

ARCHAEOLOGICAL MONITORING REPORT

Repair Base Water System, Phase 3 LKH 249, LKH 250, LKH 251.

A REPORT ON THE ARCHAEOLOGICAL MONITORING, 2003
(Planning app. no. F/2002/539)

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Acknowledgements

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The field work was carried out by Jo Caruth, John Craven, David Gill and Andrew Tester all from Suffolk County Council Archaeological Service, Field Team.

Summary

Archaeological monitoring across the airfield of RAF Lakenheath, identified two new archaeological sites, LKH 250 and LKH 251, each consisting of undated ditches. Desiccated fen deposits could be seen along the northern edge of the airfield indicating the former extent of Wangford fen. Other soil profiles recorded a history of levelling of the natural dune and hollow landscape. There were no finds recovered during the monitoring work.

SMR information

Planning application no.	F/2002/539
Date of fieldwork:	May 2003 to October 2004
Grid References:	LKH 249, centre of airfield - TL 7414 8201 LKH 250 - TL 7310 8152, LKH 251 TL 7507 8296
Funding body:	MOD Defence Estates (USF)
Oasis reference	Suffolkc1-9187

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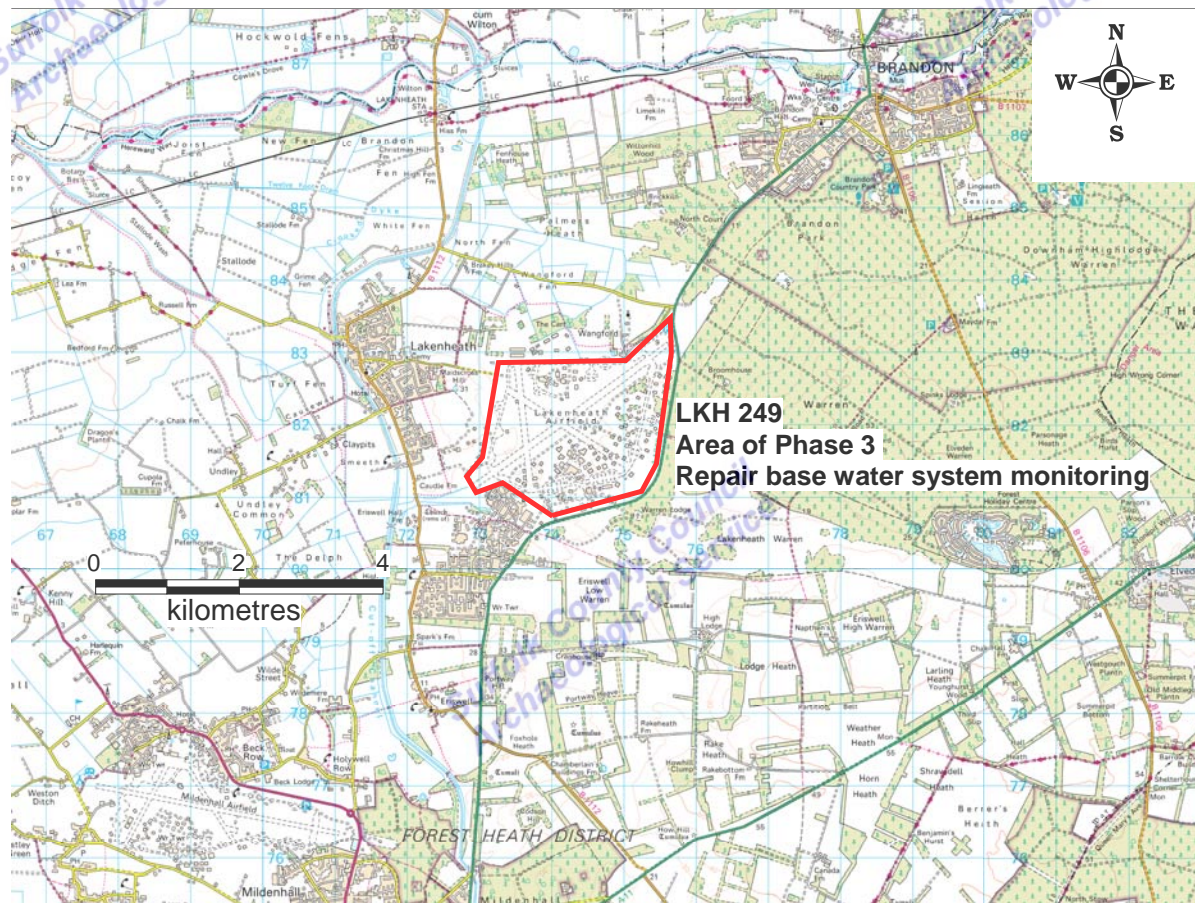
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Introduction

Archaeological monitoring was carried out during Phase 3 of the renovation of the Base Water System, which is a phased Base-wide project. Phase 3 took place during 2003 and 2004, and involved the insertion of new water pipes of between 200 and 300mm in diameter across the airfield (Fig. 1). The work was carried out in accordance with a Brief and Specification issued by Jude Plouviez, Suffolk County Council Archaeology Service, Conservation Team, as a result of a planning condition attached to Planning Application No.F/2002/539.



