Archaeological Strip, Map & Record Programme on land at Fryzm's House Farm Stenson Derbyshire NGR SK 3226 2951

Planning Application: 9/2008/0835

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Produced for

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Non-technical summary

Stoke-on-Trent Archaeology carried out an archaeological strip, map and record programme on a proposed recreational development at Fryzm's House Farm, Buckford Lane, Stenson, Debyshire (NGR SK 3226 2951). The work was commissioned by CgMs Consulting Ltd on behalf of the Client, Mr J. Hudson, and was undertaken between 27th and 31st October 2008.

An archaeological desk-based assessment of the site, known as 'Ten Acre Field', by Trent and Peak Archaeology highlighted the possibility of significant river terrace archaeology, which was mostly prehistoric in character. The site had probably lain in a zone of unimproved agricultural land since the medieval period and the historic map evidence indicated that its boundaries had remained unaltered since c.1840. Although the original design of the development had been modified to mitigate its effect on the site's potential archaeology, it remained possible that groundworks might impact upon surviving features.

Five areas were stripped by machine, four of which represented the foundation footprints for buildings, while the fifth was the site of a lake. One trench (Trench 1) was believed to intersect a possible Iron Age pit alignment. Although no evidence for this monument was encountered, it was observed that a natural sedimentary transition across the trench closely matched the same bearing as the feature. An ephemeral linear feature was revealed in trench 2 [202] close to a possible rectilinear enclosure, although not obviously related to it.

1.0 Introduction

1.1 The hamlet of Stenson forms a joint township and civil parish with the village of Twyford in south Derbyshire, about 7.0km south-west of the city of Derby (Fig. 1). The proposed development area was located on agricultural land known as 'Ten Acre Field' at Fryzm's House Farm and Stables, off Buckford Lane, Stenson, centred on National Grid Reference (NGR) SK 3226 2951.

2.0 Planning background

2.1 Planning permission for development of the site as a children's recreational camp was submitted to the Local Planning Authority (LPA), South Derbyshire District Council, by Mr J. Hudson on 1st April 2008 (planning application ref. 9/2008/0835) with full application granted on 12th June 2008. As a result of a pre-determination desk-based assessment (DBA) which highlighted the archaeological potential of the site (Brown & Walker 2008), planning consent was granted on condition that an archaeological investigation was conducted in order to mitigate the impact of the groundworks on any extant features.

2.2 This investigation comprised a non-intrusive geophysical survey of the landscape, followed by a strip, map and record programme, recommended by the Development Control Archaeologist (DCA) within the footprints of proposed buildings and a lake (Baker 2008) (Appendix 3). Stoke-on-Trent Archaeology (SOTARCH) was commissioned by CgMs Consulting Ltd, acting on behalf of Mr Hudson, to undertake the project.

2.3 Detailed specifications outlined in a Written Scheme of Investigation (WSI) for the programme (Goodwin 2008) complied with the LPA's development control policy *EV14 (Archaeological and Heritage Features)* and was consistent with relevant national guidelines and government legislation set out in *PPG15 (Planning and the Historic Environment, 1994)* and *PPG16 (Archaeology and Planning, 1990)*.

3.0 The development area

3.1 *Site location*

3.1.1 Stenson is located about 1.3km north of Twyford and 1.4km north east of the village of Willington, within an area that is predominantly pastoral in character. It is

physically separated from the outer suburbs of Derby to the north by the Trent and Mersey Canal and the A50 trunk road .

3.1.2 It is a somewhat dispersed township with a discrete focus around Stenson Lock on the north bank of the canal. The development site is approximately 325.0m south west of the lock and is contiguous with the bounds of 'Ten Acre Field', which is situated to the south east of Fryzm's House. The site is situated within a loop of roads formed by the A5132 (Twyford Road) about 500.0m to the south, Frizams Lane some 400.0m to the west and Buckford Lane approximately 300.0m to the north and east.

3.2 ***Geology***

3.2.1 Located as it is within the low and undulating washlands of the Middle Trent Valley, the permeable dark earth soils of the site relate to the underlying drift of reddish, loamy alluvial clays, sands, silts and gravels deposited during the cumulative aggradation of river terraces by fluvioglacial meltwaters during the transition from the Devensian glaciation to the Flandrian interglacial between *c*.24000-12000 years BP. These materials in turn overlie a solid geology (bedrock) of marl clay derived from Permo-Triassic mudstone and siltstone laid down about 220± million years BP (Knight & Howard 2004; Cooper 2006).

3.2.2 Geotechnical data obtained from five boreholes drilled across 'Ten Acre Field' in advance of possible mineral extraction in 1987, indicated that the stratum of drift clay was generally between 0.30m-0.60m thick with the underlying sandy gravels another 2.0m in depth. In the central and north-eastern areas, however, clay and gravel was encountered immediately below the topsoil at depths of 0.60m-0.80m. This implied that the gravel deposits in the eastern half of the site formed a minor high spot or island, surrounded on three sides by alluvial clay indicative of marshy ground, possibly from a former tributary (palaeo-channel) of the River Trent (Brown & Walker 2008).

3.3 ***Site character***

3.3.1 'Ten Acre Field' covered a gross area of 4.2 hectares (10.4 acres) and consisted of a flat and featureless paddock laid to rough grazing and pasture. It is slightly trapezoidal in plan due to the eastern boundary being longer than the other sides. The ground elevation at the north end was 42.50m AOD, sloping imperceptibly south (Brown & Walker 2008).

3.3.2 As a result of the site's low-lying nature, it was enclosed on all sides by drainage ditches with hedgerow embankments, typical of floodplain and river valley environments. These feed into Twyford Brook, which runs approximately 40.0m-60.0m south of the site and in turn drains into the River Trent about 1.0km beyond.

4.0. Archaeological and historical background

4.1 A detailed archaeological background of the Stenson study area is recorded in the DBA undertaken by Trent & Peak Archaeology (Brown & Walker 2008). In short, cropmark evidence observed on aerial photographs combined with geophysical survey data (Fig. 2) suggested a palimpsest of significant and minor archaeological features within a 1.0km radius of the site, indicative of intermittent episodes of human activity within the wider landscape between the prehistoric and medieval periods.

4.2 The geological data (see above **3.2.2**) suggested that at least part of the development site would have been a favourable location for some kind of prehistoric occupation. Evidence of activity on 'Ten Acre Field' was postulated from two groups of cropmarks identified on aerial photographs and from anomalies detected by geophysical survey. The various features are plausibly interpreted on typological grounds as dating to between the Neolithic and Late Iron Age/Romano-British periods and include the nationally important Potlock Cursus (NMR No. SK32NW81), approximately 750.0m south west of the site.

4.3 The combined data suggested that on the gravel island in the south-eastern corner of the field were two sides of a curvilinear enclosure complex with an internal ring ditch representing either the post-holes of an Iron Age roundhouse or its drip-gully (NMR No. SK32NW40). Lying between approximately 90.0m-150.0m to the north west was a less distinct cluster of four circular cropmarks each about 10.0m in diameter. These may represent the ring-ditches of ploughed-out Bronze Age round barrows or perhaps burnt mounds. Barrows were usually circular or hemispherical funerary earthworks consisting of a mound enclosed by at least one ditch (Knight & Howard 2004, 60). The functions of burnt mounds, which are of Neolithic and Bronze Age date, are unclear but as they are believed to be places where heated stones were used to boil water either for cooking, the textile production or even steam bathing they are invariably sited near running or open water (Knight & Howard 2004, 57).

4.4 These two groups of monuments were divided by a linear feature extending obliquely across the site from south west to north east for approximately 260.0m (NMR No. SK32NW42). The DBA assessed the cropmarks as representing a pit alignment (Brown & Walker 2008, 11), symptomatic of a Late Bronze Age to Iron Age/Romano-British boundary and would have comprised a row of empty pits set at intervals along a common axis (Knight & Howard 2004, 102). The geophysics results, however, implied a continuous feature, which would be more indicative of a ditch or other linear earthwork of unknown date, although still typical of a major boundary.

4.5 Only a handful of abraded prehistoric implements and one pottery sherd have been recovered from within a 1.0km radius of the site, all from disused gravel pits. A Palaeolithic hand axe is also attributed to the Fryzm's Farm area (NMR No. SK33SW29), although the NMR grid reference is disputed (Brown & Walker 2008, 11). The provenance of the find spot in a field north west of the development site was, however, confirmed by the former landowner (J. Forman, pers. comm.).

4.6 Although documentary evidence attests to the presence of permanent settlement at Stenson since the early medieval period, it has been postulated that the core of the medieval village was originally located north of the development site and that the farmsteads on Buckford Lane represent the vestiges of a shrunken vill (Brown & Walker 2008, 13). Evidence in the adjacent fields of ridge and furrow patterns associated with medieval ploughing techniques infer that the site lay within the prevalent open field farming system. Ridge and furrow does not, however, show on aerial photographs of 'Ten Acre Field', although this may be due to differential survival caused by subsequent agricultural practices (Brown & Walker 2008, 13).

