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Dear Sir, Madam

LE Barnes & Sons Ltd., Roxhill Manor Farm, Cranfield: farm reservoir

With reference to the above, I confirm that I was the lead supervisor for the feasibility project responsible for conducting the original topographical survey of the area and completing the engineering design for an environmentally friendly and aesthetic runoff attenuation farm reservoir. That study was completed in April 2018. Following planning approval, the reservoir was constructed and built in 2019.

A site visit on 27th August confirmed that the reservoir is now well established with the water level below the design freeboard for the main embankment. Its asymmetrical shape forms a very natural and well blended feature within the surrounding landscape. However, the reservoir is within a relatively steep but narrow valley; the substantial embankments and surrounding area would therefore benefit from some further sensitive landscaping to reduce the steep bank slopes and to further enhance its visual appearance. This would encourage natural plants to colonise the area, increase soil stability and reduce any erosion risks associated with high intensity rainfall events.

I would therefore strongly support any landscaping measures to enable low lying areas around the reservoir to be backfilled with appropriate quality soil to enhance site stability, reduce runoff risks and promote natural habitat colonisation and biodiversity. Further soil backfilling to landscape the northern flank of the reservoir would also be of benefit in terms of screening agricultural plant machinery from the natural reservoir site. The soil for backfilling would be sourced from agricultural land being developed as part of the A421 extensions at J13 M1 and A421 and the Black Cat development. These are both in close proximity to the reservoir (<10 mile radius) with the intention to minimise haulage costs and carbon emissions. Soil samples from both sites would be analysed to ensure that they are inert and suitable for the intended backfilling purpose.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Jerry Knox'.

Professor Jerry Knox
Chair in Agricultural Water Management

