Pensthorpe Wildlife and Gardens Development Phase 1a

Monitoring of Works under Archaeological Supervision and Control

ENF 131143

Heather Wallis March 2014

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Project name Pensthorpe Wildlife and Gardens

Parish Kettlestone

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Planning Authority North Norfolk

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Introduction

Pensthorpe Wildlife and Gardens is a wetlands wildlife centre situated to the north of the River Wensum, c.1km to the east of Fakenham (Fig. 1). It occupies the site of a former gravel quarry and is situated over the deserted medieval village of Pensthorpe. This centre promotes appreciation of wildlife and nature and is open to the public throughout the year.

A long term development for expanding and increasing its appeal to a broader audience has been formed. Planning permission for the initial phase of this work (Phase 1a) consisting of a new play area and car park was sought from North Norfolk District Council. This was granted on condition that the Monitoring of Works under Archaeological Supervision and Control was undertaken in accordance with a Brief issued by Norfolk Historic Environment Service.

Location, Topography and Geology

The development area was sited to the north of the buildings now accommodating the visitor facilities of Pensthorpe Wildlife and Gardens. Some landscaping and levelling had taken place for the construction of the 'old' car park which was made up of gravel/hoggin with tree planting to the north and south.

The underlying bedrock geology is chalk, formed approximately 71 to 94 million years ago in the Cretaceous Period in a local environment dominated by warm chalk seas. The superficial geology which was formed up to 3 million years ago in the Quaternary Period varies across the site (http://mapapps.bgs.ac.uk/geologyofbritain/home.html). In the north eastern part lay the Sheringham Cliffs Formation of clay, silt, sand and gravel while Briton's Lane Sand And Gravel Member of sand and gravel lay to the south west.

Archaeological Background

A search of the Norfolk Historic Environment Record was undertaken. This showed that Pensthorpe Wildlife and Gardens is located within an area where a variety of archaeological sites are known. Palaeolithic and Neolithic worked flints have been found on both sides of the River Wensum, including two Palaeolithic hand axes from one of the gravel pits within the Gardens. An undated human skull and red deer bones were recovered from another quarry pit. Further evidence for prehistoric activity is located to the north-east of the site where a Neolithic long barrow and a Bronze Age burial group, made up of at least 12 barrows, have been identified. A prehistoric track also runs through this area.

No finds of Iron Age date have been recorded but a small number of Roman artefacts have been retrieved immediately to the west and north of the development area. These date from both the 1st to 2nd century and 4th century. Casual finds of Saxon date are few but two sites of significance lay nearby. Artefacts recovered during the 19th century indicate that an Early Saxon cemetery was located *c*. 0.75km to the north of the development area. A medium sized settlement at Pensthorpe was established by the Late Saxon period as it is mentioned in the Doomsday Book (http://domesdaymap.co.uk/place/TF9429/pensthorpe/). The settlement continued into the medieval period being finally abandoned in the 16th century, possibly as a result of the growth of the nearby town of Fakenham (Batcock, 1991, The Ruined and Disused Churches of Norfolk, East Anglian Archaeology 51). The deserted medieval village is located to the east and south of the development area and evidence for this in the form of earthworks survived into the 20th century. The majority of these earthworks have since been levelled although the remains of the parish church were incorporated within 19th-century farm buildings which now form part of the Gardens visitor facilities.

The development

This phase of the Pensthorpe Development Project included the construction of an external adventure playground which is sited on the existing visitor car park. A new car parking area has been laid out immediately to the north of this and a new track around the northern perimeter of the proposed playground has also be created to allow vehicular access to the Gardens.

Works to create the adventure playground involved removing the hoggin which formed the makeup and surface of the old car park. Topsoil sourced from the new car park was deposited in the playground area to re-establish the existing ground level. Scattered individual footing pits were dug across the site to support the new play equipment (Fig. 2). A new service trench was also excavated across the area. Within the new car park topsoil was stripped on the areas of the new trackways. No excavation below this level was undertaken in this area.

