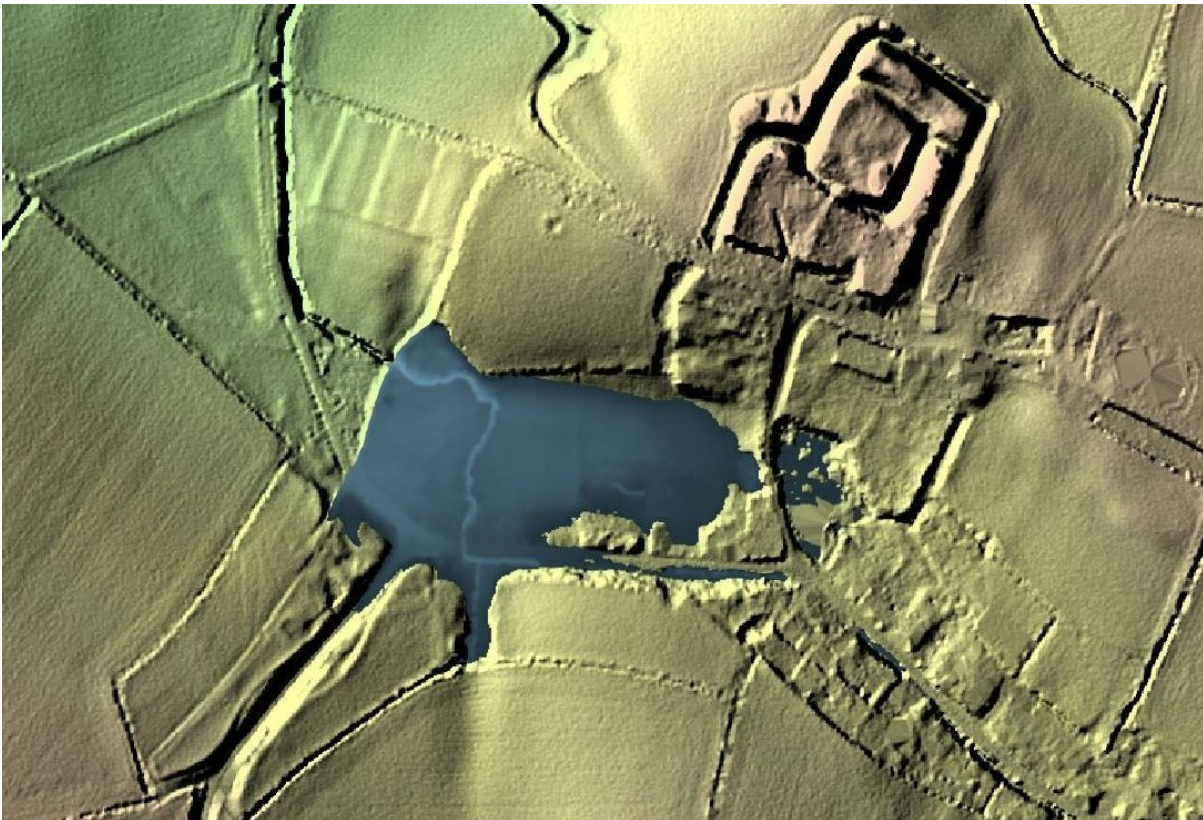


THE LIDGATE CASTLE POND

Lidar analysis of the land to the south of Lidgate castle strongly suggests that the current pond once extended west beyond the causeway to create a much larger area of water. If so, part of this pond bank can be seen on the northern edge of today's meadow as an abrupt change of gradient.

What Lidar modelling does not show is just how far west the hypothesized pond would have extended. This is because the western dam has gone but there is a current low bank that is a good candidate for being its remnant. It would have once had to have been two metres higher along the valley base to provide a dam to fill the pond extent.

This proposed extent is shown below:



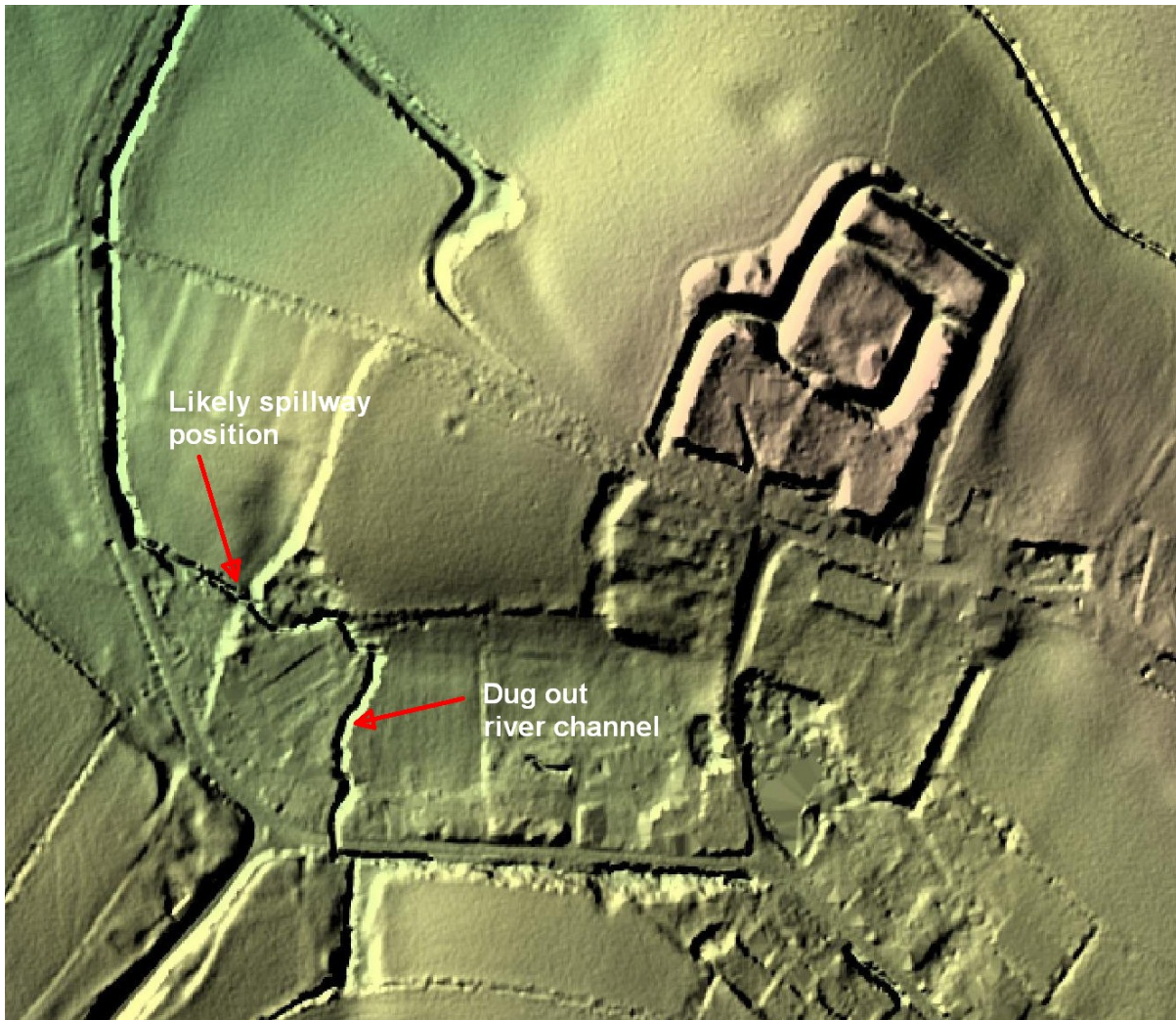
When medieval earth dams were drained or failed through lack of maintenance, the logical place for the drainage point would have been at the dam spillway, where water overflowed from the pond. Not only was this a weak point for failure but by deliberately lowering the dam level at this point, the water could safely drain away along the existing water course on the downstream side. A medieval 'pondcaster' was an expert in this rather dangerous task.

Once drained, though, there would have been a problem. The stream that once filled the pond at its edge would simply flow across the drained pond base. The channel it used to flow along before the dam was built would have gone and the pond base would simply become marsh.

To avoid this happening, a new river course could be dug across the pond base to take the river to the former spillway position. This would leave the former pond as a properly drained and fertile area.

If we look at the current river course at Lidgate, a channel goes across from the south and then heads north west to the bank. If it is a dug river course, it would be expected to head straight for the former spillway position as a simple economy of effort. That it does not do so but meanders to some extent was at first puzzling.

However, walking the river bed showed that there has been irregular land encroachment to enlarge gardens etc at various points. This may have forced the river course off a direct alignment in various places. There also may have been reclamation before the river course was dug that had to be avoided.



If today's bank was once a dam then it would be expected that the river channel would be different in character either side of it. On the former, eastern, pond side, the river should look like a dug channel. The dug channel may be anything up to a few hundred years old. The downstream, western, channel would effectively be for the river that flowed there when the pond existed, perhaps even long before that period. It would be much older and could look very different.

Furthermore, a dam spillway was effectively a waterfall. One might expect the downstream river course to have evidence of fast flowing water adjacent to the dam.

Such differences are exactly what are observed today. The river course east of the bank is square cut with a flat base of chalky nodules as per the two images below



As the river runs through the bank there is an abrupt change. The course is then irregularly v-shaped and hollowed out in places with a base that is also irregular and is consistent with fast water flow. It is very different in character to the other side of the bank.



This does not prove the bank was once higher and a dam but it is strong circumstantial evidence. Similar engineering works have been observed at Kelsale Medieval Park and within the boundary of Framlingham Castle's deer park. Furthermore, a far larger (than Lidgate's) medieval pond system has recently come to light at Hawkedon.

More support for the pond at Lidgate could be found by soil sampling either side of the bank as on the pond side there should be a silt layer absent from the downstream side.