4.7 The Enclosure Plan of 1840 is the earliest extant cartographic evidence pertaining to the actual site and reveals its plan to be identical to the present layout, albeit divided longitudinally into two separate fields on a north-south alignment, each half paradoxically called 'Green Hills' (DRO Ref. Q/R193). Each portion was similar in size, combining to form an area of 9.95 acres (4.03 hectares). In 1840 'Green Hills' was part of land owned by George and Mary Ann Wayte of Stenson Farm, now East Farm, and sat on the eastern edge of the estate. The census return of 1841 and the Tithe Map of 1850 revealed the tenant farmer as Richard Forman who occupied Cowpasture Cottage,

located in the vicinity of what is now Fryzm's House Farm. The tithe apportionment disclosed that the western half of 'Green Hills' was then open pasture and that the eastern field was arable (DRO Ref. D2360/3/32a).

4.8 The Ordnance Survey (OS) map evidence shows that between 1887 and 1978 there were no overt physical changes to the site. It is also uncertain when its nomenclature was changed to the more prosaic 'Ten Acre Field', although perhaps it was when the demarcation of the two halves of the site was removed some time between 1955 and 1978. At least part of the field was laid to seed during this period and ploughed on an east-west alignment until the early 1980s when it reverted to pasture (J. Forman, pers. comm.), primarily for equestrian grazing.

5.0 Methodology

5.1 *Aims and objectives*

5.1.1 The aims and objectives of the project are set out in full in *A Brief for Archaeological Evaluation and Mitigation on Land at Fryzm's House Farm, Buckford Lane, Stenson, Derbyshire* (Baker 2008) and are summarised below:

- To determine the presence or absence of remains of archaeological interest,
- To clarify the date, nature, phasing and extent, state of preservation and relationships of any archaeological features or deposits,
- To mitigate the effect of the proposed development on any existing archaeology, through preservation by record,
- Assess the significance of the site within its local, regional and national contexts.

5.1.2 The site was investigated by SOTARCH between the 27th and 31st October 2008. The project was conducted in compliance with current best archaeological practice and conformed with relevant national standards, guidance and codes of conduct advocated by the Institute for Archaeologists (IfA).

5.1.3 The DCA's project brief (Baker 2008) called for a programme of works involving strip, map and record, evaluation and potential excavation. A revised design for the development (produced by the Client in consultation with CgMs Consulting Ltd and the DCA), however, sought to mitigate the impact of the scheme upon the site's archaeology

(Fig. 3) by preserving the more significant features *in situ*. As a result, only the strip, map and record programme was undertaken as the first phase of intrusive archaeological investigation of the site.

5.1.4 The scope of works involved the stripping of topsoil within the footprints of four proposed buildings and the lake (Fig. 3). Topsoil was removed using a 180º tracked excavator equipped with a 1.70m wide toothless ditching bucket, operating under the supervision of the site archaeologist. The exposed subsoil was examined for archaeological features or deposits and any encountered were quickly cleaned by hand and documented by means of a written record (site notes and individual *pro-forma* context sheets) and annotated sketch plans and sections. If nothing of archaeological significance was observed after the removal of topsoil within the building footprints, excavations were continued by the plant to the pre-determined depths required for the foundation rafts.

5.1.5 A digital colour and 35mm colour slide and monochrome print photographic record was also maintained to show specific stages of the fieldwork and the layout and relationship of any archaeological features. The site archive will be deposited at Derby Museum and Art Gallery (site code **FHS 08**) (Accession Number: **DBYMU 2008-291**) (a list of the archive's contents is provided in Appendix 2).

6.0 Results (a full list of contexts can be found in Appendix 1)
6.1 Four rectilinear building footprints (numbered 1, 2, 4 & 5) were stripped and excavated under archaeological supervision, most of which were located in the north-eastern and eastern quadrants of the site. The area of the recreation lake (trench 3) was situated on the western side of the site.

6.2 Trench 1 (37.60m N-S x 11.20m E-W) (Fig. 4, Plate 1)
6.2.1 This was the footprint for the *Alaska* building and was ultimately excavated to a depth of 1.50m. Two land gas monitoring wells were retained within small peninsulas at each end of the trench.

6.2.2 The natural subsoil (101) was encountered at a depth of between *c*.0.20m and *c*.0.25m below present ground level and was at least 1.20m thick to the trench bottom. It

comprised an aggregate of red silty sand and gravel with occasional inclusions of flint nodules. Toward the western end of the trench the gravel became less prevalent and was displaced by an orange/yellow medium-grained sand (102), the boundary between the two discretely extending diagonally across the trench from WSW - ENE, approximately 12.0m-10.0m from the end of the trench. Although (102) contained far fewer inclusions it was mottled with lenses of compact yellow/grey silty clay which on investigation proved to be only a few centimetres thick.

6.2.3 The overlying topsoil (100) in trench 1 comprised a layer of friable dark grey soil approximately *c*.0.20-*c*.0.25m thick with residual inclusions of pebble. No archaeological features or deposits were encountered within this trench and the only artefacts recovered were two potsherds from (100), dating from the mid to late 19th century.

6.3 Trench 2 (27.80m E-W x 7.0m N-S) (Fig. 5, Plate 2)

6.3.1 This trench represented the footprint of the *Louisburg III* building and was excavated to a maximum depth of 0.50m. The natural subsoil (201) was encountered at a depth of 0.30m below present ground level. It comprised an orange/red silty sand and gravel similar to (101), but with a subtle commingle of grey silty clay in the last 3.0m-4.0m at the western end of the trench. One archaeological feature was encountered in the form of an irregular linear cut [202] within (201) (Plate 3), extending obliquely across the trench on a WNW - ESE alignment. This was initially presumed to be a field drain and was excavated by hand.

6.3.2 Cut [202] was approximately 10.0m long and between 0.35 and 0.40m wide, although there was no apparent vertical cut visible in the trench section, although this may have been due to the limited reduction of the trench below the topsoil. A small sondage (number 1) measuring 0.35m NE-SW x 0.60m NW-SE and 0.50m in depth was put in across the feature which revealed in section (Fig. 6a, Plate 4) a topfill of grey silty-sand (203) barely 0.08m deep. This overlay a compact stratum of rusty red medium-grained sand (207), with only moderate inclusions of gravel. Cutting these strata was a bore hole [204] for a redundant groundwater monitoring well. This was approximately 0.10m in diameter and 0.24m deep and was partially lined with a broken opaque plastic pipe (205) about 0.12m long, containing a backfill of loose yellow/grey washed sand and gravel (206), which would have been used as filler between the pipe and the strata. This

deposit had spilled out to produce a secondary fill within what seemed to be a partial void beneath (207), perhaps caused by the drilling. This deposit lay above a white fine-grained sand (208), which began to seep water within minutes of exposure.

6.3.3 As the modern bore hole disturbance meant that what was revealed of cut [202] was perhaps not representative, another sondage (number 2) measuring 0.40m NE-SW x 0.45m NW-SE was opened about 4.0m north-west of the first (Fig. 6b, Plate 5). This appeared to show in section that the cut widened from about 0.24m in sondage 1 to 0.42m in the second. Sondage 2 revealed an upper fill of grey silty sand (209), identical to (203), about 0.06m deep overlying a compact layer of yellow/grey gravel (210) interpreted as disturbed natural as it overlay a solid conglomeration of sand and pebbles (211) at a depth of 0.22m, which was presumed to be the undisturbed natural. There was no evidence of a field drain or any other indication of what the feature may have represented.

6.4 Trench 3 (85.0m N-S x 65.0m E-W max) (Fig.3, Plate 6)

6.4.1 This represented the location of a shallow lake, of approximate 'figure-of-eight' configuration. The diameter of the top circle was about 60.0m and the lower approximately 35.0m. Two islands would be incorporated within the lake to preserve *in situ* two of the circular anomalies believed to be round barrows or burnt mounds. The natural orange/red silty sand subsoil (301) was located between 0.40m and 0.50m below present ground level. As with (201), layer (301) featured occasional inclusions of pebbles and random grey silty clay mottling. Above (301) was a grey topsoil. Again, no archaeological features or deposits were encountered in this trench.

6.5 Trench 4 (9.0m N-S x 14.0m E-W) (Fig. 3, Plate 7)

6.5.1. This was the footprint of the *Cabot I* building. A land gas monitoring well was retained in an islet toward the east end of the trench. The natural subsoil, an orange/red silty sand (401), was encountered at a depth of between 0.30m and 0.35m below present ground level. The subsoil was cut by a further 0.20m to the required trench depth. Overlying (401) was a dark grey topsoil (400), containing two sherds of 19th-century pottery. No archaeological deposits or features were encountered in this trench.

6.6 Trench 5 (8.0m N-S x 12.50m E-W) (Fig. 3, Plate 8)

6.6.1 The natural subsoil in trench 5, excavated within the footprint of *Louisburg I*, was between 0.30m-0.35m below present ground level and was once again an orange/red silty sand (501). This stratum was overlain by a grey friable topsoil (500). No archaeological features or deposits were encountered.

7.0 Finds

7.1 The finds assemblage was limited four small unabraded pottery sherds recovered from the topsoil. Those from trench 1 (100) comprised a sherd of Nottinghamshire/ Derbyshire brown stoneware, probably from a bowl or pan, inscribed with two decorative bands of the conventional (double spiral) 'Greek Key' motif. The other sherd was glazed earthenware decorated with a blue and white transfer-printed pattern. Both fragments dated to the mid to late 19th century. The two sherds from trench 4 (400) were glazed white earthenwares; one a flatware sherd, the other a moulded hollow ware. Again both artefacts were mid to late 19th century in date.