Recording methods

Machine excavation of the topsoil deposits and the footing pits were monitored on a regular basis. Disturbed soils were inspected and metal-detected in order to retrieve any artefacts. Archaeological records of the watching brief comprise written, drawn and photographic data.

All works were carried out in full accordance with national and regional guidelines for the treatment of archaeological remains, and in particular the guidance set out in *Standards for Field Archaeology in the East of England* (Gurney 2003) and the *Institute of Field Archaeologists Standard and Guidance for an Archaeological Watching Brief* (2001).

Archaeological Monitoring

Car Park

Topsoil was stripped from the new roadways within the new car park. Only *c*. 0.1-0.2m of soil was removed from these areas by machine. A clear archaeological horizon was not reached across the site so the presence or absence of archaeological features was not established. Soils from this area were metaldetected but only finds of a modern date were retrieved. These were discarded. Soils removed from this area have been used in the new play area to the south.

West Rope Walk (Figs 2 and 3, Plate 1)

Fourteen pits (W1-W14) were excavated for the footings of the rope walk supports. Each measured $c.1.2 \,\mathrm{m} \times 1.5 \,\mathrm{m}$ with depths of either 1.4 or 1.9m. All of these were monitored with observations being made from the top of the trenches. Services ran through trenches W3-W8 so no clear archaeological sequence was visible in these trenches.

The underlying natural (19) was observed in all the trenches. This was a laminated yellowish orange sand with some gravel lenses becoming more silty towards the east. Over this lay clean soft orange sand (18), which also filled a hollow in the top of the natural (W13). This has been interpreted as redeposited sand. Over this was a mid brown sandy loam topsoil (17). The homogenous nature of this also suggested that this is an imported soil.

Carousel Swing (Figs 2 and 4)

The carousel swing support (CS) measured $1m \times 1m$ and was 1.2m deep. The lowest revealed deposit was a soft yellow sand (19) above which was 0.8m of mid brown sandy loam (17).

Music Pit (Figs 2 and 4)

The music pit (MP) measured 1.2m x 2.3m and was between 0.7m and 0.9m deep. Clean orange brown clayey silt (23) was revealed at the base of this trench. Above this lay a deposit of mid brown loam (22) with notable root disturbance and has been interpreted as a former topsoil. This was sealed by a layer of gravel (21) which may have been an earlier, but modern, surface. Over this was the modern topsoil which was a mid brown sandy loam (20).

Rope Bridge (Figs 2 and 4)

Two pits (RB) each 0.9m x 1.5m and 1m deep were excavated for the rope bridge footings. The same deposits were recorded in both of these pits. The lowest recorded deposit was the natural orangey brown sandy and clay (23). Over this lay grey brown silty clay (27) which may be a post-medieval or modern horizon. Above this was a series of modern deposits consisting of silty, clinker make-up (26), a previous gravel surface (25) and a silty loam topsoil (24).

Test pits (Figs 2 and 5, Plate 2)

Three test pits (TP1-TP3) were excavated in the old car park to test ground conditions. These measured c.1.5m x 1.2m, TP1 was 1.3m deep, TP2 0.8m and TP3 0.7m deep. The same sequence of layers was noted in all the trenches. The lowest deposit (not seen in section as water was present in the base of the trench, but identified from soils on the spoil heap) was mid orange brown sandy clay with grey clay and chalk lump inclusions (16). Above this lay a deposit c.0.1m deep, of dark greyish grey sandy, slightly silty clay with occasional medium flint (15) which in turn was sealed by dark greyish brown clayey, slightly silty sand with occasional small flints and occasional fragments of Post-medieval brick/tile (14). All deposits above this were modern in origin consisting of a bedding layer (13) for the hoggin (12) and gravel (11) surface of the old car park.