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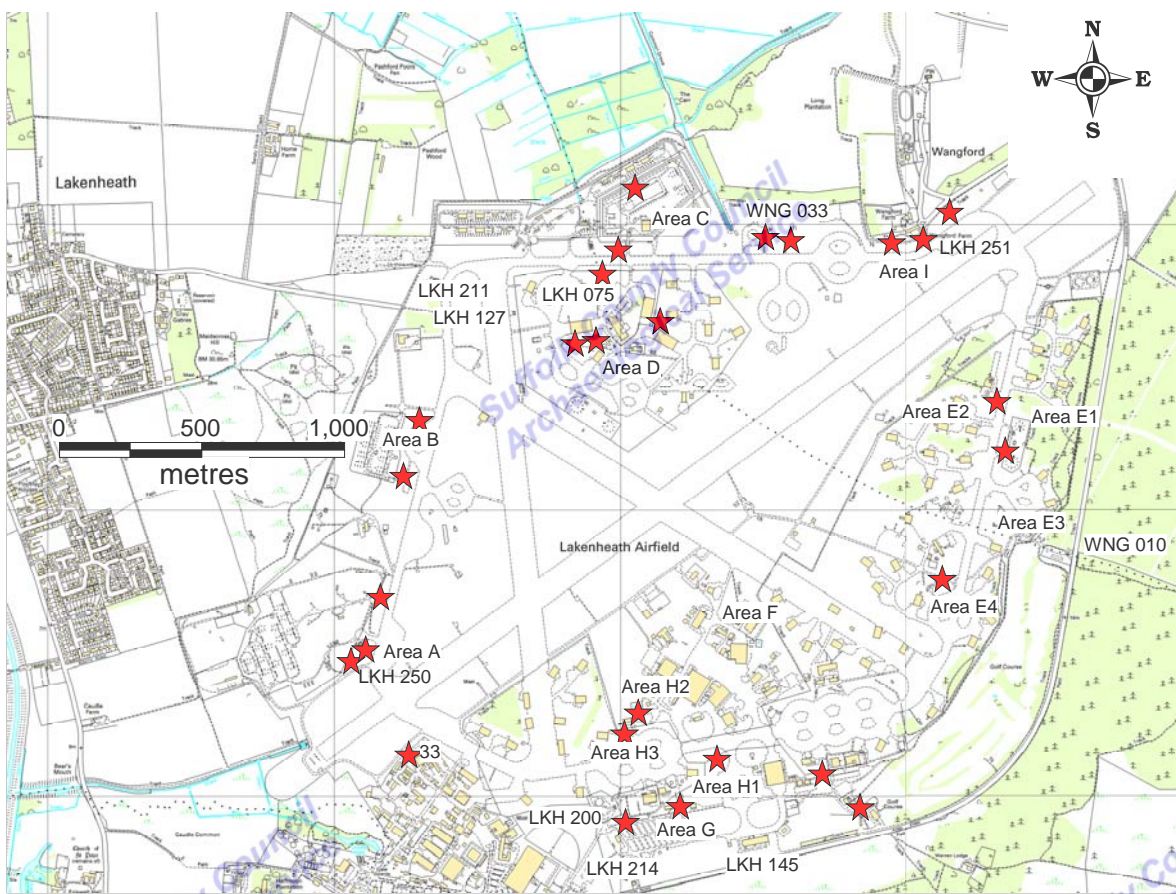
Figure 1 Site location

The airfield of RAF Lakenheath lies in an area of less intense archaeological finds than the built-up areas to the south-west, although the lesser density of development may be a contributing factor in the identification of fewer sites. Previous work (Fig. 2) has identified fen deposits along the northern edge of the airfield (WNG 033) and Iron Age features and finds in the north-western corner (LKH 211, Caruth, 2001). Mesolithic deposits were found in the north-western corner of the airfield prior to its construction (LKH 075 and 127, SMR ref.) and scattered prehistory has been found along the southern edge (LKH 200, Caruth, 1998 and LKH 214, Gill, 2002), but this is very dispersed. Two undated burials (LKH 145 – SMR ref.) were found near building 1346 along the south-eastern edge. The Phase 1 and 2 Water Main replacement confirmed the continuation of Roman and Saxon settlement into the southern end of the airfield, but the Phase 3 work did not pass through this area. The line of the Brandon Road was re-routed in the 1960's to allow for Base expansion. The road originally ran in a straight line across the airfield.

Methodology

Intermittent visits were made throughout the construction period to monitor the soil profile within the trenches. All construction areas were visited (except small Area F), but some only once, and the necessary visits were kept to a minimum with the co-operation of the contractor, Lawrences, who provided two weekly schedules showing when and where excavation would be undertaken. Whilst secure areas were monitored, these needed prior arrangement so, as many visits were timed to fit in with other monitoring jobs, trenches on the external margins of secure areas were monitored for preference. During the period of this monitoring several other projects have been undertaken on this part of the base. Negative results from other archaeological monitoring (Restore Fuels, Southern Taxiway (both Caruth in prep), AEF Facility (Caruth, 2004), Strike Eagle (Tester, , and several watching briefs) demonstrating an absence of archaeological finds or features, particularly in Areas F, some of G and parts of E led to only minimal monitoring for this project. Occasional ditches were seen in the trench sections, but no finds were recovered. Sections were drawn of soil profiles and feature cuts at 1:20 and locations marked on existing Base plans.

