excavated. The stumps of the willows that had previously been cut down have been removed and new liner laid where tree roots have damaged the original clay liner. The self-seeded willows in the reeded area and a nearby large willow in the lake will be removed and the clay liner repaired as necessary. The lake levels will have to be resurveyed now that the lake margins have been cleared to determine the desired maximum water level in the lake.
9. The paths on the island are being reinstated.

AS undertook to keep FOPP informed as the works progress.