

Pishiobury Park History Group Investigation 1.

Introduction.

On first of September 2021 the newly formed Pishiobury Park History Group held its first investigation. The chosen site was a puzzling rectangular depression showing up clearly on LIDAR and lying to the east of Oak Walk. In previous years after a fall of snow, this depression had always been clearly visible. The softened LIDAR outlines of the hollow suggested significant antiquity. Several explanations had been put forward for the existence of the hollow including a pond and an ornamental garden. The methods chosen for investigation were those easily available for the amateur and gave us the opportunity to give a possible explanation for the feature.

Method.

A 40 m transect line was set out East-West, using surveyors tapes. The ends of the transect were located using GPS. A simple, large-scale clinometer was used to measure the angle of the ground and this data used to plot a profile. Both the transect line and the plotted profile can be seen in Figure 2. A Surber sampler was used to investigate soil layers with each stage in the sampling being laid out in rainwater guttering for recording later. Soil colour was estimated using a Munsell Colour Chart and soil texture and type estimated using a 'Dirty Hands Test'.

Results.

Borehole 1. Start of transect. 60 cm depth. Soil 7.5YR 6/6. Topsoil 15 cm, dark brown and finely textured. The remainder was a consistent silt/clay loam with medium/small stones. The transition to a paler colour with depth suggested transition to Chalky Boulder Clay.

Borehole 2. 11m along transect. 60 cm in depth. Similar brown silt/clay loam grading into Chalky Boulder Clay at 40 cm.

Borehole 3. 22 metres along transect. 35 cm in depth. Fine, silty topsoil, dark in colour with medium stones.

Borehole 4. 25 m along transect. 10 cm in depth. Dry, stony topsoil. It was not possible to go deeper due to the heavily compacted soil which was very dry and loose in texture.

Borehole 5. 38.5 m along transect. Fine, silty topsoil 15 cm. Light coloured, weathered Boulder Clay for remainder of borehole with chalky pellets at base.

Discussion.

The complete absence of any archaeological material or man-made structures caused us to dismiss the idea of a garden. A lack of an organic layer also precluded the existence of a pond which must be in doubt anyway because of the lack of water at this high part of the Park. It has been recorded that water has stood for a short while at the southernmost end of the depression after very heavy rain and this is supported by the finding of Chalky Boulder Clay which can be impervious to water. Regarding the soil type, it appears that in this area we are seeing a heavily weathered and decalcified Boulder Clay which is known in geological terms as 'Head'. This type of soil would have been created in post glacial conditions with freeze/thaw taking place for many thousands of years resulting in leaching of the clay and downhill slumping. We found no real conclusive evidence for the existence of the depression but have come up with an alternative hypothesis as shown in Figure 4. A field visit by Mark Hanson (author of Essex Parks) some years ago suggested that the route of Oak Walk must be of considerable antiquity for it to have continued in existence as a footpath and public thoroughfare through what would have essentially have been a private Park. He suggested that the route may well have been a country lane or a trackway through an agricultural landscape. The fact that it connects at one end to the Fair Green in Sawbridgeworth and at the other at Harlow Mill River Crossing would suggest that it has a considerable history. During the creation of the Brown style Park the route was incorporated into the 18th-century landscape. A look at the natural slope of the land in the area suggests a general fall towards what is the ditch running through the west part of the Park. This would have meant an uncomfortable angle for a coach or carriage and if this is coupled with a general dip in the landscape which is also suggested, then it may be that the depression was caused by artificial movement of soil to level up the land and make the passage of wheeled vehicles more comfortable and indeed less dangerous by having a level surface to travel over. The general hypothesis of how this might have happened is shown in Figure 4. There is also a shallow ditch and bank on the west side of Oak Walk and there was the suggestion that this may originally have been a hedge line bordering the pre-Park lane or track. The extremely dry nature of the topsoil particularly in boreholes 3 and 4 would suggest that a considerable thickness of gravel has been laid over the top of the Boulder Clay and that compaction of this layer both by cattle and the passage of heavy wheeled vehicles is what was making it so difficult for us to try and sample. It may well be this same factor which makes it so difficult to establish young trees in what is recognise as a dry environment.

Conclusion.

No evidence was found for either garden or pond and indeed no other archaeological evidence for any human activity. It was shown that the underlying soil is Chalky Boulder Clay and that this has undergone significant post glacial weathering resulting in a typical silt/clay loam found in large areas of the Park. A reasonable explanation has been put forward regarding the need to

level up Oak Walk for vehicles and this has resulted in the rectangular depression. It is very likely that this process took place in the mid-18th-century with the formation of the Brown-style landscape Park.

Bob Reed.