The project as a whole was recorded under SMR no. LKH 249 and the two areas of features under site codes LKH 250 and LKH 251 (Fig. 2). The report and project details have been lodged with the on-line OASIS database ref. Suffolk1-9187.



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Figure 2 Location of monitored lengths, new sites LKH 250 and 251 and existing sites

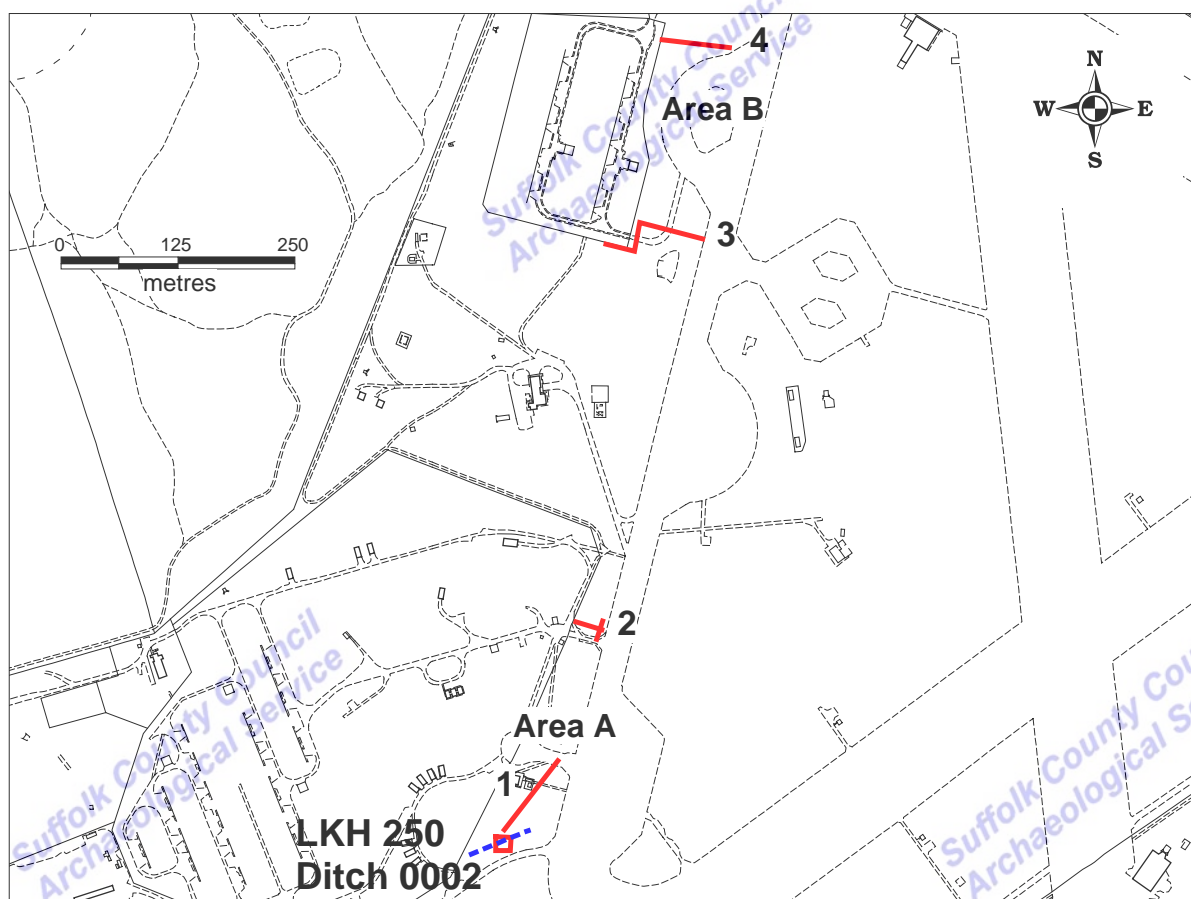
Results

The results of the various monitorings are recorded in the table below and plotted on the accompanying maps, (Figs. 3, 5, 7 and 8) using numbers to identify each observation. Sections of the features and sample soil profiles are recorded by Area (Figs 4, 6 and 9).

