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LINDSEY ARCHAEOLOGICAL SERVICES

**Tattershall Thorpe, land adjacent to North Road Farm
(Application A)**

NGR: TF 2230 6020
Site Code: TNRF 04
LCNCC Museum Accn. No.:2004.263

Archaeological Desk-Based Assessment

Highways & Planning
Directorate

5 JAN 2005

Planning &
Conservation

**Report prepared for
Woodhall Spa Sand and Gravel Ltd**

**by
G. Tann**

**LAS Report No. 789
December 2004**

Conservation
Services

13 JAN 2005

Highways & Planning
Directorate

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EVENT : L1 5851
CON : L1 10559

INTERVENTION: L1 9934
EXCAVATION: L1 9935

COPY 1 OF 2

PRN: 45863 ^{late} Mesolithic -
Neolithic
45864 - Roman

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Summary

Land intended for future sand and gravel extraction is known to have been used for accommodation huts and other buildings related to use of the nearby RAF Woodhall Spa during World War II. No cropmarks of archaeological features have been identified on air photographs on the application site, but it appears to have been part of a land block with cropmarks of ridge and furrow from medieval ploughing. A rapid walk-over of part of the site produced prehistoric flint artefacts and a sherd of Roman pottery. The quarried land to the north and east formerly contained a complex of archaeological features, probably of Neolithic to Romano-British date, but these were not investigated. The area lies in the Bain Valley, close to the River Witham, in a zone which has produced several significant Neolithic, Bronze Age and Iron Age sites. Although it is probable that the application site lay within the multi-period archaeological landscape, it is unknown whether archaeological features have survived medieval plough damage, wartime development and subsequent site clearance.

A low, unlaidd, hedgerow along the northern edge of the application area has occasional limestone pieces at its base. Cropmarks suggest that the hedgerow straddles medieval ridge and furrow, indicating that it is probably of post-medieval origin and with no archaeological significance.

Given the known potential for prehistoric archaeological remains on the site, and the small size of the application area, it is proposed to topsoil-strip the total area affected, and record any archaeological remains which are revealed.

Introduction

Lindsey Archaeological Services (LAS) was commissioned in November 2004 by Woodhall Spa Sand and Gravel Ltd to prepare an archaeological desk-based assessment of land in Tattershall Thorpe affected by proposed future sand and gravel extraction (Figs. 1 and 2). This report considers a plot of land outside the application area assessed in a previous desk-based assessment (Tann 2004).

The purpose of the desk-based assessment is to identify the archaeological potential of the proposed quarry extension by collating existing information, and to recommend any necessary mitigation.

The Proposed Quarry Extension

Application A relates to a c.1.5ha rectangular field immediately north of the North Road Farm buildings, located to the south and west of an existing active sand and gravel quarry. The western limit of the area is a farm track. The land is at present farmland with a recently sprouted crop of onions.

Planning Background

The archaeological desk-based assessment and hedgerow assessment was requested by the Lincolnshire County Council Senior Built Environment Officer as part of an archaeological evaluation. It was recommended that the assessment made particular reference to air photographs and LIDAR data. The evaluation is also expected to include fieldwalking, detailed gradiometry, and may require evaluation trenching.

Methods and Sources

A desk-based assessment of the site, within the context of a 0.5km radius, was undertaken in order to identify and assess archaeological constraints. Research was conducted by G. Tann between November 29th and December 3rd 2004. The following sources were consulted and available information researched:

- Lincolnshire County Council County Archaeology Office (Sites and Monuments Record, National Mapping Programme overlay of cropmarks, parish files, previous reports, oblique and vertical air photographs)
- Lincolnshire Archives Office (Manuscript maps, Ordnance Survey maps, other documentary and published sources)
- Lincoln Central Library Reference Department, Local Studies Collection (published sources, Ordnance Survey maps)
- LAS collection of air photographs
- LIDAR data – LIDAR (Light Detection and Ranging) uses a similar principle to RADAR, with an instrument transmitting light outwards to a target. The transmitted light interacts with and is changed by the target. Some of this light is reflected back to the instrument, where it is analysed. The change in the light properties enables some property of the target to be determined, and the time for the light to travel out to the target and back to the instrument is used to determine the range to the target (description from NASA website). The Lincolnshire LIDAR data is held by the Environment Agency, and allows mapping of the height differences of the ground surface (primarily for flood risk purposes). For each 2m x 2m grid, individual heights are assigned, within a typical accuracy tolerance of 0.25m vertically, and 0.4m horizontally. For this project, the data was not purchased, but a JPEG image was supplied which included the application site.

Topography and Geology

The application site is at about 10m OD. Land to the north and east of the site has been quarried and is at a lower level.

A borehole survey in 1989 by Site Investigation Services included two locations within or beside this application area (borehole logs supplied by the client). The boreholes were BH24 (at the northern boundary of the area), and BH26 (at the south-east corner). At BH24, topsoil was a 0.6m thick layer of brown sandy soil with traces of gravel. The gravel content may reflect disturbance of the underlying

material. Beneath the topsoil were thick layers of sand with gravel; no intervening subsoil was noted. To the south-east, BH26 recorded a 0.6m thick dark brown sandy topsoil, over sand and gravel layers.

An image showing the extent of LiDAR data close to the application site illustrates some variations in topography in nearby fields, produced by extant buildings, the sites of former buildings, and banks associated with the quarry (Fig. 3). No variations are marked within the application site.

Archaeological and Historical Background (Fig. 4)

Previously recorded sites and findspots are listed in the Lincolnshire Sites and Monuments Record. These have been allocated Primary Record Numbers (PRNs) and these are used in the text.

Prehistoric

The gravel soils beside the River Bain are known to have been exploited throughout the prehistoric period, and the angle between the Rivers Bain and Witham contains several occupation and farming sites. Gravel working in Kirkby on Bain and Tattershall Thorpe parishes has exposed archaeological remains, and since the late 1970s various archaeological investigations have been undertaken prior to quarry extensions. This work has included air photographic reconnaissance, in July 1976 and 1979, which recorded marks in the ripening crops. Cropmarks of archaeological features were recorded on the land east of the farm track, since removed by quarrying (Pl. 1). The clearest cropmark feature is a five-sided ditched enclosure SMR **40430**, with an entrance on its eastern side. This feature is about 100m north of the application area. The survival of this feature despite medieval ploughing suggests that its ditches are substantial. Other cropmark features surrounded that enclosure (and lie within about 100m to the east of the application area), but their poorer definition probably indicates shallower ditches. The palimpsest of cropmarks is confused by features which are probably of geological origin, and others from post-medieval drainage and ploughing.