8.0 Discussion

8.1 A total area of approximately 15985m² (1.6 ha) was machine excavated/stripped, equivalent to 38% of the development site's gross area. Only one trench (1) was reduced by more than 0.50m. Despite the prospect of archaeological features suggested by the DBA, the trenches proved to be sterile. The almost total lack of features can be partially explained by the deliberate policy of moving building footprints to avoid known archaeological monuments and allow *in situ* preservation. The historical cartographic evidence shows that the site was not transformed by development in the 19th or 20th centuries and although the tithe apportionment related that half of the site was ploughed, there was no indication of ridge and furrow within the subsoil.

8.2 The absence of features was somewhat surprising, especially as trench 1 intersected the suspected pit alignment, approximately 8.0m-10.0m from the northern end of the trench. It is possible that the spatial arrangement of the individual pits which formed the relative components of the monument ensured that the trench contrived to miss the relevant parts. Investigation of the pits at a comparable site at Whitemoor Haye, Alrewas, Staffordshire, revealed them to be approximately up to 3.0m in diameter and about 3.0m-4.0m apart (Knight & Howard 2004, 104). It seems unlikely, therefore, that an 11.0m

wide trench could have missed the pits, while a ditch or bank would have been even more obvious if it had been present.

8.3 It is interesting to note that the purported alignment of the feature across trench 1 coincided with the a geological transition from gravel to sand. Could this sedimentary juxtaposition have been detected by the remote sensing surveys? This is not without precedent in the area. At Buckford Bridge, approximately 900.0m west of the site, archaeological examination of a suspected pit alignment and linear ditches was revealed to be primarily of natural origin (NMR Activity Report 1318653). Natural features were mistakenly interpreted as cursus ditches within the Potlock monument (NMR No. SK32NW81) during excavations in the 1960s, an error not rectified until new investigations were carried out nearly thirty years later.

9.0 Conclusions

9.1 The data summarised in the DBA indicated that the general area around the development site probably fell within a ceremonial landscape that extended the length of the Trent Valley and dated to the Neolithic and Bronze Age. This may have precluded sedentary settlement during these periods, while earlier human activity on the river terraces was perhaps transitory or seasonal. Later permanent settlement was focused on the elevated ground to the north, probably leaving the site within a zone of agricultural land that may have been pastoral for most of its existence. Given these circumstances the spread of material culture from any of these periods was likely to be light.

9.2 There is the possibility that geological formations may be responsible for some of the remote sensing survey results highlighted in the DBA. The negative results resulting from the deliberate avoidance of the potential archaeology by the client and the shallow reduction of the trenches does however suggest that if the archaeology does exist it has been preserved *in situ* and will not be affected by the development of the site.

10.0 Acknowledgements

10.1 Richard Cramp of Stoke-on-Trent Archaeology undertook the fieldwork and wrote this report. Illustrations were produced by Zoe Sutherland and ceramic finds were identified by Jon Goodwin. Thanks are extended to the clients Jem and Sue Hudson; the previous landowner, John Forman; Steve Baker, Development Control Archaeologist for Derbyshire County Council and Paul Chadwick of CgMs Consulting Ltd. for their valuable assistance and co-operation during the project.

11.0 References

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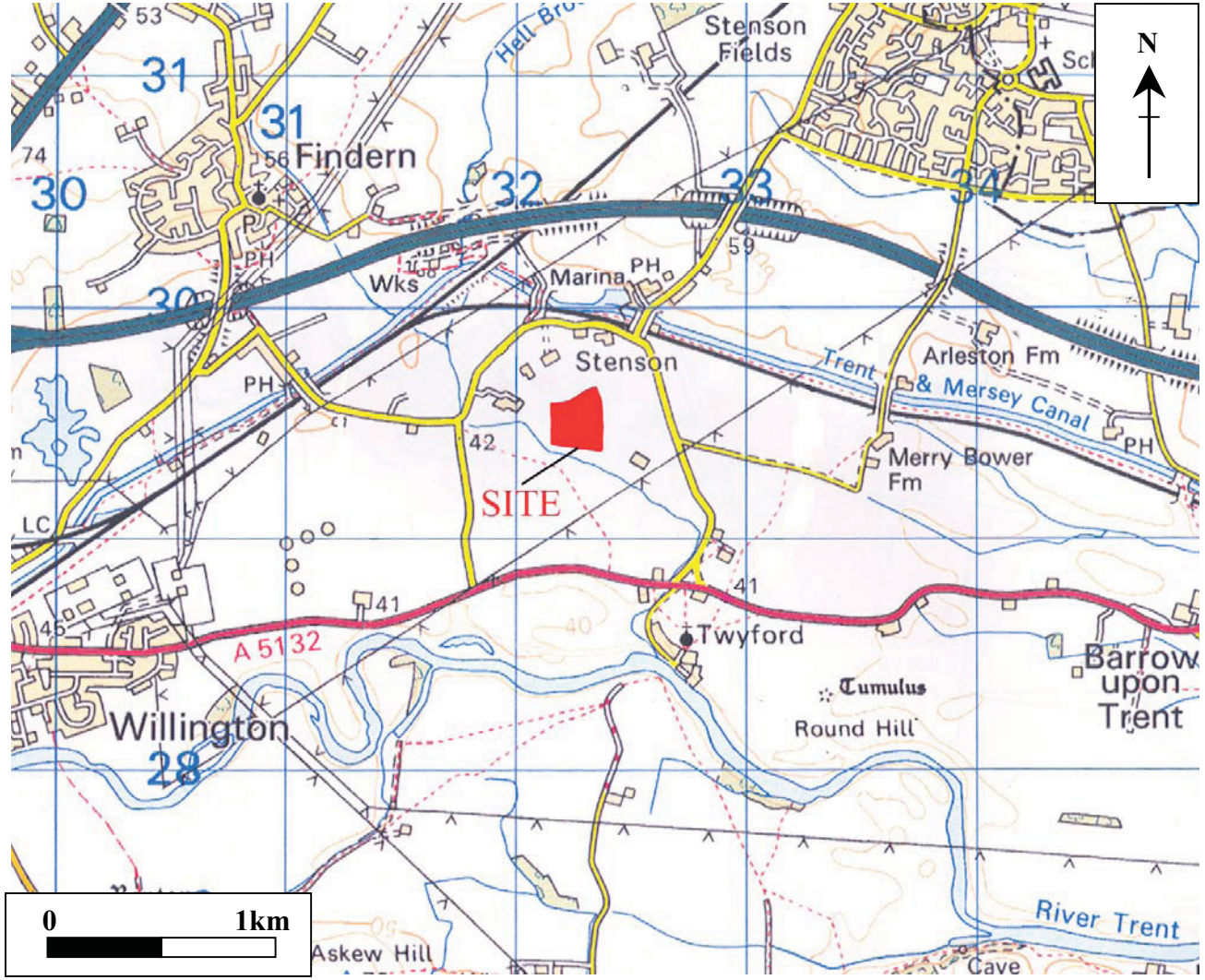

FIG. 1

Site location

FIG. 2

Site plan showing combined results of cropmarks and geophysical survey carried out by SiteScan (Baker 2008). Features that could have been impacted by trenching are highlighted in red. (Not to scale).