Plan Id.	Location	Description
1	Area A	A large hole and short length of trench seen where the new Perimeter Road leaves the old on the SW side of the airfield. Two east-west ditches seen – SMR number LKH 250, 0002 (Figs 3 and 4). Chalk and red sand subsoil seen directly under 0.3m of sandy topsoil.
2	Area A	A second short length of trench (Fig. 3) linking into existing main, seen between the Perimeter Road and the security fencing. Chalk and sand subsoil seen lying under mixed sandy topsoil c.0.3m deep.
3 and 4	Area B	Trenches from security enclosure to Perimeter Road and tie in to main seen (Fig. 3). Both showed c. 0.17m of redeposited soil and topsoil over 0.13m of fine orange-brown sand, possibly windblown, over chalk natural.
5	Area C	C.30m of trench in the central part of the secure area seen (Fig. 5). This showed redeposited sand and modern debris 0.6m deep, overlying an original (pre 1940?) ground surface of 0.15m of desiccated peat over 0.7m of dark grey silty sand suggesting that this area originally lay within Wangford fen.
6	Area C	Short length of trench to tie in with existing water main (Fig. 5). The sections were disturbed but a soil profile of dry peaty sand and gleyed sand was visible.
7	Area D	Length of trench seen alongside taxiway (Fig. 5). Already partially backfilled and sections not clear. However seemed to show shallow dried fen deposits under topsoil and over gleyed sand.
8-10	Area D	Tie in to existing main and trench seen south of Building 1473 (Fig. 5). Three different soil profiles were seen, from east to west. Grey sand 0.3m deep over gleyed sand to base of trench; Modern material 0.25m deep over 0.15m of grey sand over 0.3m of yellow gleyed sand over natural yellow sand and the eastern most point showed disturbed material to the base of the trench.
11	Area D	Square trench for replacement water storage tank alongside Building 1493 (Fig. 5). This showed topsoil, 0.15m deep over 0.3m of pale brown sand, over 0.4m of gleyed orange sand over 0.3m of pale grey-white sand which overlay dense grey sand continuing beyond the base of the trench (1.2m). This appears to be within Wangford fen.
12	Area D	Another square trench for a water tank (Fig. 5). This showed brown and grey sand 0.35m deep fading into yellow sand 0.15m deep, over bands of grey and white sand onto yellow sand natural at c.1m.
13	Area I	Square hole for water tank seen (Fig. 5). This showed natural sand at c.0.7m with dry peaty and gleyed sand deposits above.
14	Area I	A length of trench alongside the Perimeter Road (Fig. 5). The sections were unclear but it showed similar depth of fen deposits as no. 13.
15	Area I	C.50m length of trench in front of Wangford Farm, alongside Perimeter Road (Fig. 5). This showed deep fen deposits (Fig. 6) extending below the base of the trench (1.2m).
16	Area I	10m length of trench in front of Wangford Farm (Fig. 5), opposite the east-west wing. This showed fen deposits to 0.7m. A pair of substantial east-west aligned ditches (LKH 251, 0002) were visible aligned with the centre of the wing of the farm building (Fig. 6). The northern cut could be seen to clearly cut the southern. There were no finds with which to date the feature.
17	Area I	Trench, c.50m starting 2m SW of Wangford fence corner, southwesterly along the west edge of the Perimeter Road (Fig. 5). Fen deposits of dried peaty sand and grey sand 0.5m deep under topsoil, over natural yellow sand. The base of the grey sand undulates but only one positive feature was identified; a large ditch, c. 4m wide and deeper than the trench (1.2m), LKH 251 0003 (Fig. 6).
18	Area E2	C.30m of trench seen (Fig. 7), chalk found at 0.8m, below 0.5m of modern deposits and 0.3m of previous topsoil (very sandy).
19	Area E1	Intermittent lengths of trench and/or tie in holes seen (Fig. 7). Natural chalk found at between 0.3 and 0.6m, with some patches of orange-brown sand over the chalk where it dips.
20	Area E4	50m of trench observed (Fig. 7). This showed that the topsoil had been previously stripped and the subsoil was a dark mineral rich, Fe stained sand with stony areas suggesting some deflation of the surface due to weathering.
21	Area H2	A c.30m of trench showed 0.5m of redeposited pale brown sand with dark lens at the base overlying sand natural (Fig. 8). This did not look modern and is probably windblown deposits.

Plan Id.	Location	Description
22-27	Area H3	A 60m length of trench with six different soil profiles recorded (Figs. 8 and 9). One had concrete over natural but the rest showed redeposited sand and gravel overlying a buried turf line at anything between 0.3 and 0.9m below the current surface. The turf generally overlay layers of yellow-brown sand and gravel, in one case it lay directly on natural. The levels of the buried turf clearly demonstrate a levelled, formerly undulating landscape, but it was not always obvious in the trenches how one level became another – i.e. sudden or gentle changes. Between 26 and 27 there was a pipe intermittently obscuring the section view.
28	Area G	A short length of trench seen in Area G (Fig. 8). All disturbed.
29	Area E6	Two short lengths of trench (Fig. 8), pipe already in, that seemed to show sandy redeposited soil overlying yellow sand natural.
30	Area E6	Short length of trench (Fig. 8) showing natural yellow sand at 0.3m.
31	Area H1	Short length of trench seen (Fig. 8), near compound. 0.2m of topsoil directly overlying yellow sand natural.
32	Area H1	Some disturbance (Fig. 8), otherwise natural at c.0.3m.
33	Near building 1155	A repair to a burst main was also seen (Fig. 2). This lay near building 1155 and showed 0.25m of modern redeposited material over, 0.2m of black sand which overlay a layer of grey-brown sand c.0.3m deep and with an undulating base. No finds or features were seen, but the soil layers are consistent with those seen in the adjacent Roman settlement.