To the north-west of this proposed quarry extension is a series of rectangular enclosures with rounded corners, which appears to be a field system pre-dating the medieval period, east of the plantation belt. Other cropmarks, of smaller curvilinear and circular enclosures and post-hole/pit arrangements, seem to be earlier than the field system, and probably mark a prehistoric or Romano-British occupation site with hut circles. The recorded features lie on the lower ground near the stream, but extend partly up the slope.

Four archaeological excavations have provided an indication as to the type of archaeological features which are present in this area, and the potential for recovery of artefacts and environmental remains.

The nearest excavation was 200m south-east of North Road Farm, in 1979, when the site of an early/middle Iron Age ovoid enclosure with two concentric ditches (SMR 43556) was being removed by quarrying (Chowne 1980). This enclosure had first been recorded in July 1977, extending over an area 220m x 170m, and crossing the northern end of Annpasture Lane (Everson 1980). The 5m wide

ditches were about 2m deep, and about 16m apart. They produced quantities of organic material, including a peat layer in the outer ditch. The few artefacts found were all above the peat, and included pottery and a triangular loomweight. Part of a beehive quern was found nearby during topsoil stripping. Further excavations were conducted here in 1986, east of Annpasture Lane (Seager Smith 1998). Remaining parts of this site have been designated a Scheduled Ancient Monument.

During December 2003, a fieldwalking survey and evaluation trenching exercise was conducted by LAS on a 8ha site south-east of Annpasture Lane, slightly further from the North Road Farm proposed quarry extension. The finds included one Mesolithic flint flake, and 31 Neolithic/Bronze Age worked flints. This area was found to have been heavily damaged by ploughing (Britchfield 2004).

LAS has also conducted evaluations and excavation to the west of the River Bain at Kirkby on Bain, about 1.8km NE of the present study area (Field and McDaid, forthcoming). This work has established the presence of a remarkable density of prehistoric worked flint, Neolithic pits and ditches.

The Kirkby on Bain results add to the detail provided by excavations at the NE corner of Tattershall Thorpe parish in 1981 and 1984 (Chowne 1993). Neolithic and Bronze Age pits, post-holes and undated hearths were recorded, but no building plans were established with confidence. Irregular pits were excavated which were tentatively interpreted as either tree root disturbances or flint quarries. The difficulty in recognising archaeological features in a sandy soil disturbed by heathland root activity, rabbits and ploughing, is common to this area. The survival of features from this period also depends on the depth of modern and earlier ploughing.

Roman

The Lincolnshire County Sites and Monuments Record contains an entry for a Roman site at Tattershall Thorpe (SMR 40130). The SMR locates the site around the farmyard of New Farm, following the lead of the Ordnance Survey Field Investigator C.W. Phillips' in 1929. Phillips had attempted to pinpoint the location of 'two summer encampments' described in some detail by John Dyer (the Rector of Coningsby, c.1752). The descriptions were recorded in Camden's *Britannia*, and in *Archaeological Review*, but the stated location "on flat moor bordering fens in Tattershall Park" could apply to land south and east of New Farm, closer to Tattershall Thorpe village (cited in Griffiths and Collcutt 1994, 9-10). In the early 1900s, a press article in Green's *Village Life* mentioned the 'encampments' but noted "all trace of them now appears to be obliterated" .

Persistent investigation has produced very little trace of Roman activity in the area. An interim report on the 1981 excavation near the River Bain noted three pits containing small quantities of Romano-British pottery, and backfilled with a sand different in nature to that filling prehistoric features (Chowne 1981). A grave (context 19) was described as that of a Roman bronzesmith, although this was reinterpreted subsequently as of Saxon date (Chowne, in Bradley *et al* 1993). A Roman pot containing 5-7,000 Roman coins (SMR 40152) was found in July 1982 during extension of a quarry formerly

owned by Bain Aggregates. An archaeological site visit found further coins, but no archaeological features; the date range of the coins is from the mid-third century (White 1983).

Saxon, Medieval and Post-Medieval

The settlement of Tattershall Thorpe was originally within the parish of Tattershall. The 1086 *Domesday Survey* distinguishes between the two communities, referring to Tattershall Thorpe by the term *torp*, an Old Danish place-name element indicating a secondary settlement (Cameron 1998, 123). In 1086, land in *Torp* was held by the Bishop of Durham, the Bishop of Bayeux, and Eudo; the recorded assets included a church and mills (Foster and Longley, 1924). In the eleventh century, Tattershall Thorpe was in the administrative wapentake of Horncastle, but was later transferred to Gartree wapentake.

A single Saxon artefact, a bone thread-picker (SMR 40134), has been reported from the vicinity of the proposed quarry extension. This was found in 1974 in a charcoal deposit, close to the ground surface, on land east of North Road Farm which has since been quarried. Archaeological watching briefs by LAS on land close to New Farm, Tattershall Thorpe (700m north-west of the study area), have produced no evidence of Saxon or medieval activity. Recent fieldwalking of land south-east of Annpasture Lane has produced a scatter of medieval sherds which probably derives from manuring of fields; a possible medieval horizon was also noted there during evaluation trenching (Britchfield 2004). The Annpasture Lane site lies close to the Iron Age hillfort site, on a ridge of higher ground, and this may have affected its past landuse.