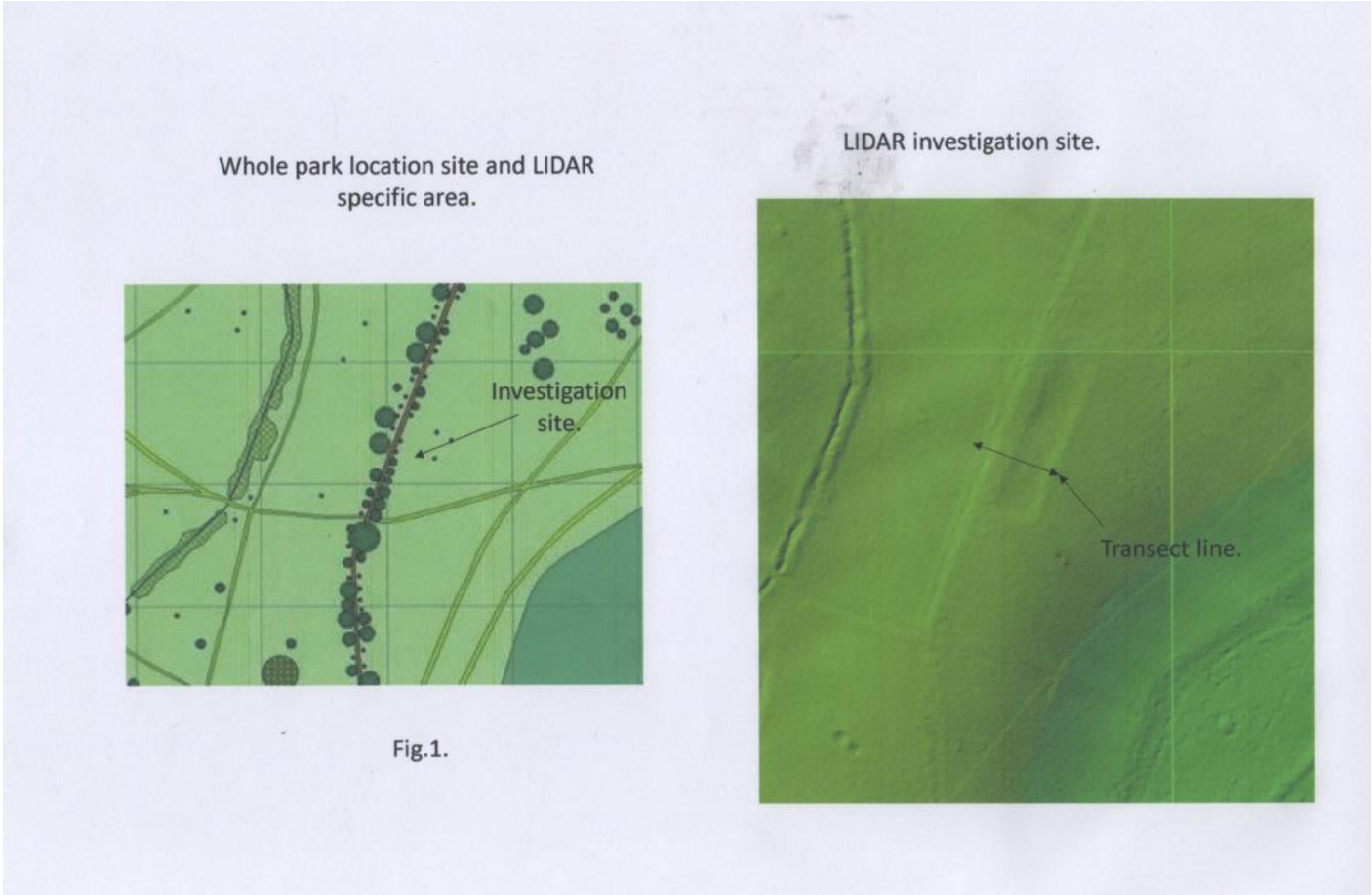


Fig.1.

Ground Profile and Borehole logs(see text for data).