Table 1 Observations

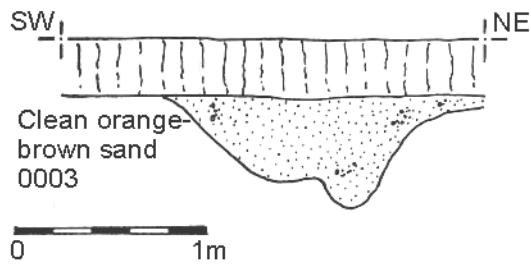


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Figure 3 Areas A and B; detail

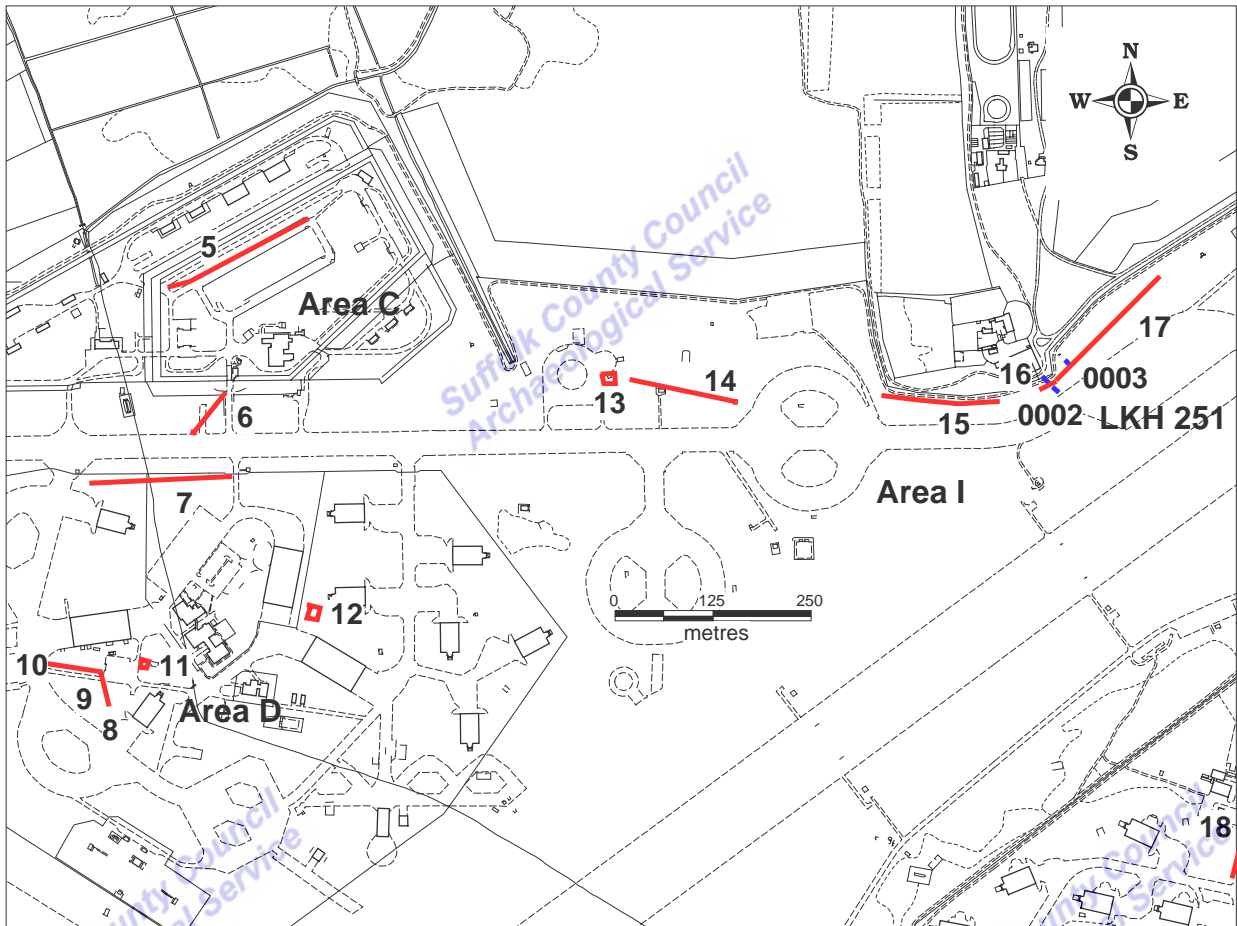
LKH 250 Ditch 0002

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Figure 4 Section of ditch LKH 250, 0002 in Area A



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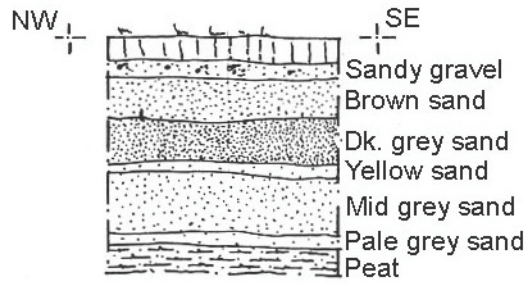
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Figure 5 Areas C, D and I; detail