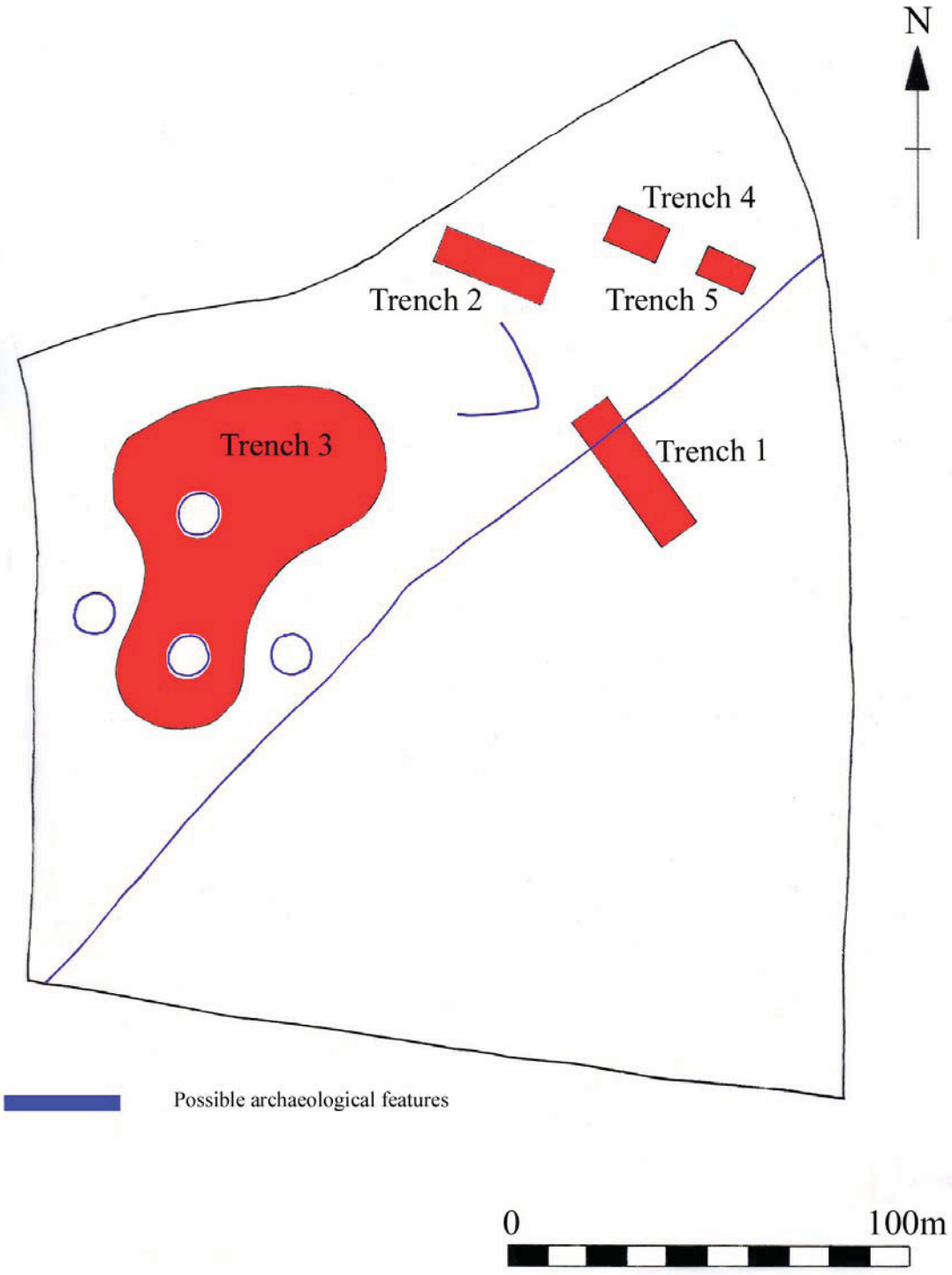

FIG. 3

Site plan showing trench locations in relation to possible archaeological features.