The earliest identified map to show the affected land in detail is a plan of the estate of Earl Fortescue, surveyed by J. Lighton and Son in 1867 (LAO CHAT 6/2). Unfortunately, the available printed plan incorporates revisions of 1887, and is less detailed than the Ordnance Survey map surveyed in 1887 (Fig. 5; OS 1891). A field, corresponding to the application area, is numbered 129, but the corresponding field name was not found during research for this assessment. The field is also shown on the Ordnance Survey map. The two plans show that it lay within a landscape of polygonal-shaped fields, which seem to represent post-medieval formal enclosure and subsequent sub-division or amalgamation; some of these blocks are marked on the Ordnance Survey 1" map, surveyed between 1818 and 1821 (OS 1824). Several boundaries form linear features crossing much of Tattershall Thorpe, and these are assumed to reflect watercourses or farm access tracks, rather than ancient estate boundaries. A track leads to the north of North Road Farm, along the course of the existing farm track. The most dominant linear boundaries may mark periodic advances in reclamation of land to the west of the River Bain. To the north of North Road, west of the track, is a block of smaller but more regular fields, extending northwards to one of the linear boundaries. This block is more likely to be of medieval or early post-medieval enclosures, predating the Enclosure Act of 1796.

Modern

The airfield at Tattershall Thorpe (known as RAF Woodhall Spa), opened in February 1942, and was operational until October 1945. It was reopened in about 1959, and finally closed in about 1967 (Hancock 1978, 129; Hancock 1985, 68). A cluster of rectangular buildings, probably accommodation units or sheds used in association with the airfield, is shown on an Ordnance Survey map within the present application site in the field north of North Road Farm. The map was revised between 1946 and 1948 (Fig. 6; OS 1951). About nine small huts and one large building were within the application site area, with further buildings and the access road lying immediately to the south within the farmyard area. The southern part of the group, outside the application area, was also marked on the Ordnance Survey map published in 1956, which states it was based on revisions prior to 1930; this statement is clearly incorrect, and the clearance of the northern structures can probably be dated to between 1948 and 1956 (OS 1956).

Research for this project located a plan of the RAF structures in May 1946 (Air Ministry 1946). The plan shows the application site as forming part of 'Site No. 6', with structures 144-146 (quarters for officers and servants), 145-146 (quarters for officers), 152 and 163 (airmen's latrines), 153-157 and 159-162 (airmen's barrack huts) (Fig. 7).

Some of the huts beyond the application site appear to have been incorporated into agricultural sheds which remained in 1980. The access road outline remained visible on July 1979 air photographs, but had probably been removed by January 1980. An air photograph of 1972 shows disturbed land within the application site which may be related to demolition and clearance of the huts, but air photographs of 1979 and 1980 show no trace of any huts within the application area itself.

Site Visit

The area of the proposed quarry extension can be accessed on foot along the surfaced farm track leading from North Road through the farmyard of North Road Farm. There is no vehicular access from the track, and the field is reached from the north-east corner of the farm complex. At the time of the visit, on December 2nd 2004, a crop of spring onions was beginning to sprout. The tracks of tractor tyres provided west-east transects across the field.

The field is virtually level, with a deep drainage ditch along its western boundary and quarry faces beside its eastern and northern sides (Pls. 2-4). Farm buildings and stored equipment form the southern limit, with a large brick rubble heap marking demolition of wartime buildings. No trace of any remaining building foundations were seen within or immediately adjacent to the application site. Mr Norman Leggate, who farms North Road Farm, remembers the World War II buildings in use, and recollects a west-east access road and other buildings on the northern part of the field which are not shown on the RAF plan.

Four east-west transects of the field were made on foot, checking for artefacts on the surface. With the lack of vegetation, the recently cultivated surface was ideal for fieldwalking between the rows of crop. One sherd of Roman pottery, and one scrap of medieval pottery were collected, together with six worked or struck flints (including at least one scraper). The flints, probably including Mesolithic examples but mostly Neolithic in date, formed a concentration close to the north-east edge of the field. The Roman sherd was found on the eastern headland. Virtually no artefacts predating the twentieth century were seen on the southern side of the field, where demolition fragments were scattered.

An inspection of the hedgerow along the northern side of the field was made (Pl. 4). The hedge appeared to be comprised exclusively of young hawthorn bushes, and did not seem ever to have been a laid hedge. There were infrequent pieces of limestone at the foot of the hedge, which must derive from an imported source. The density did not indicate a removed field wall.

At the western side of the field, no hedge or hedgerow is present, although one survives to the north, with infrequent mature oak trees beside a hawthorn hedge.

Scheduled Ancient Monuments and Listed Buildings

The nearest scheduled ancient monument is the part-excavated site of a small multivallate fortified enclosure (SAM 29725; SMR 43556), SE of North Road Farm, and about *m from the proposed quarry extension. The only listed building in the vicinity is the Grade II Blue Bell Inn, to the south of the village.

Hedgerows

The hedgerow at the northern boundary of the proposed quarry extension cannot be demonstrated on the basis of available documentary or cartographic evidence to predate the late nineteenth century. Its appearance is of a young replacement hedge, not re-using an established hedgerow. This suggests that it may have been planted since World War II. The field boundary appears on late-nineteenth century maps.

An air photograph of July 1979 shows cropmarks of ridge and furrow ploughing in the field immediately north of the application site, apparently extending southwards as far as the field boundary without a break for a medieval headland (Pl. *). Further indications of ridge and furrow were visible in the field to the south of the farmyard, but the crop in the application site was not conducive to reflecting growth variations. The air photograph suggests that the application site formed part of a more extensive north-south aligned ploughed area, in which case the site's northern hedge boundary is no older than the later medieval period.

There is no archaeological significance to the hedgerow at the northern limit of the application site, and any hedgerows on other sides of the area have been removed in the past.

Archaeological Potential of the Proposed Quarry Extension

A series of photographs taken in July 1979 record an unharvested crop (possibly potatoes) on the field, contrasting with arable fields to the north and east. This crop was unsuitable for showing cropmarks of archaeological features. The arable fields clearly exhibit cropmarks of ridge and furrow to the south and north of the application site, with ditched enclosures and boundaries to the north and east. One photograph from July 1979 shows two lighter patches on the northern side of the field, but these may have been produced by light reflection or another non-archaeological cause (Pl. 1; PE 2957/37).

The clearest archaeological feature, in the next field to the north (since quarried away) was an irregular, five-sided enclosure, with its entrance to the east. Cropmarks of less clear enclosures and ditches covered much of the land since taken by the quarry.

The density of cropmarks, assumed to be of Iron Age or Romano-British date (but possibly earlier), implies that the area was densely occupied. In the absence of any intervening stream or other topographical feature, there is no reason why the archaeological features should not have extended onto or across the application site. The field boundary to the east may mark a minor watercourse (the 1891 Ordnance Survey map shows it leading to a pond east of the farm), but the boundary bisects the large enclosure and a block of ridge and furrow and cannot reflect an ancient feature.