Area I No. 15

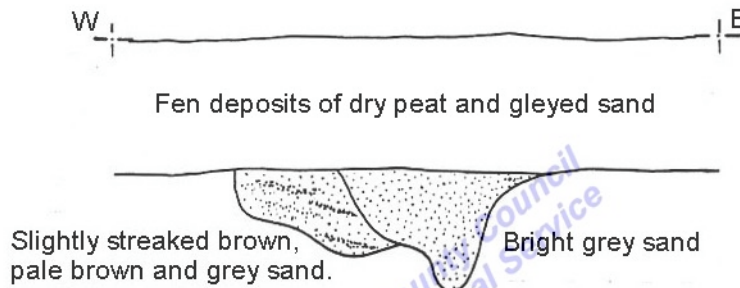
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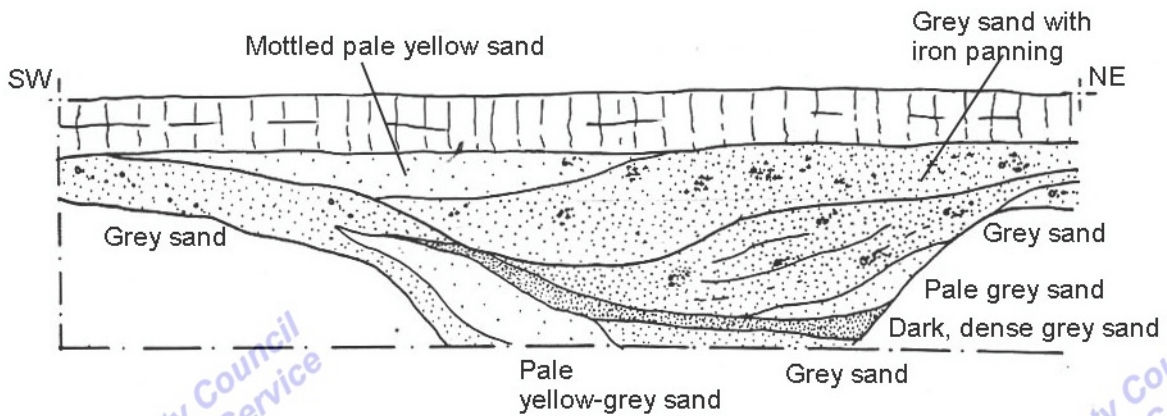
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LKH 251 ditch 0002