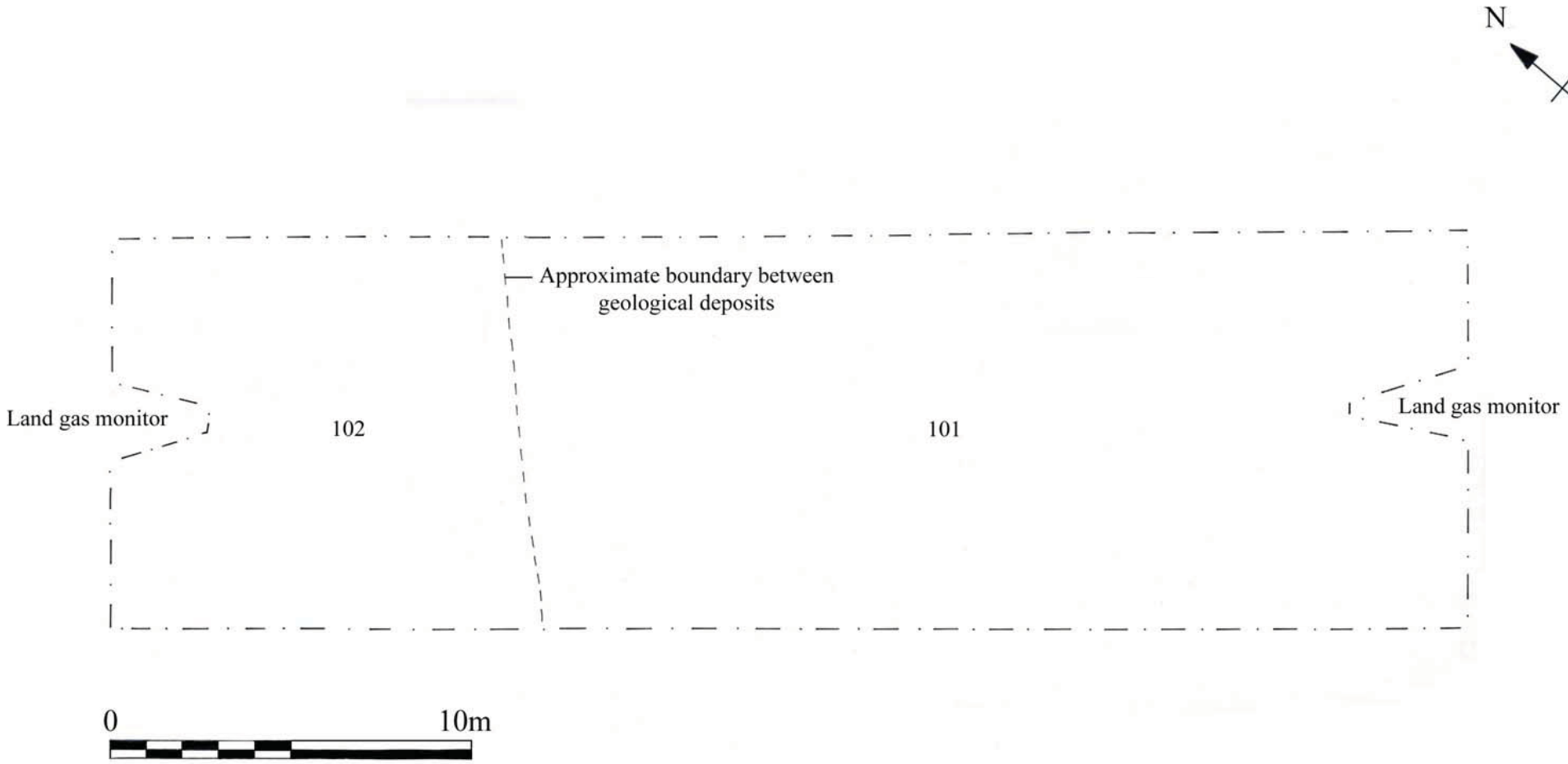

FIG. 4

Post-excavation plan of trench 1

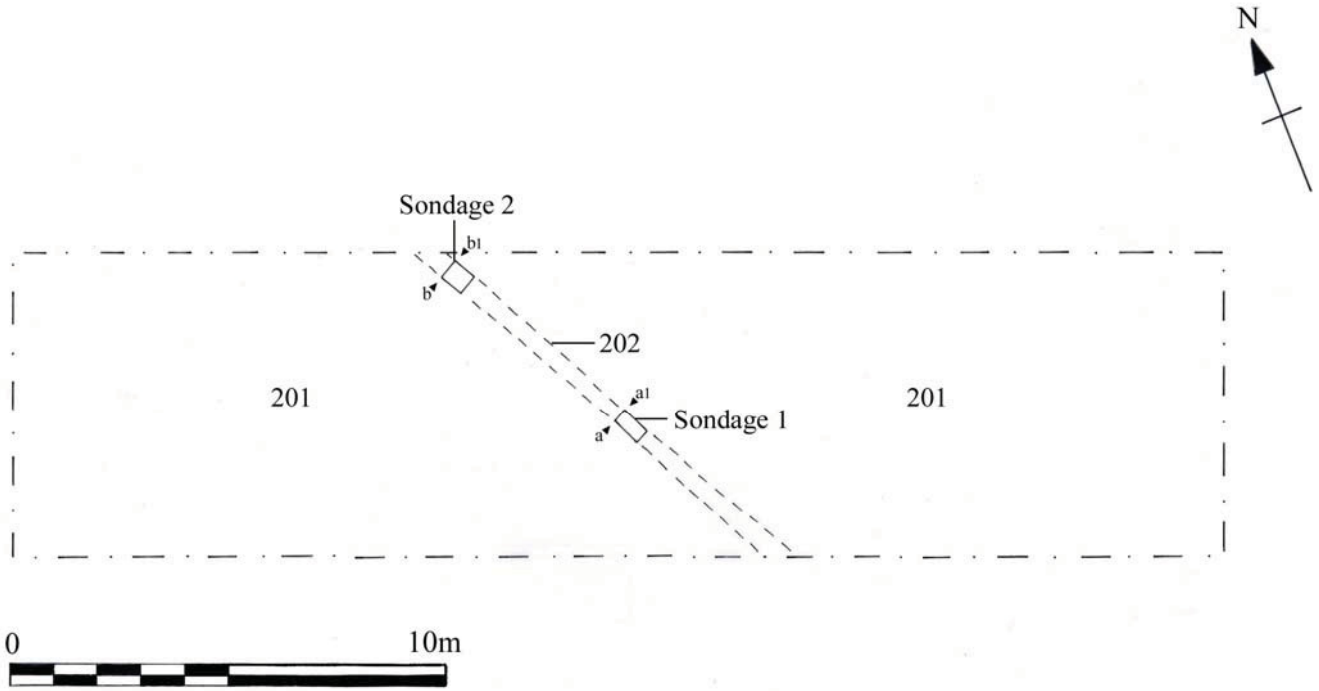

FIG. 5

Post-excavation plan of trench 2

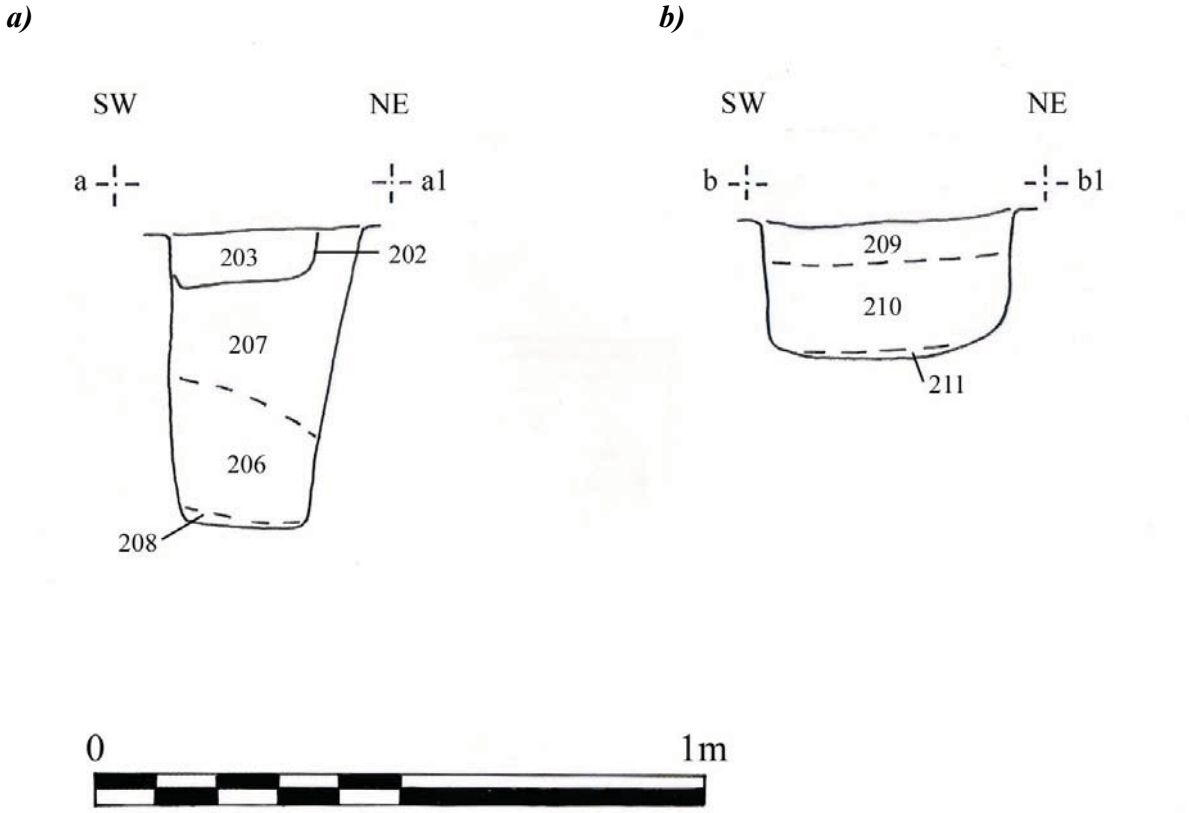

FIG. 6

a) Sondage 1, south-east-facing section *b*) Sondage 2, south-east-facing section

PLATE 1

Trench 1 looking north (scales: 1.0m and 2.0m)

PLATE 2

Trench 2 looking west (scales: 1.0m & 2.0m).

PLATE 3

Linear cut [202] in trench 2 looking north west (scales: 1.0m & 2.0m).

PLATE 4

Sondage 1 in trench 2 showing south-east-facing section across cut [202], with bore hole cut [204] and plastic piping (205) (scales: 0.50m).

PLATE 5

Sondage 2 in trench 2, showing south-east-facing section and shallow topfill (207) (scales: 0.50m & 1.0m).

PLATE 6

Trench 3 looking north east (scales: 1.0m & 2.0m).

PLATE 7

Trench 4 looking north west (scales: 1.0m & 2.0m).

PLATE 8

Trench 5 looking west (scales: 1.0m & 2.0m).

Appendix 1: List of contexts

Context	Description	Dimensions
100	Topsoil layer, friable dark grey earth, overlying (101) in trench 1	37.0m N-S x 11.10m E-W x 0.25m thick (max)
101	Natural orange/red, firm silty sand and gravel subsoil below (100)	
102	Natural orange/yellow, firm sand below (100), coterminous with (101)	
200	Topsoil layer, friable dark grey earth, overlying (201) in trench 2	27.80m E-W x 7.0m N-S x 0.30m thick (max)
201	Natural orange/red, silty sand and gravel subsoil below (200)	
202	Irregular linear cut within (201) extending diagonally WSW-ESE across west end of trench 2	11.0m long x 0.42m wide x 0.22m deep (max)
203	Grey, silty sand topfill of [202] within sondage 1, overlying (207); similar to (209)	0.24m NE-SW x 0.60m NW-SE x 0.08m thick (max)
204	Circular bore hole within [202], cutting (203) and (207)	0.10m diameter, 0.24m deep
205	Opaque plastic piping lining bore hole cut [204]	0.10m diameter, 0.12m long
206	Secondary fill of loose yellow/grey washed sand and gravel within (205) and below (207)	
207	Layer of compact rusty red, medium sand underlying (203), cut by [204]	0.35m wide NE-SW x 0.35m thick (max)
208	Layer of firm white sand underlying (206), no inclusions visible; undisturbed natural	0.20m wide NE-SW x 0.02m thick (as revealed)
209	Grey, silty sand topfill of [202] within sondage 2, overlying (210); similar to (203)	0.41m NE-SW x 0.45m NW-SE x 0.06m thick (max)
210	Layer of compact yellow/grey gravel underlying (209); disturbed natural?	0.41m NE-SW x 0.45m NW-SE x 0.14m thick (max)
211	Conglomeration of very compact yellow/grey sandy gravel underlying (210); undisturbed natural	0.32m NE-SW x 0.45m NW-SE x 0.02m thick (as revealed)
300	Topsoil layer, dark grey friable earth overlying (301) in trench 3	0.50m thick (max)
301	Natural orange/brown silty sand underlying (300); less gravel inclusions than (101) and (201)	

Context	Description	Dimensions
400	Topsoil layer, grey friable earth overlying (401) in trench 4	14.0m E-W x 9.0m N-S x 0.35m thick (max)
401	Natural orange/red, silty sand and gravel below (400)	
500	Topsoil layer, grey friable earth overlying (501) in trench 5	12.50m E-W x 8.0m N-S x 0.35m thick (max)
501	Natural orange/red, silty sand and gravel below (500)	

Appendix 2: Archive contents

Site Name: Fryzm's House Farm, Stenson

Site Code: FHS 08

Derby Museum Acc. No.: DBYMU 2008-291

Component	*Quantity*
Final report	26 A4 pages (single sided) (+ pdf file on CD)
Site data – synthesised context records	1 A4 page
Site data – record index	1 A4 page
Site data – index of site drawings	1 A4 page
Site data – primary drawings	1 sheet drawing film
Site data – synthesised drawings	4 sheets drawing film
Finds data – synthesised finds record	1 A4 sheet
Finds	4 x pottery sherds
Catalogue of photographs (slides and index prints)	1 A4 sheet
35mm colour slide images	1 x hanging file (final number *TBC*)
35mm black & white index prints and negatives	1x wallet (final number *TBC*)
Index to digital images	1 A4 sheet (+ Microsoft Word 97 file on CD)
Contact sheet of digital images	1 A4 sheet
Digital images	1 CD
Documentary	16 A4 pages

Appendix 3:
DCA's Project Brief

Brief for Archaeological Evaluation and Mitigation

Site Name: Land at Fryzms House Farm, Buckford Lane, Stenson, Derbyshire
NGR: (centred) SK 3226 2951
Applicant: Mr J Hudson
Planning application: South Derbyshire 9/2008/0385
District Planning Officer: Tony Burdett
Brief issued by: Steve Baker – Development Control Archaeologist (DCA)
Date: 30th September 2008

1 Introduction

1.1 Planning permission has been granted for the development of an area of approximately 4ha at Fryzms House Farm, Stenson, as a children's camp. This will include the construction of a small number of buildings, an access road and car parking, and landscaping of the site to include a lake for water-based activities and tree-planting.

1.2 A desk-based assessment was submitted pre-determination, undertaken by Trent & Peak Archaeology. The desk-based assessment highlighted the potential for prehistoric/Romano-British occupation within the site area.

1.3 Given the potential for archaeology of at least regional significance within the site area, the DCA concluded that archaeological evaluation and mitigation should take place as a conditioned scheme before development of the site. This recommendation is in line with government guidance as set out in DOA Planning Policy Guidance on **Archaeology and Planning (PPG 16 1990).** The following conditions were therefore attached to the planning consent:

> '16. Unless otherwise agreed in writing by the Local Planning Authority, no development shall take place until the applicant has made arrangements for the implementation of a scheme of archaeological field evaluation. This shall include geophysical survey and trial trenching, and shall be undertaken in accordance with a written scheme of investigation which has been submitted to and approved by the local planning authority'
>
> '17. No development shall take place until the developer has made provision for the implementation of a scheme of archaeological mitigation, following the completion of field evaluation. The work shall be undertaken in accordance with a written scheme of investigation which has been submitted to and approved by the local planning authority in writing'

1.4 Geophysical survey was subsequently carried out by SiteScan, and the applicant has compiled a Landscape Masterplan for the site detailing a scheme for preservation *in situ* of key features located by geophysical survey.

1.4 This brief provides the basis from which an archaeological contractor may prepare a Written Scheme of Investigation (WSI) for the remaining elements of archaeological evaluation and mitigation required under conditions 16 and 17. The WSI must be submitted for approval to the DCA at least two weeks in advance of any proposed fieldwork.