The rapid walkover survey has demonstrated that prehistoric and Roman artefacts are present within the application site. Archaeological survival within the site can be expected to have been damaged by medieval ridge and furrow ploughing, although any surviving ridges might preserve buried soil horizons lost elsewhere. The wartime development of part of the site, and the subsequent demolition and clearance, has probably caused disturbance to any archaeological remains, and may have removed shallow features.

Potential Archaeological Impact of the Proposed Quarry Extension

Sand and gravel extraction will cause the total loss of any archaeological remains within the quarry, and the impact on the local water-table could affect waterlogged organic artefacts and environmental deposits in features close to the quarried area.

Suggested Mitigation Measures

The air photographic evidence of enclosures, ditches, and occupation features close to the proposed quarry extension demonstrates that the site may have been rich in archaeological features. It is unclear how much of this has survived.

A geophysical survey of the proposed quarry extension was planned, but this would damage the present crop (due for harvest in Spring 2005). Since archaeological remains have been demonstrated to be present, the applicant has suggested that some evaluatory stages could be omitted, and that the

application area be stripped of topsoil under close archaeological supervision. Topsoil stripping would be followed by examination and recording of any surviving archaeological features. The results of that exercise may prompt the exclusion of certain areas from any extension of the quarry (preservation *in situ*), or result in archaeological excavation of threatened features (preservation by record).

Conclusion

Archaeological features are known beside the assessed area, forming a small part of an extensive busy local prehistoric landscape. Artefacts have been found on the field surface within the application area. This assessment suggests that the cropmarks visible on 1970s air photographs on the land to the east and north (which has since been quarried) were of enclosures, pits and field systems dating between the Neolithic and Romano-British periods. The application site also appears to lie within a small block of medieval ridge and furrow. Much of the application site was used for huts and ancillary buildings associated with the nearby RAF Woodhall Spa, although these have been cleared.

The complex of ditched features and pits may have extended across the assessed area, and evidence of this could still remain.

Acknowledgements

LAS would like to thank the following organisations and individuals for their help during the preparation of this assessment:

David Jones (Woodhall Spa Sand and Gravel); John and Norman Leggate (North Road Farm); Louise Hutchings, and other members of the Built Environment Team, Lincolnshire County Council (Highways and Planning Directorate); staff at the Lincolnshire Archives Office, and Lincoln Central Library Reference Collection. Further thanks are expressed to the Environment Agency and to the RAF Museum, Hendon, for permission to reproduce material.

Thanks are also due to Naomi Field for her help in producing this report.

Geoff Tann
Lindsey Archaeological Services
20th December 2004

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Air Photographs

HSL UK72 61 R23 1067; 23/5/1972

TF 221 604; 2918/5, PE 24.7.1976

TF 224 603; 2957/30-40, PE 21.7.1979

TF 223 598; 2937/26. PE 13/1/1980

Archive Summary

Correspondence

Photographs: LAS jpeg nos. 2004/2035-2044

Archaeological finds: pottery, flint

APPENDIX 1

APPENDIX 1

Previously Reported Archaeological Sites and Findspots

(Source: Lincolnshire County Sites and Monuments Record)

SMR No.	NGR (all TF)	Description
40127	2270 6043	Mammoth and other Pleistocene period fossil remains
40129	2163 6022	Neolithic stone axe, found 1966
40130	2150 6080	Supposed site of Roman earthworks, recorded 1806 and 1929
40131	2140 6010	Neolithic stone axe, found pre 1973
40132	2180 6040	Neolithic stone axe, found pre 1973
40133	2143 6020	Neolithic flint axe, found pre 1973
40134	2258 6012	Saxon bone point thread picker, found 1974 in charcoal deposit
40136	2300 6040	Neolithic/Bronze Age flint
40143	2280 5990	Clay pits and bricks. Possible site of post medieval brick kilns
40144	2240 5930	Clay pits, post medieval pottery, bricks and tiles
40147	2310 5985	Dense scatter of Neolithic/Bronze Age flint, and cropmarks of ringditch
40151	2222 5970	Scatter of medieval and post-medieval pottery
40152	2250 5980	Roman coin hoard in greyware jar, found during gravel extraction 1982
40429	2204 6070	Undated cropmarks of small rectangular enclosures
40430	2235 6032	Undated cropmarks of polygonal enclosure, and rectagonal enclosure
40431	unlocated	Cropmarks of polygonal enclosure and other features, recorded 1979. May be near 40134
40432	2054 6013	Undated cropmark of linear ditch system and enclosures. ?Field system
43332	2120 6055	Scatter of Neolithic/ Bronze Age flints
43397	215 612	RAF Woodhall Spa airfield
43472/43473	2137 6109	Neolithic/Bronze Age flint
43474	2117 6116	Post medieval enclosure
43556	2231 5982	SAM 29725; small multivallate hillfort/Iron Age defended enclosure, partly removed by gravel extraction. Partially excavated in 1979.