East Rope Walk (Figs 2 and 5, Plate 3)

Seventeen pits (E1-E17) were excavated for the footings for the rope walk supports of which ten were monitored. Each measured $c.1.2m \times 15m$ with depths of between 1.4 and 2.5m. The underlying natural was revealed in all of the trenches and consisted of orange/yellow/grey silty clays with chalk flecks (31, 33, 34, 35 and 37) and a band of large flint nodules. Above this in trenches E1-E5 greenish grey sandy clay (30) was revealed. In E1 the deposits above consisted of cinder make-up (29) and hoggin (28). The upper deposits in the remainder of the trenches were a loamy subsoil (36 in E9 and E10) and mid brown silty loam (32 in E2 – E8)

Sewer Trench (Figs 2 and 4)

A sewer trench was excavated across the site, joining into existing services at both its east and west end. Sections were recorded at four points along its

length (ST1 - ST4). The natural in the ST1 and ST2 was orange sandy clay (38) over which lay a loamy subsoil (22). In trench ST2 a pit (39) containing brick tile and slate rubble (40) was recorded. Over this lay the topsoil (20). Further west in ST3 the lowest deposit revealed was orange sand (18) over which lay topsoil (17). The natural in the most westerly trench (ST4) was creamy orange chalk flecked clay (31) over lain by a loamy subsoil (36) and topsoil (32). No other features were noted during the excavation of this trench.

Finds

Finds from the site were few. Two worked flints were recovered from the spoil, of which one was a small scraper and the other a small flake. The only other artefacts revealed consisted of Post-medieval and modern brick and tile, and modern metaldetected items. These were not retained.

Discussion

It was anticipated that the underlying natural would consist mainly of sands and gravels, however this type of deposit was only present in the western half of the site where firm laminated sands were identified as the underlying natural. In the eastern part of the site and the most westerly part of the sewer trench the natural subsoil was made up of chalk flecked clay with occasional horizontal bands of flint nodules. At both the eastern and western ends of the site truncation had occurred onto and into the underlying natural. This may have occurred when the area lay on the periphery of the sand and gravel quarry.

The remnants of a possible archaeological horizon was observed in seven of the monitored trenches (MP, RB1/2, E1, E2, ST1 and ST2). In five of these trenches a greenish grey silty clay was noted (15 and 30). It was not clear if this was the top horizon of the underlying clayey natural, or was the result of human activity. Above this in three trenches (TP1-3) was a layer of dark greyish brown clayey sand (14) containing fragments of ceramic building material, which indicated a Post-medieval date for this deposit. Other deposits (22 and 27) of possible post-medieval (or modern) date were noted in ST1, ST2, MP and RB trenches. A single pit of post-medieval or modern date was noted in ST2.

Conclusions

Across this site it appears that large scale earth movement have taken place destroying or truncating many of the archaeological deposits. It is thought this may have occurred during the time that Pensthorpe was an active gravel extraction quarry. Small areas of possible medieval and post-medieval deposits survived in the central part of the site, but it was not possible to date or interpret these with any certainty.

Figure 1. Site location plan.