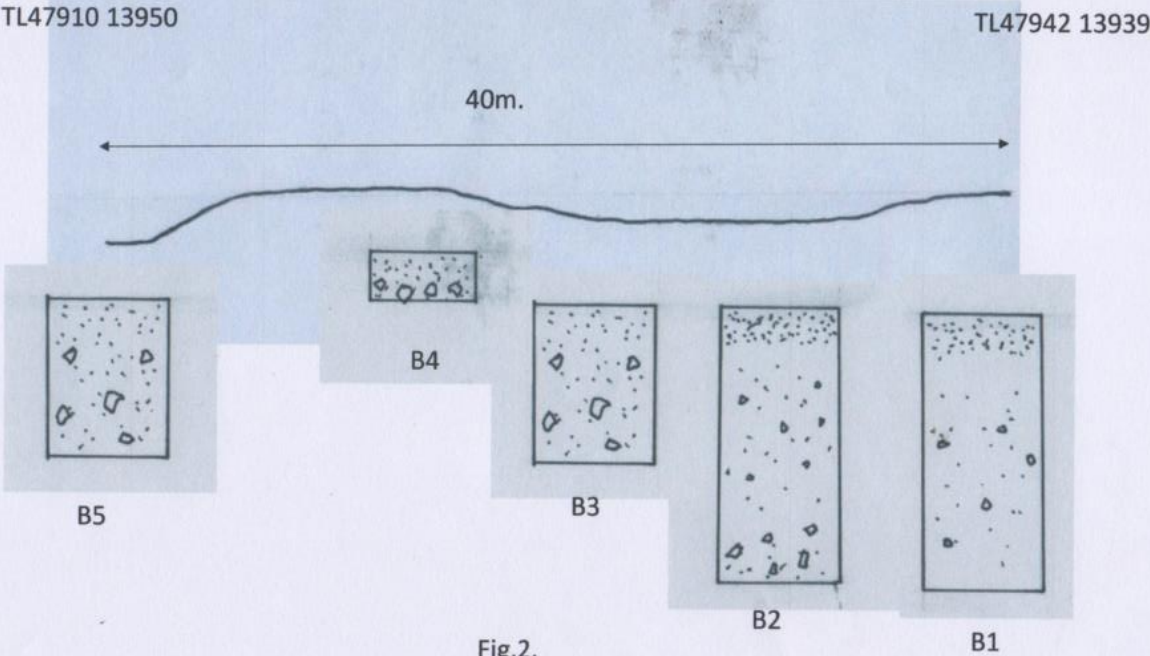


Fig.2.

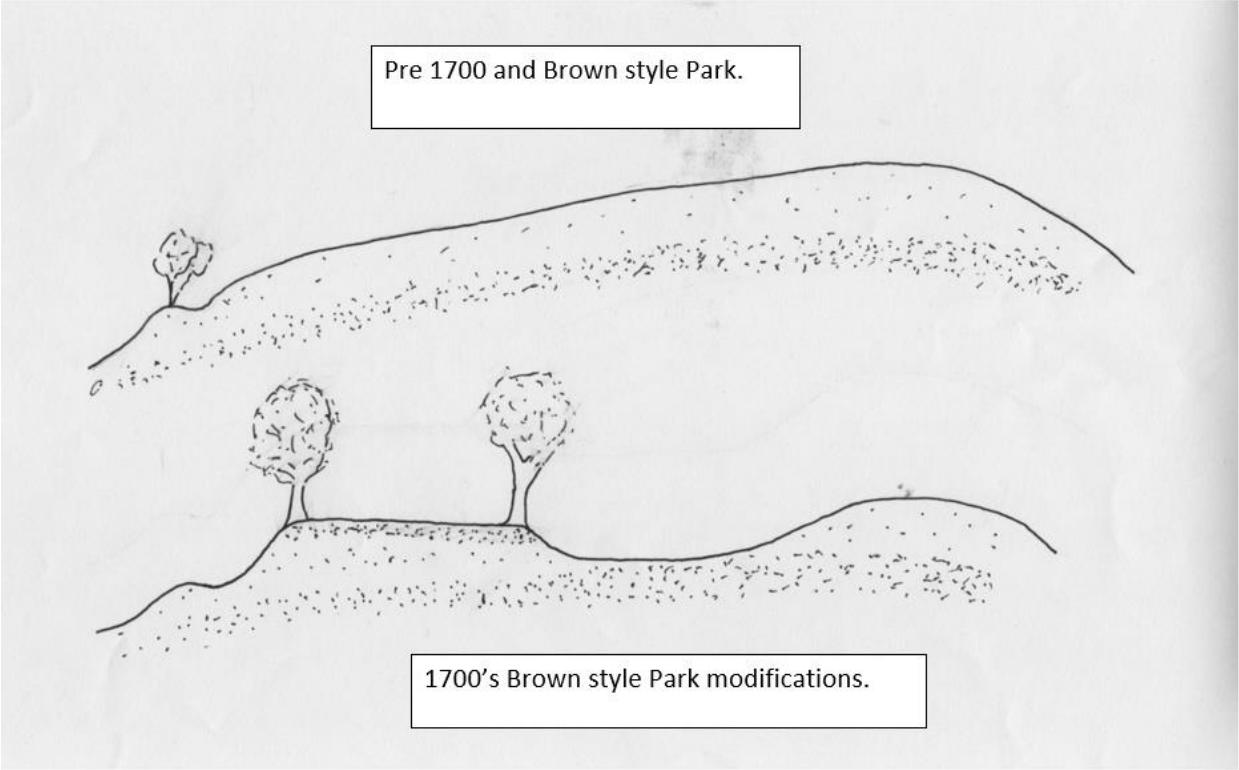


Fig.3.