THE FIGURES

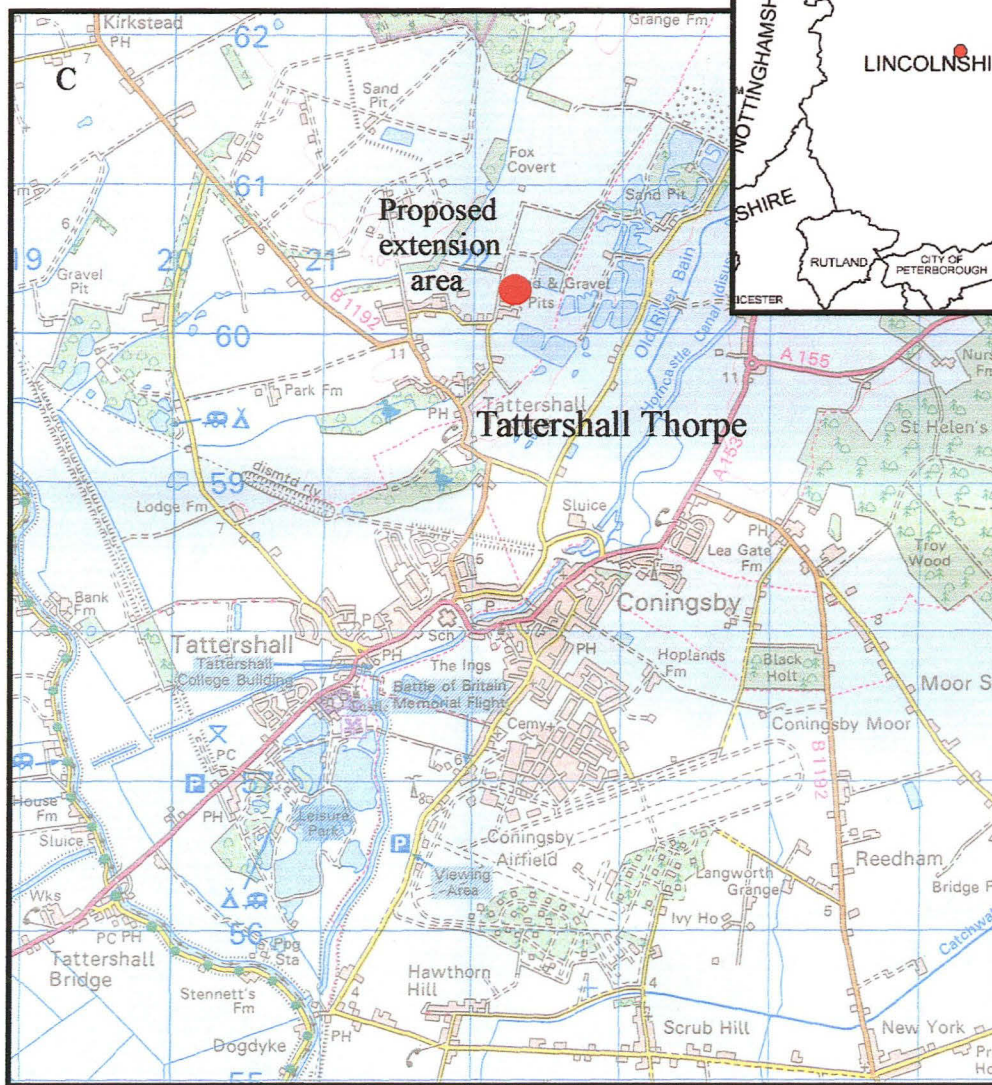
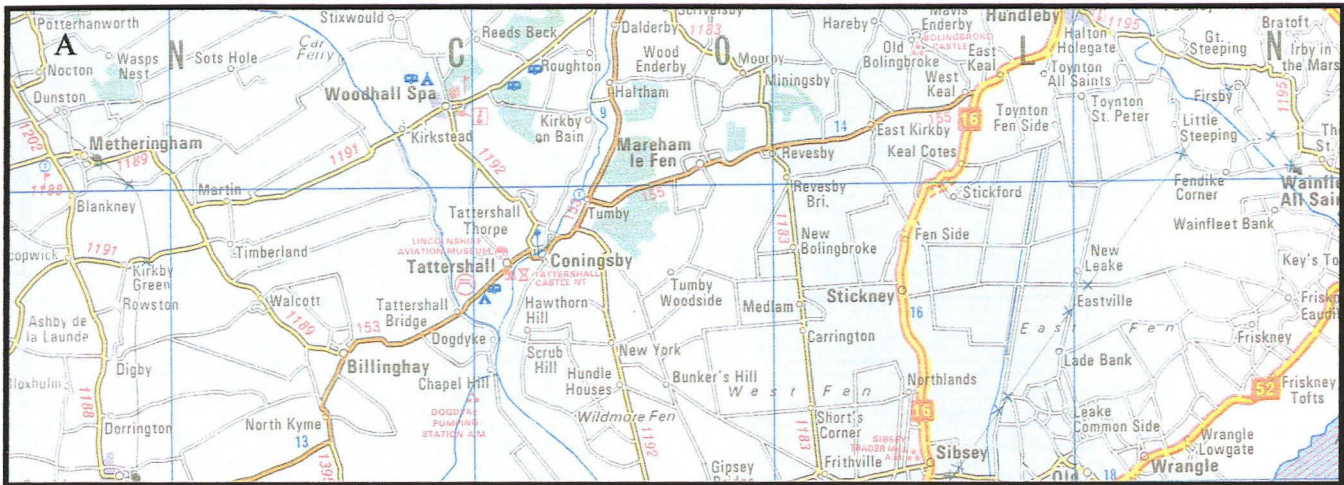


Fig. 1 Location of Tattershall Thorpe, based on the 2002 Ordnance Survey 1:50,000 Landranger map, Sheet 122. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 10002165).