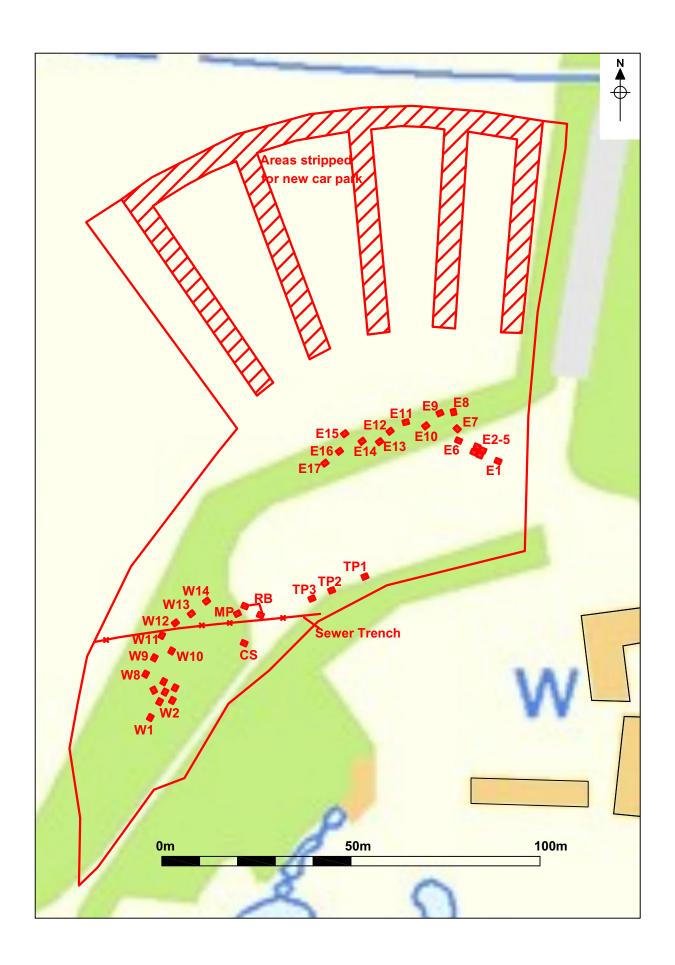


Figure 2. Site plan. Scale 1:1000.

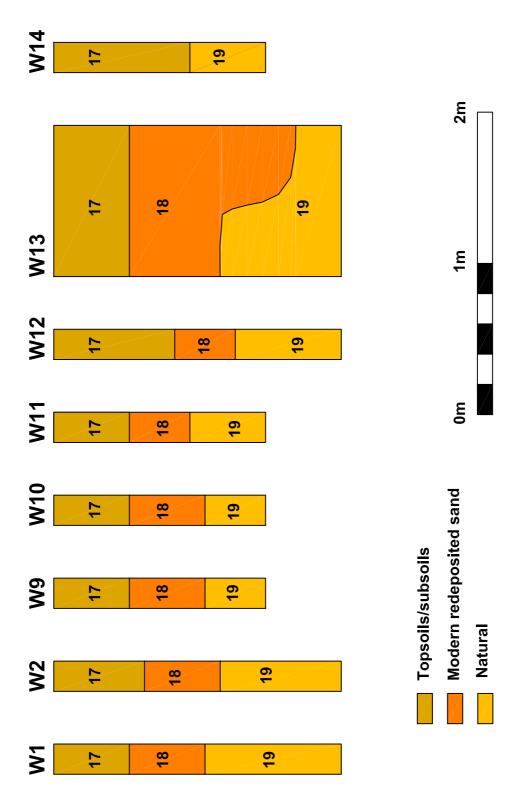


Figure 3. Typical sections, West rope walk.

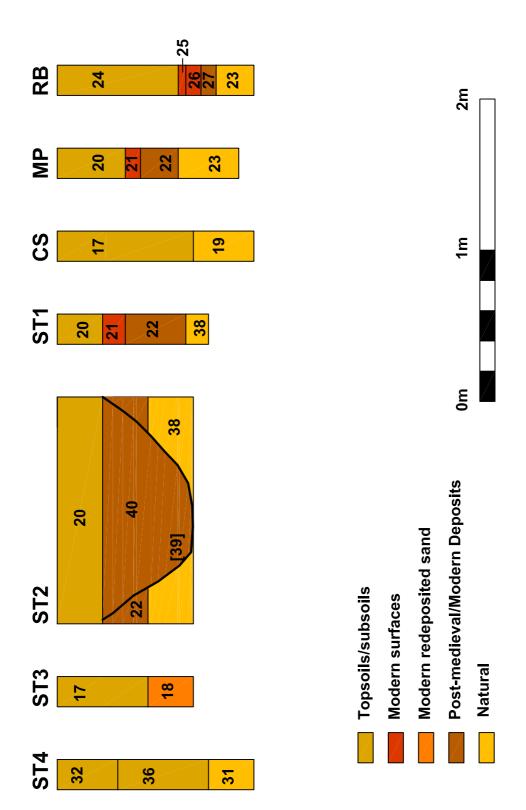


Figure 4. Typical sections, Sewer Trench, Carousel Swing, Music Pit and Rope Bridge.