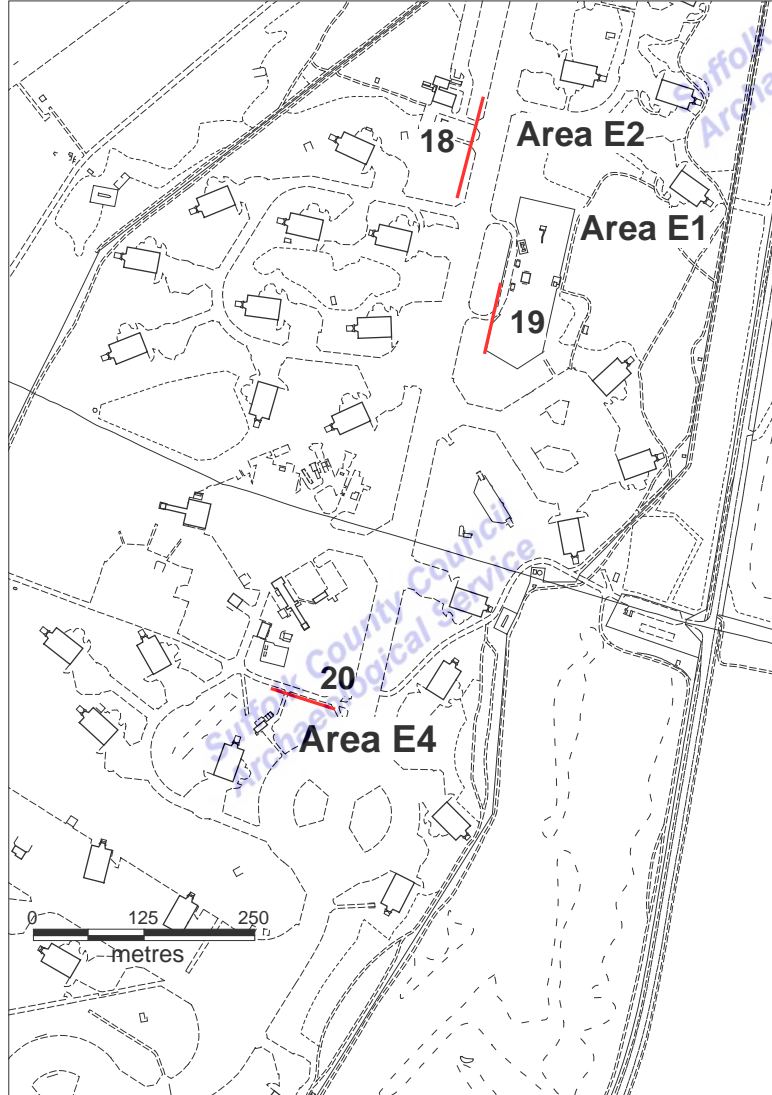
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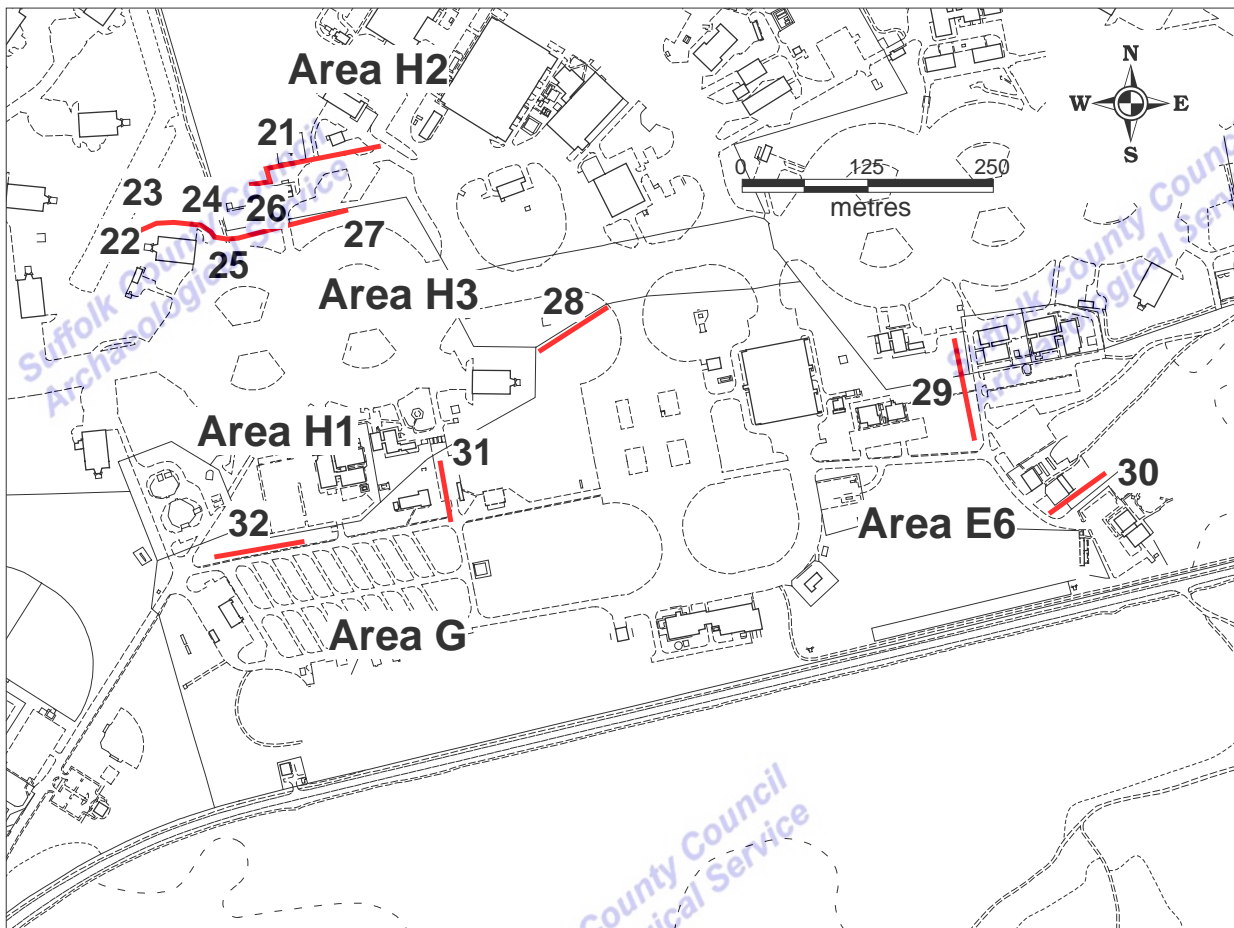
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Figure 6 LKH 251, soil profile and ditch sections