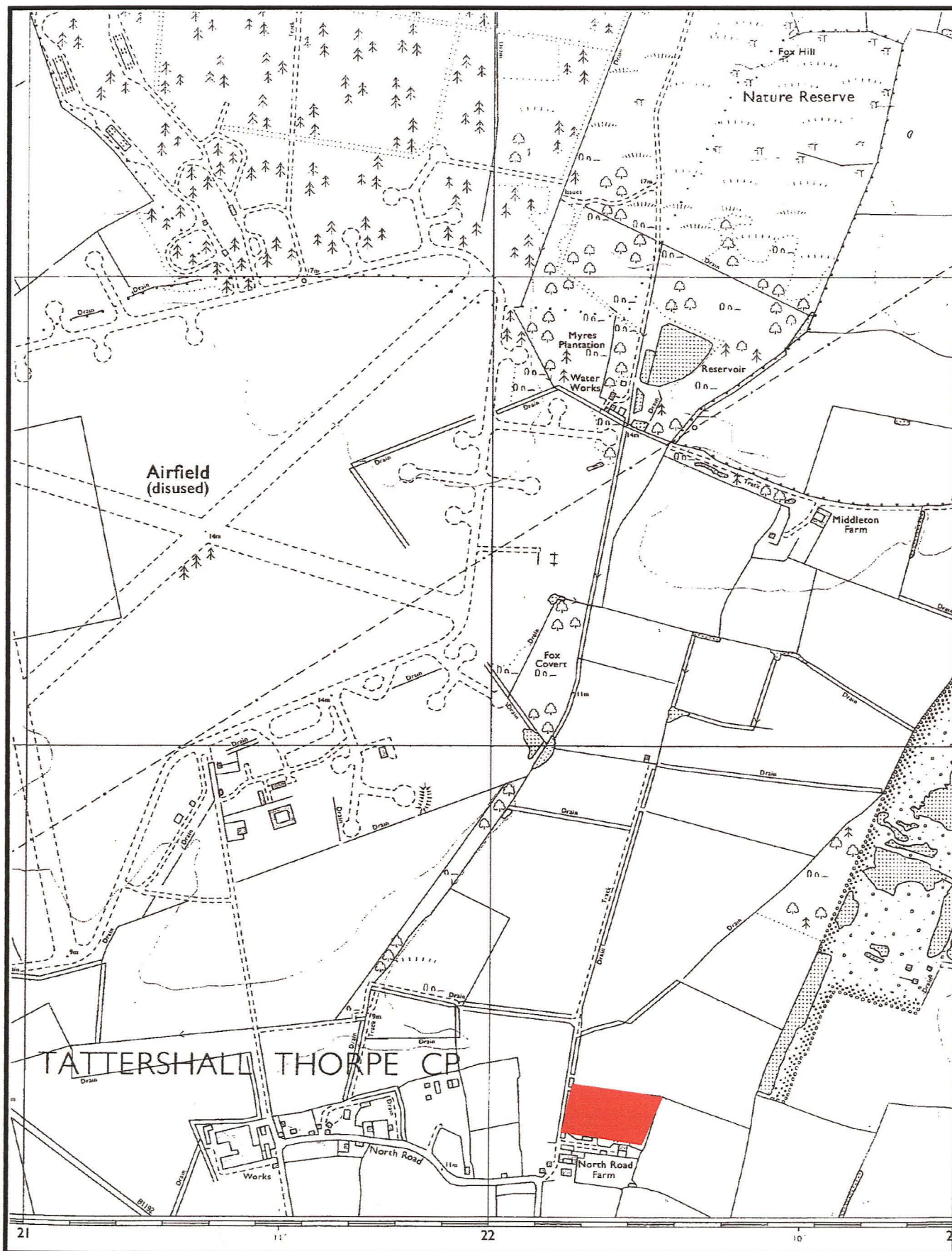


Fig. 2 Extent of the proposed Quarry Extension (based on the 1975 1:10,000 Ordnance Survey map, Sheet TF 26SW, using information supplied by the client. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 10002165).