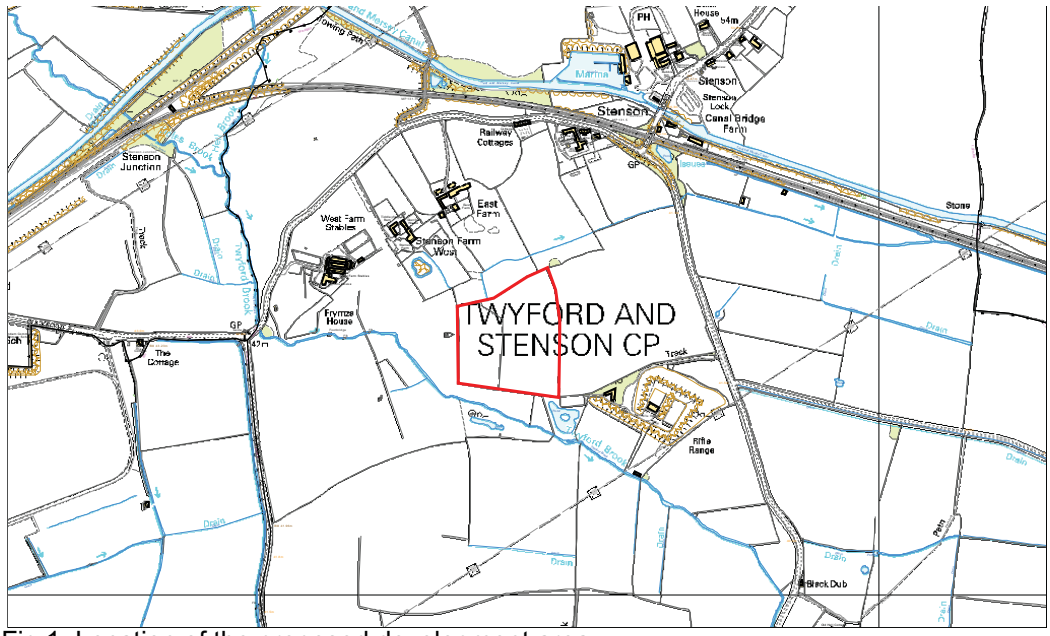

Fig.1: Location of the proposed development area

2 Requirement for archaeological evaluation and mitigation

2.1 The proposed development is within a known cropmark site listed in the Derbyshire Historic Environment Record (HER 27406). The north bank of the River Trent from Willington to Shardlow is an area of extensive Neolithic/Early Bronze Age, Later Bronze Age/Iron Age, and Late Iron Age/Romano-British activity. The cropmarks within the proposal area therefore form part of a wider prehistoric landscape of at least regional significance, and could potentially represent activity at several periods.

2.2 The desk-based assessment interprets the cropmark features visible on aerial photographs as a pit alignment, ring ditch and potential enclosure. This document also suggests that the proposed approach road may impact upon an area of cropmarks relating to the shrunken medieval village of Stenson.

2.3 The geophysical survey covered the main area of the proposed development, but did not cover the planned access road. A number of anomalies (**Figure 2**) relating to potential archaeological features were located:

- Feature groups J and K: a potential prehistoric/Roman-British enclosure with internal roundhouses, occupying the south-eastern corner of the site. Evidence of a substantial prehistoric site;
- Feature group F: corresponding to the cropmark pit alignment, but showing here as a continuous feature;
- Feature group G: circular in form and possibly representing pits or burnt mounds;
- Feature H: circular feature similar to G;
- Feature M: circular feature similar to G;
- Feature E: rectilinear 'corner' of unknown date.

2.4 The applicant's Landscape Masterplan has attempted to ensure preservation *in situ* of the major components above (see below and **Figure 3**), through alterations to site design and raising of ground levels above key features.

2.5 However, English Heritage's current guidance document *Geophysical Survey in Archaeological Field Evaluation* (2008) states that 'lack of geophysical anomalies cannot be taken to imply a lack of archaeological features'. Geophysical survey should therefore be supplemented with field evaluation by trial trenching.

2.5 The Masterplan involves significant ground impacts in areas where no, or minor, geophysical anomalies were located: areas of tree-planting, building footprints, access road and car parking, proposed lake. Given the archaeological sensitivity of the whole site as

established by the desk-based assessment and geophysical survey, some of these areas require field evaluation.

2.6 Once complete, field evaluation will inform a decision on the scope of further archaeological mitigation. This may comprise further excavation, or a watching brief on groundworks.

2.7 The archaeological objective of the evaluation phase is to establish the presence/absence, character, preservation, date and significance of archaeological deposits likely to be impacted by the development.

2.8 The archaeological objective of the mitigation phase is to achieve a balance of preservation *in situ* through sensitive design, and 'preservation by record' (*sensu* PPG 16) of those archaeological deposits to be impacted by the development.

2.9 The required evaluation and mitigation methodology is developed below.

3 Preservation *in situ*

3.1 The proposed scheme for preservation *in situ* involves the following strategies:

- Redesign of site landscaping to avoid geophysical anomalies;
- Raising of ground level over geophysical anomalies by 1.5m, using material excavated from lake area. Tree-planting will be of shallow-rooting species with a maximum root depth of 0.75m.

3.2 The DCA should be given at least one week's notice of the commencement of any works relating to ground-level raising on the site. The DCA will make monitoring visits to ensure that the work is carried out to the agreed standard.

3.3 The current Landscape Masterplan does not allow for ground-level raising over the full extent of the prehistoric enclosure in the south-eastern corner of the site. This is a substantial prehistoric site. The part of the enclosure not covered by ground-level raising must therefore be included within the archaeological evaluation and mitigation developed below. Should the area of ground-level raising be modified to cover the whole enclosure, allowing an appropriate buffer, then this requirement will be dropped.

3 Fieldwork rationale

3.1 Areas to be subject to field evaluation are as follows:

- Building footprints
- Lake
- Tree-planting areas (non-raised), to include the northern part of the prehistoric enclosure currently not covered by ground-level raising.
- Access road (Area 3 only as defined in desk-based assessment)

3.2 The building footprints and lake area will be evaluated/mitigated through a combined **strip-and-record** approach. This is a one-phase approach involving a total area strip and allowing rapid evaluation followed by targeted mitigation excavation should significant features be present.

3.3 The tree-planting areas (non-raised) and Area 3 of the access road will be evaluated through a traditional **trial-trenching** approach. Trial trenches should cover 5% of the relevant areas to be impacted. Trial trench locations should be planned in discussion with the DCA.

3.4 Following the completion of the evaluation phase, the requirement for further mitigation excavation will be determined by the DCA. **Archaeological watching brief** will be required as a minimum, to cover groundworks for the access road and car parking area, and excavation of service trenches.

4 Fieldwork methodology

4.1 **Strip-and-record:** The full extent of building footprints and the lake area will be stripped under archaeological supervision to a level or levels at which is possible to assess the

presence or absence of archaeological features or deposits. Cleaning and sample excavation may be necessary to establish the character, state of preservation and date of archaeological remains. Following this initial stripping and evaluation exercise, a site meeting should be held with the DCA to review the archaeological potential of the different areas. This may result in the targeting of specific areas for further excavation, with more rapid treatment of areas where preservation is absent or limited.

4.2 **Evaluation trial-trenching:** Trenches will be stripped under archaeological supervision to a level or levels at which is possible to assess the presence or absence of archaeological features or deposits. Cleaning, sample excavation and recording will be carried out to establish the character, state of preservation and date of archaeological remains. Before backfilling a site meeting should be held with the DCA to review the archaeological potential of the different areas.

4.3 **Mitigation excavation:** The requirement for mitigation excavation will depend on the results of evaluation, and may be particularly relevant in the northern part of the prehistoric enclosure currently not covered by proposed ground-level raising. The DCA will produce a further written brief should further work of this type be required following evaluation.

4.4 **Archaeological watching brief:** The appointed archaeological contractor shall maintain a watching brief during the groundworks specified above. The watching brief will not entail archaeological excavation beyond the areas exposed by the development works.

5 Written scheme of investigation

5.1 A written scheme of investigation (WSI) should be formulated by potential contractors and submitted to the DCA for approval. This document forms an agreed scope of works required to satisfy the planning conditions, and should explicitly cover all the requirements of this brief:
The proposal should include:

- A description of the proposed fieldwork methods to be used.
- An explanation of the sampling strategies to be used
- A projected timetable for work on site
- Details of the arrangements made for deposition of the finds and site archive (see section 10 below)
- A list of specialists available for undertaking finds and palaeo-environmental analyses

5.2 The work will be carried out by appropriately qualified and experienced staff. Details of staff numbers and their relevant experience should be included, plus their responsibilities in carrying out the work. Staff CVs should be included, unless already submitted to the DCA in previous project specifications.

5.3 Any changes to the agreed WSI will be discussed with, and agreed with, the DCA before implementation

6 Excavation and post-excavation guidelines

6.1 All archaeological fieldwork, recording of archaeological features and deposits and post-excavation analysis should be carried out to acceptable archaeological standards. The contractor will be expected to abide by the Code of Practice of the Institute of Field Archaeologists, and to follow the guidance provided in *Archaeological Science at PPG16 Interventions*" (English Heritage 2003).

6.2 Where machines are to be used the following guidelines should be observed:

6.2.1 An appropriate machine should be used. The choice should be influenced by the prevailing site conditions, and the machine must carry out a clean and safe job.

6.2.2 An appropriate bucket should be used.

6.2.3 All machining is to be carried out under the direct supervision of an archaeologist and should be halted if archaeological deposits are encountered.

6.2.4 All recent overburden should be removed down to the first significant archaeological horizon in successive level spits. Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits.