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Figure 7 Area E; detail



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Figure 8 Areas G, H and E6; detail

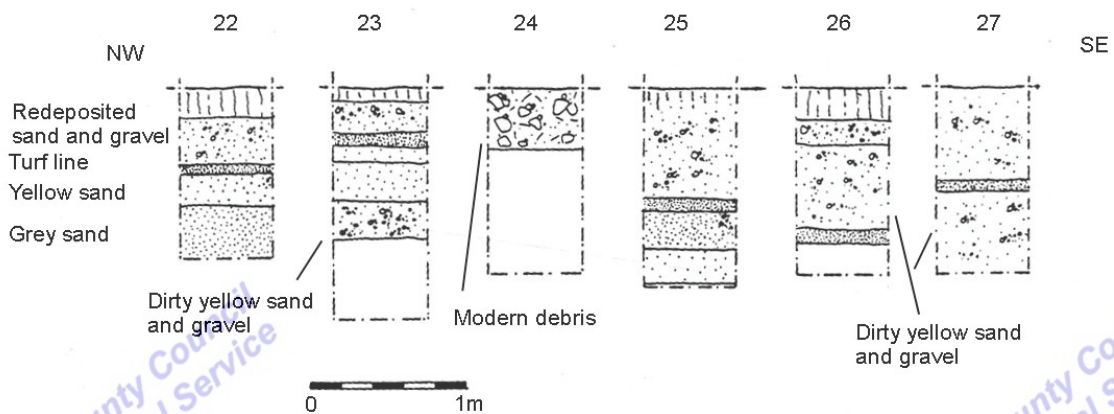
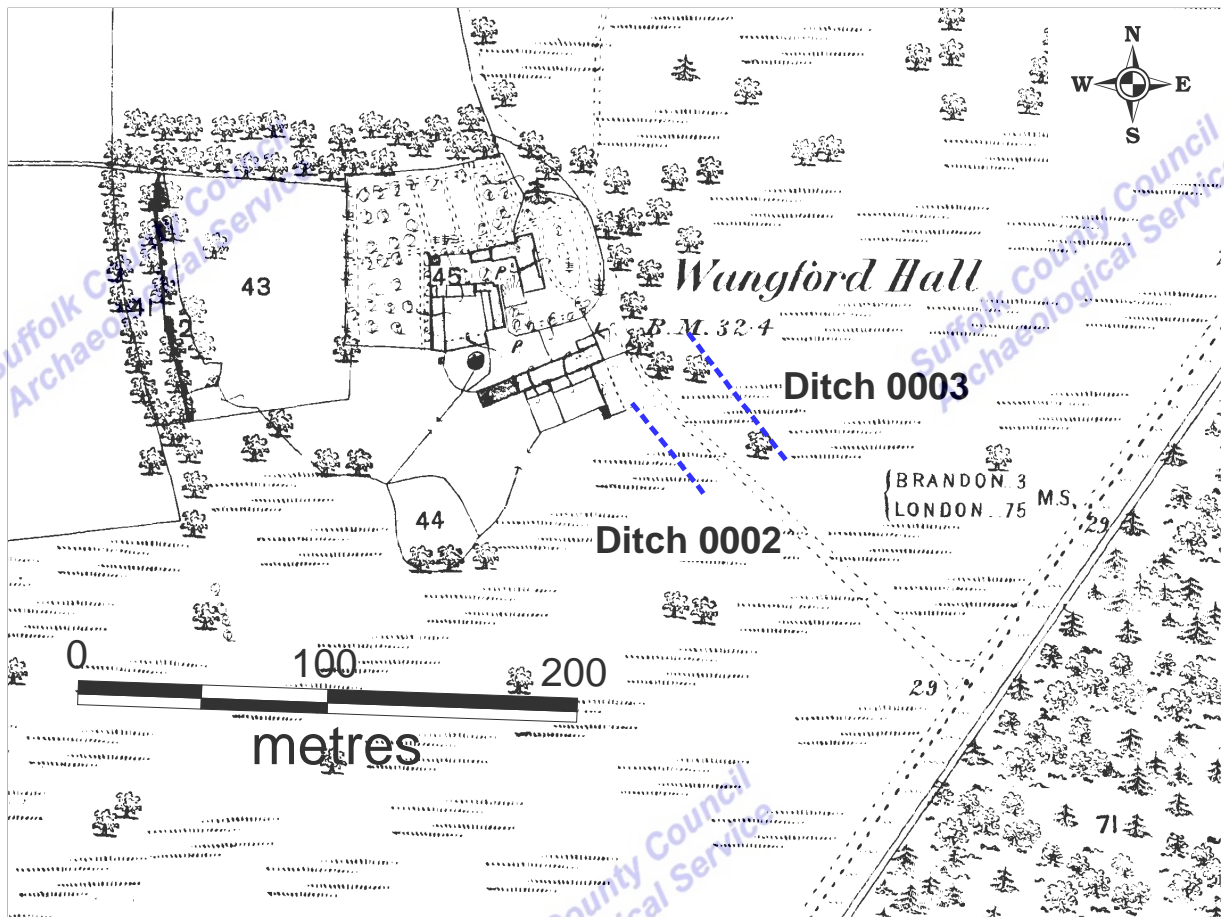


Figure 9 Soil profiles at points 22-27

No datable features were found during this monitoring although two pairs of east-west aligned ditches and one large single ditch were found in trenches along the north and west side of the airfield. Of these, one pair and one single ditch were found near Wangford Farm, and whilst the location or orientation of these ditches cannot be very precisely plotted, they appear to lie either side of a track shown on the 1880's Ordnance Survey Map running in a southeasterly direction from Wangford Farm (Fig. 10).



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Figure 10 1880's 1st edition OS map, with approximate positions of LKH 251 features marked on



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Figure 11 Map of projected fen edge and prehistoric sites

Soil profiles showed former fen deposits extending from the north side of airfield, and help define the extent of Wangford Fen into the airfield. The evidence for this suggests that the

Mesolithic finds, LKH 075 and LKH 127, and Iron Age site LKH 211 lie at the projected western edge of Wangford Fen (Fig. 11). Evidence of levelling of the natural dune and hollow landscape was found in most areas and it is assumed that this dates to the formation of the airfield starting in the 1930's.

Conclusions

The archaeological results of this work were largely negative, and this supports results from other monitorings across the airfield. So far the only areas on the airfield to contain significant datable archaeological sites are the northern corner, LKH 211 (Caruth 2001, and previously recorded sites LKH 075 and LKH 127), the western end, LKH 225, LKH 227 (SCCAS report in prep) and a dispersed area of prehistory against the southern boundary, LKH 200 (Caruth, 1998) and 214 (Gill, 2002), most of which is outside the airfield area. The potential for evidence of medieval and post-medieval warrens still exists along this southern edge (WNG 010, Fig. 2), as might evidence relating to activity alongside the now re-routed Brandon Road. Extensive Mesolithic activity identified during the earlier part of the 20th century lies on the northern edge of the airfield and may respect the former edge of Wangford fen. However large parts of the centre of the airfield appear devoid of any archaeological activity.

Jo Caruth

July 2005

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