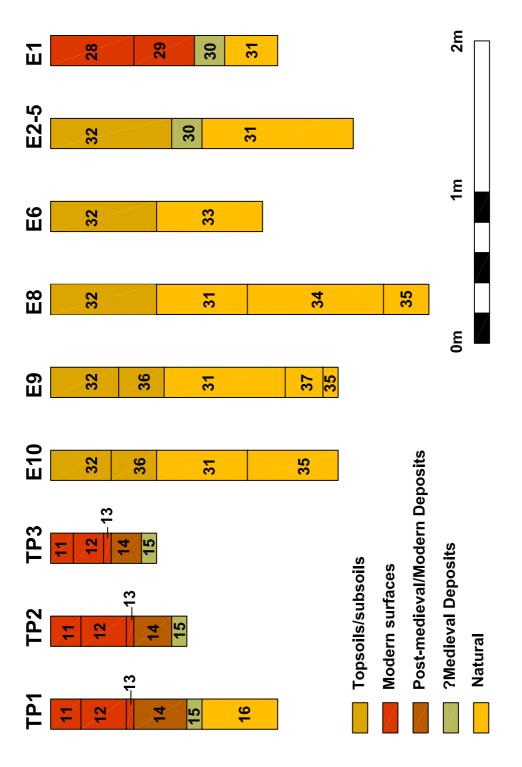


Figure 5. Typical sections, Test Pits and East Rope Walk.



Plate 1. Trench W1



Plate 2. Trench TP2



Plate 3. Trench E1

Appendix 1

Context list

Context No	Areas	Category	Description	Date
11	TP1, TP2, TP3	Make-up and surface	Gravel	Modern
12	TP1, TP2, TP3	Make-up	Hoggin/gravel	Modern
13	TP1, TP2, TP3	Make-up	Dark grey compacted silty clay	Modern
14	TP1, TP2, TP3	Buried soil	Dark grey brown clayey sand, some silt, small flints and fragments of ceramic building material	Post-medieval
15	TP1, TP2, TP3	Layer	Dark green grey sandy clay, some silt, medium flint	?Medieval/Post- medieval
16	TP1	Natural (clay)	Orange brown sandy clay, chalk flecked	-
17	W1, W2, W9, W10, W11, W12, W13, W14, CS, ST3	Topsoil	Mid brown silty loam	Modern
18	W1, W2, W9, W10, W11, W12, W13, ST3	Redeposit ed sand	Soft, unstructured sand	Modern
19	W1, W2, W9, W10, W11, W12, W13, W14, CS	Natural (sand)	Yellow sand with some gravel, laminated	-
20	MP, ST1, ST2	Topsoil	Brown loam	Modern
21	MP, ST1	Surface	Gravel	Modern
22	MP, ST1, ST2	Buried soil	Semi-compacted loamy topsoil with roots	Post- medieval/Modern
23	MP, RB	Natural	Orangey brown slightly clayey silt	-
24	RB	Topsoil	Loam	Modern

Context No	Areas	Category	Description	Date
25	RB	Surface	Gravel	Modern
26	RB	Make-up	Clinker and silt	Modern
27	RB	?buried soil	Grey brown silty clay	Post- medieval/Modern
28	E1	Make-up	Orange hoggin	Modern
29	E1	Make-up	Black cinder and silt	Modern
30	E1, E2-5	Layer	Greenish grey, slightly sandy clay, firm	?Medieval/Post- medieval
31	E1, E2-5, E8, E9, E10, ST4	Natural	Yellow/orange/pale grey clay, chalk flecked	-
32	E2-5, E6, E8, E9, E10, ST4	Topsoil	Mid brown silty loam	Modern
33	E6	Natural	Yellow sandy clay, chalk flecked	-
34	E8	Natural	Grey/while clay, chalk flecked, clear band of large flint nodules	-
35	E8, E10	Natural	Dark grey clay, chalk flecked	-
36	E9, E10, ST4	Subsoil	Mid brown loamy subsoil	Modern
37	E9	Natural	Orange clay, chalk flecked, bands of flint nodules	-
38	ST1, ST2	Natural	Orange sand	-
39	ST2	Pit cut		Post- medieval/Modern
40	ST2	Pit fill	Red brick, tile and slate rubble	Post- medieval/Modern