6.3 Decisions made on the methods and strategies for sampling features should be based upon the nature and extent of any deposits which are revealed. These decisions should be made in consultation with the DCA. As a guideline, all features of early post-medieval date or earlier should be fully investigated and recorded. Discrete features will be half-sectioned in the first instance; linear features will be sampled a minimum of 20% along their length (each sample section not less than 1m), or a minimum of a 1m sample section of the feature is less than 10m long. In addition, the deposits at junctions or interruptions in linear features should be sufficiently excavated for the relationship between components to be established.

6.4 Features are to be recorded according to the normal principles of stratigraphic excavation, and should be accurately located on a site plan and recorded by photographs, summary scale drawings and written descriptions. Individual features will be planned at 1:20 where additional detail is required. Sections and profiles of each feature sampled will be drawn at 1:10 or 1:20, depending on the size of the feature. All plans, sections and profiles will be related to Ordnance Datum, in metres.

6.5 It is possible that waterlogged deposits are present on the site. The appointed contractor must make specific provision for these eventualities in their WSI.

6.6 The archaeological contractors will be responsible for locating any service pipes, cables etc. which may cross the excavation area, and for taking the necessary measures to avoid disturbing such services.

6.7 Should deposits of palaeo-environmental potential be encountered, an environmental specialist will visit the site to advise on a sampling strategy and their suggested strategy will then be implemented.

6.8 Artefact collection policy should be concerned with the provision of adequate samples for meeting the objectives of the work. Discarded artefactual materials should be described and quantified through assignment to broad categories in the field. All retained finds and palaeo-environmental samples should be treated in accordance with the EH guidance document *A strategy for the care and investigation of finds (1995)* and the UKIC's document *Guidelines for the preparation of excavation archives for long term storage*. Analysis of finds and palaeo-environmental samples will be undertaken, as necessary, by suitably qualified specialists.

6.9 Any human remains encountered must initially be left *in* situ. If removal is necessary, this must comply with the relevant Ministry of Justice, Diocesan and other regulations, as appropriate. A strategy for the excavation, analysis, retention and/or reburial of a) disarticulated and b) articulated human remains will need to be developed and specified in the WSI. The cataloguing and analysis of all human remains will be undertaken, as necessary, by a suitably qualified osteoarchaeologist.

6.10 Provision will be made to recover material suitable for scientific dating. Contingency sums will be made available to undertake such dating, if necessary. This will be decided in consultation with the DCA.

6.11 Further contingency provision will be made for additional specialist advice, eg for finds analysis, palaeo-environmental work and conservation.

7 Monitoring

7.1 During the course of the fieldwork it is anticipated the Development Control Archaeologist will undertake monitoring visits. The DCA should be given at least 2 weeks prior notice of the commencement of fieldwork. In particular, a site meeting will be necessary following the completion of evaluation. No backfilling should be carried out without the approval of the DCA.

7.2 The WSI should include the name and mobile telephone number for the relevant field and project officer.

8 Health and Safety

8.1 Whilst on site all archaeologists will operate with due regard to health and safety regulations.

8.2 Before any fieldwork commences a risk assessment should be completed by the appointed archaeological contractor.

9 Reporting

9.1 The preparation of reports should follow the guidelines published by the Institute of Field Archaeology and English Heritage (MAP2).

9.2 A brief interim report may be required following the completion of field evaluation. The final site report should be available within 6 months of completion of fieldwork.

9.3 Bound copies of reports should be provided for the interested parties. This should include the Development Control Archaeologist and the Derbyshire Sites and Monuments Record. The archive should be deposited with the appropriate museum (see below).

9.4 A digital copy of the report including illustrations and photographs (PDF Format) should be submitted to the Sites and Monuments Record.

9.5 The final report should include as a minimum:

- Non-technical summary
- Introductory statement
- Aims and purpose of the archaeological work
- Method
- An objective summary statement of results
- A full, phased stratigraphic discussion of the archaeological features
- An interpretive discussion of the results, placing them in a local and regional context
- The results of analyses of artefacts and ecofacts carried out by suitable specialists
- A detailed context index
- Supporting illustrations and plans at appropriate scales, with levels related to Ordnance Datum
- Supporting data – tabulated or in appendices
- Site photographs including key features and working shots
- Index to archive and details of archive location
- References
- A copy of the OASIS form
- A copy of this brief

The appointed archaeological contractor will provide the DCA with a written statement on how the project is to be published. *Where no further publication is envisaged then a short report will be published in an annual round-up on developer-funded archaeology in Derbyshire Archaeological Journal.*

10 Arrangements for the Project Archive

10.1 It is required that arrangements for the deposition of the finds and site archive be made with Derby Museum and Art Gallery, prior to the commencement of fieldwork. Following agreement with the landowner, the contractor should contact the museum curator to discuss archaeological archiving requirements at the initial stage of the project design.

Your contact will be:
Derby Museum and Art Gallery
The Strand
Derby
DE1 1BS

Tel: 01332 716659

10.2 The archive should be transferred in accordance with the procedures set-out in *Procedures for the Transfer of Archaeological Archives* (2003).

11 Publicity

11.1 A summary of the project, with selected drawings, illustrations and photographs, should be submitted within 2 years of the completion of the project to Derbyshire Archaeological Journal for publication (see notes attached).

11.2 At the start of fieldwork (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/project/oasis/ must be initiated and key fields completed on Details, Location and Creators forms. All parts of the OASIS online form must be completed for submission to the SMR. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive).

Notes for contributors to the *Derbyshire Archaeological Journal* of interim and short reports on developer funded archaeology:

The aim is to publish annual compilations of short reports on developer funded archaeology in the county on a regular basis in the *Derbyshire Archaeological Journal,* in order to better inform the public of the results of the work being undertaken.

It is envisaged that the reports will take one of two forms;

1 Interim reports – short interim descriptions of an excavation or survey that will eventually be subjected to fuller publication.

2 Definitive reports – summaries of archaeological work which will not be pursued further. Note that even if the results were negative, if valid questions were posed then a brief explanation will be worthwhile.

MODEL – see 'Some Fieldwork in Derbyshire by the Trent & Peak Archaeological Unit in 1998-9' edited by Graeme Guilbert and Daryl Garton, *DAJ* vol. 121 (2001): 223-5. Number 18 is an example of an Interim report and numbers 19 to 20 are examples of definitive reports.

DETAILED NOTES
Set individual reports out in alphabetical order of site names.
NGR should follow site name, followed by names of those responsible for the report and/ or fieldwork.
Give due acknowledgement to sponsors of project within text.
Definitive reports should include whereabouts of the related written, drawn and photographic archive, as well as any artefacts.
Illustrations – include line drawings and/or photographs if appropriate.
References – include where appropriate at the end of each report.

FUNDING
The Derbyshire Archaeological Society will require an offer of grant-aid towards the printing costs of short reports submitted in order to guarantee publication. Costs will be determined from the printer's estimate. A contribution towards these costs of around 60% will be sought from the relevant contracting archaeological organisation. For further information contact Pauline Beswick (Hon. Editor), 4 Chapel Row, Froggatt, Calver, Hope Valley, S32 3ZA or tel. 01433 631256.

DEADLINE
Reports received by the end of July will be considered for inclusion in *DAJ* in the year following. If too late they will be saved for consideration for the succeeding year.

Reports to be submitted in hard copy and on disc to:

Steve Baker at Environmental Services Department, Derbyshire County Council, Shand House, Dale Road South, Matlock, Derbyshire DE4 3RY.