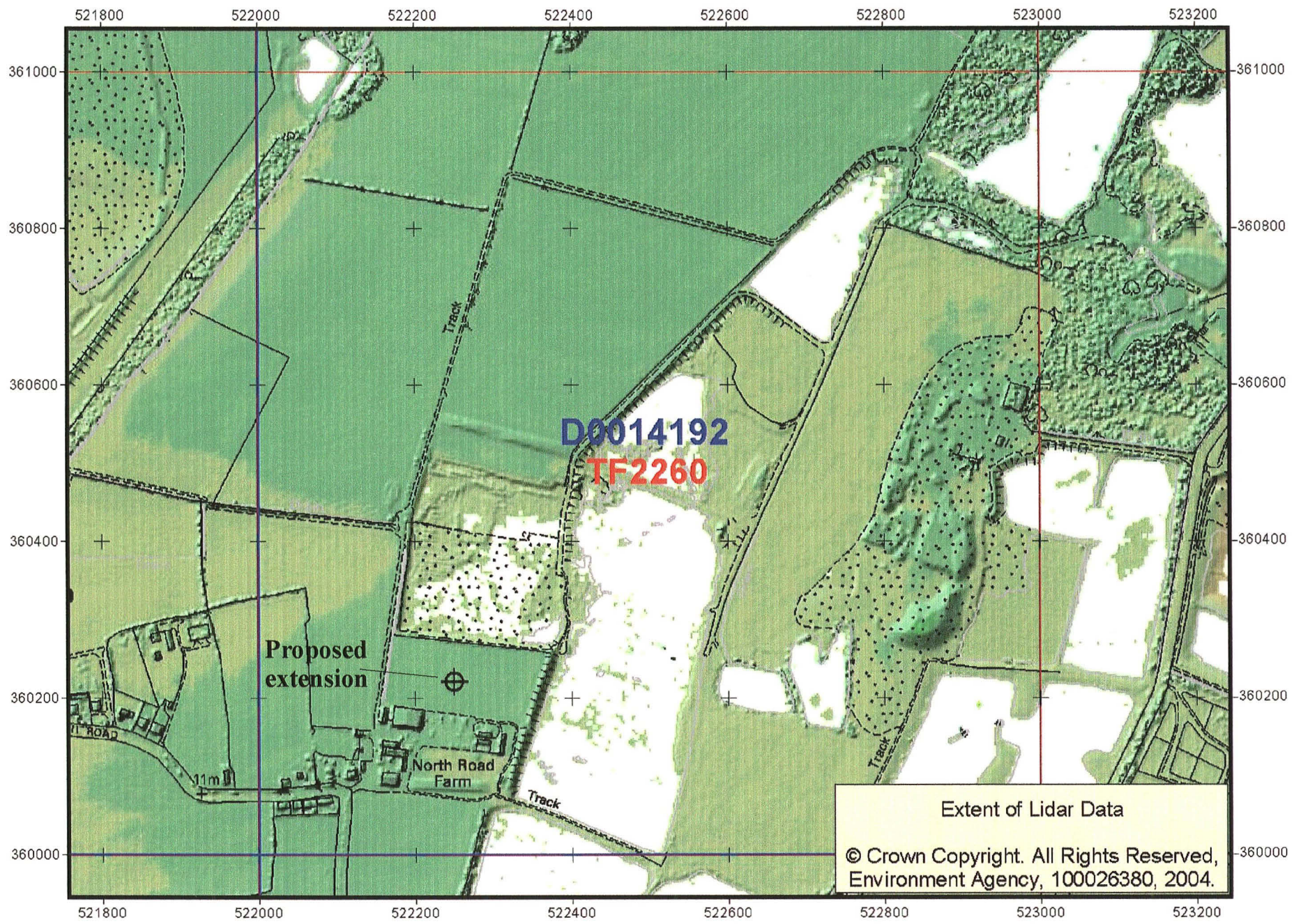
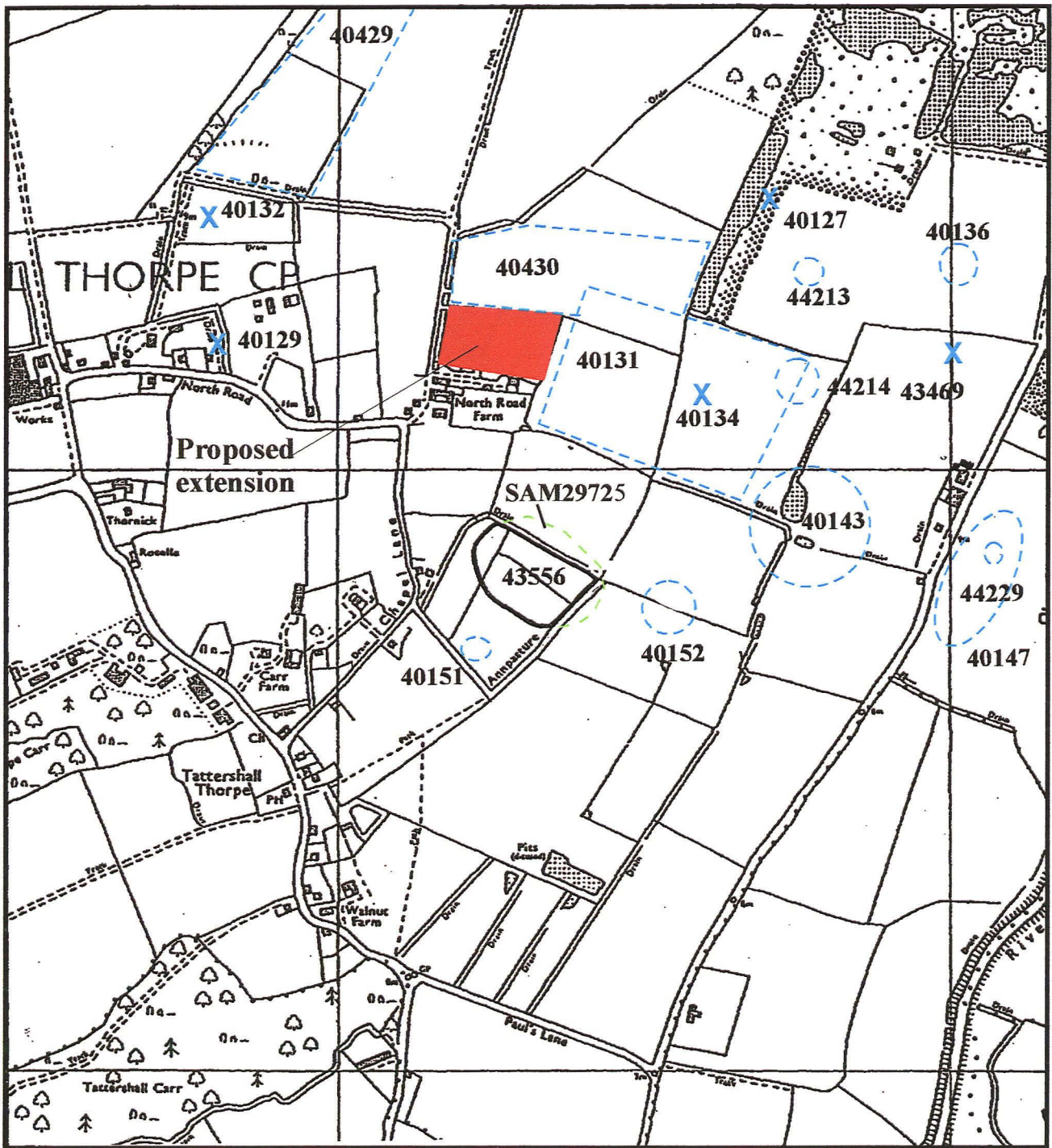


Fig. 3 Digital (JPEG) image representing coverage for LiDAR data held by the Environment Agency for the application site and surrounding land. Reproduced with permission.



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Fig. 4 Previously reported archaeological sites and findspots. (Information from Lincolnshire County Sites and Monuments Record, based on the 1975 1:10,000 Ordnance Survey maps, Sheets TF 25NW and TF 26SW. © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 100002165).