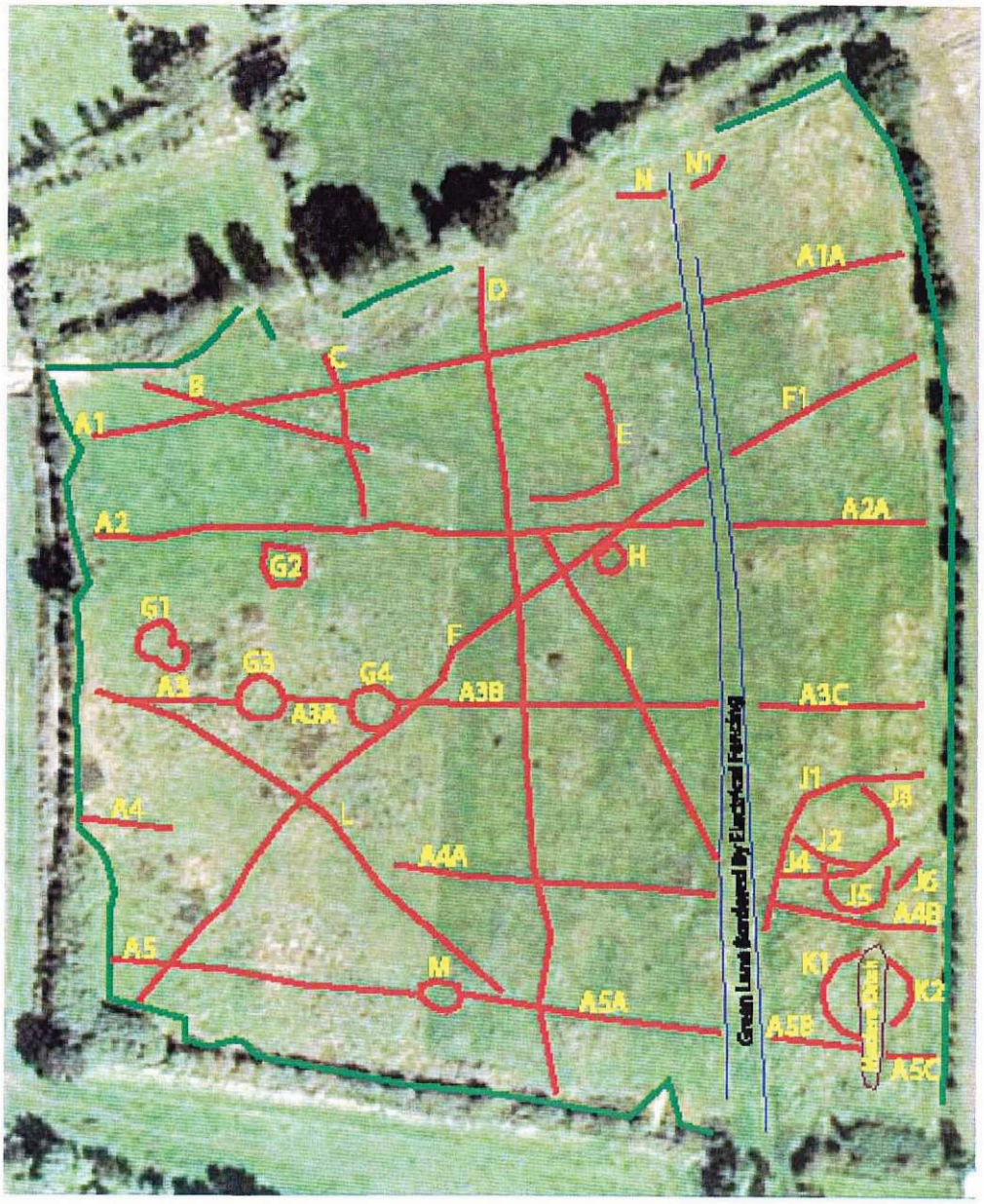

Figure 2: Key to geophysics features

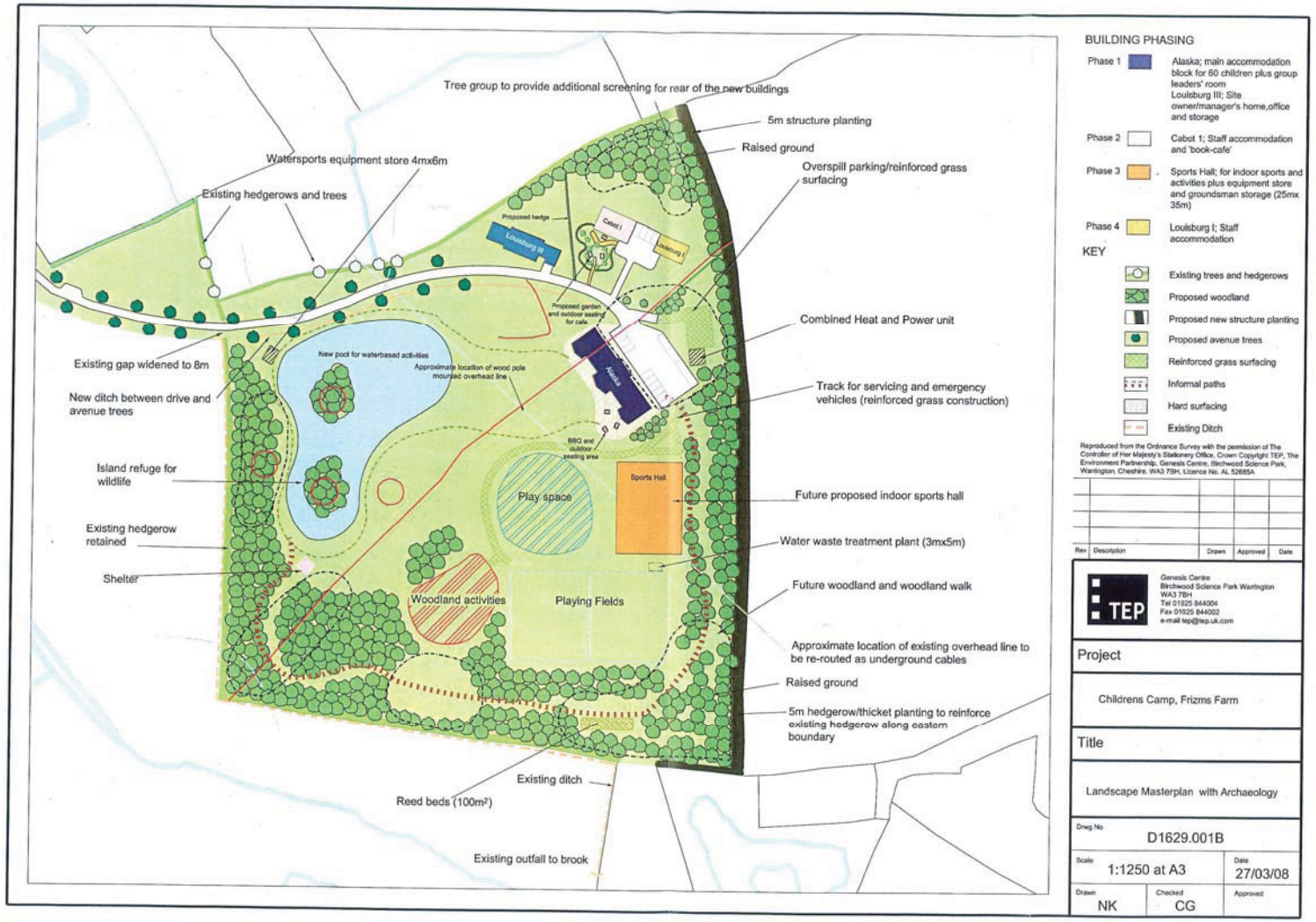

Figure 3: Proposed landscape masterplan

Appendix 4:

Copy of OASIS form for the project

OASIS DATA COLLECTION FORM: England

OASIS ID: stokeont2-52440

Project details

Project name	Archaeological strip, map and record programme on land at Fryzm's House Farm, Stenson, Derbyshire
Short description of the project	Stoke-on-Trent Archaeology carried out an archaeological strip, map and record programme on a proposed recreational development at Fryzm's House Farm, Buckford Lane, Stenson, Debyshire (NGR SK 3226 2951). The work was commissioned by CgMs Consulting Ltd on behalf of the Client, Mr J. Hudson, and was undertaken between 27th and 31st October 2008. An archaeological desk-based assessment of the site, known as 'Ten Acre Field', by Trent and Peak Archaeology highlighted the possibility of significant river terrace archaeology, which was mostly prehistoric in character. The site had probably lain in a zone of unimproved agricultural land since the medieval period and the historic map evidence indicated that its boundaries had remained unaltered since c.1840. Although the original design of the development had been modified to mitigate its effect on the site's potential archaeology, it remained possible that groundworks might impact upon surviving features. Five areas were stripped by machine, four of which represented the foundation footprints for buildings, while the fifth was the site of a lake. One trench (Trench 1) was believed to intersect a possible Iron Age pit alignment. Although no evidence for this monument was encountered, it was observed that a natural sedimentary transition across the trench closely matched the same bearing as the feature. An ephemeral linear feature was revealed in trench 2 [202] close to a possible rectilinear enclosure, although not obviously related to it.
Project dates	Start: 27-10-2008 End: 31-10-2008
Previous/future work	Yes / Not known
Any associated project reference codes	FHS08 - Sitecode
Any associated project reference codes	DBYMU 2008-291 - Museum accession ID
Any associated project reference codes	9/2008/0835 - Planning Application No.
Type of project	Field evaluation
Site status	None
Methods & techniques	'Targeted Trenches'
Development type	Recreational/leisure
Prompt	Planning condition
Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	DERBYSHIRE SOUTH DERBYSHIRE TWYFORD AND STENSON Fryzm's House Farm

Postcode	DE73
Study area	4.20 Hectares
Site coordinates	SK 3226 2951 52.8617837157 -1.520780500150 52 51 42 N 001 31 14 W Point

Project creators

Name of Organisation	Stoke-on-Trent Archaeology
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Jonathan Goodwin
Project director/manager	Jonathan Goodwin
Project supervisor	Richard Cramp
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Mr. Jem Hudson

Project archives

Physical Archive recipient	Derby Museum and Art Gallery
Physical Archive ID	DBYMU 2008-291
Physical Contents	'Ceramics'
Digital Archive recipient	Derby Museum and Art Gallery
Digital Archive ID	DBYMU 2008-291
Digital Contents	'Stratigraphic','other'
Digital Media available	'Images raster / digital photography','Images vector','Text'
Paper Archive recipient	Derby Museum and Art Gallery
Paper Archive ID	DBYMU 2008-291
Paper Contents	'Ceramics','Stratigraphic'
Paper Media available	'Context sheet','Correspondence','Diary','Drawing','Map','Miscellaneous Material','Notebook - Excavation',' Research',' General Notes','Photograph','Plan','Report','Section','Unpublished Text','Unspecified Archive'

Project bibliography 1

Publication type	A forthcoming report
Title	Archaeological Strip, Map and Record Programme on land at Fryzm's House Farm, Stenson, Derbyshire NGR SK 3226 2951
Author(s)/Editor (s)	Cramp, R
Other bibliographic	Report No. 236

details	
Date	2008
Issuer or publisher	Stoke-on-Trent Archaeology
Place of issue or publication	Stoke-on-Trent

Entered by	Jonathan Goodwin (jon.goodwin@stoke.gov.uk)
Entered on	5 December 2008