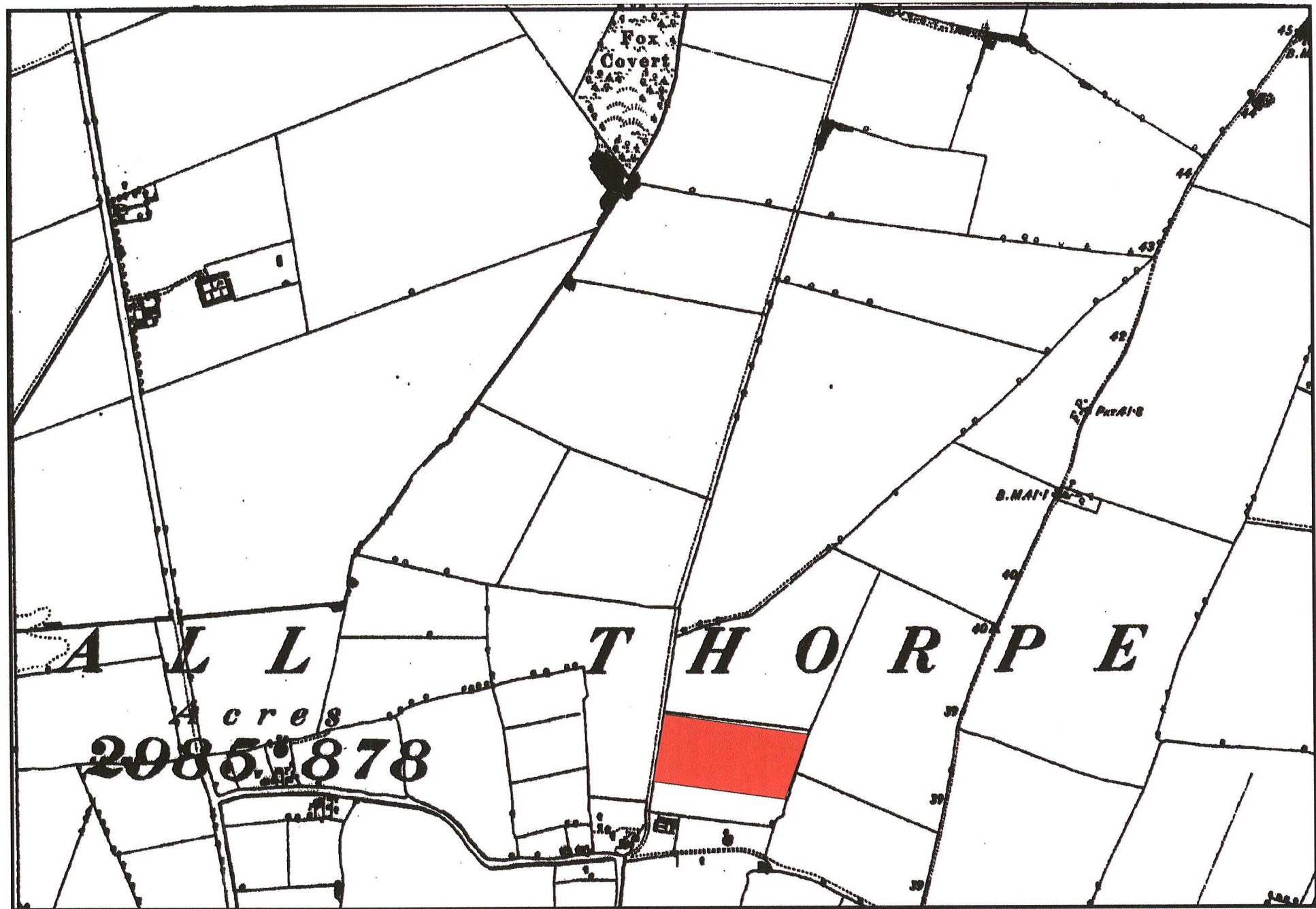


Fig. 5 Extract from the 1:10,560 Ordnance Survey map surveyed in 1887 (OS 1891, reproduced at enlarged scale).

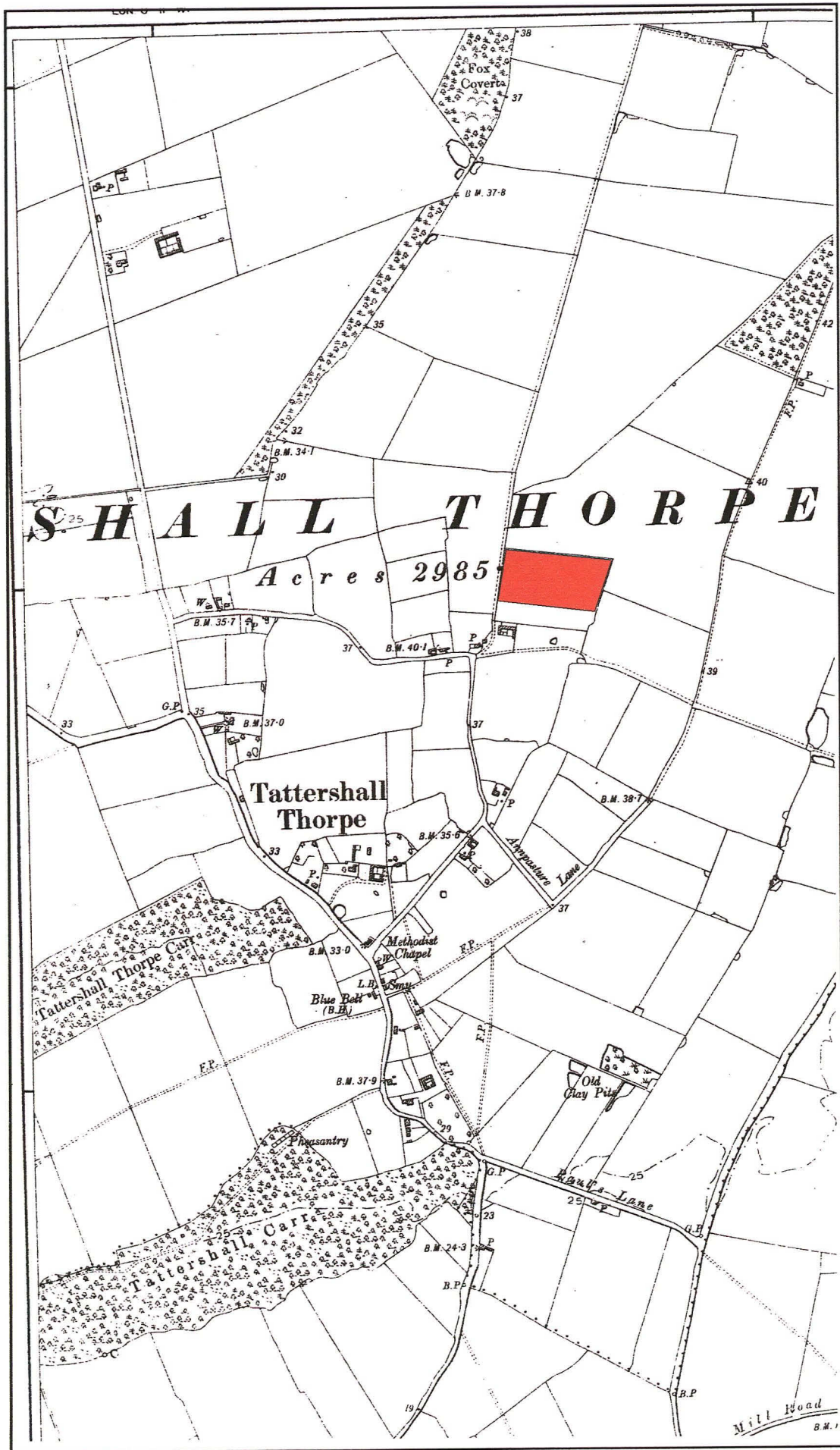


Fig. 6 Extract from the 1:10,560 Ordnance Survey map revised in 1904, with additions in 1946-8

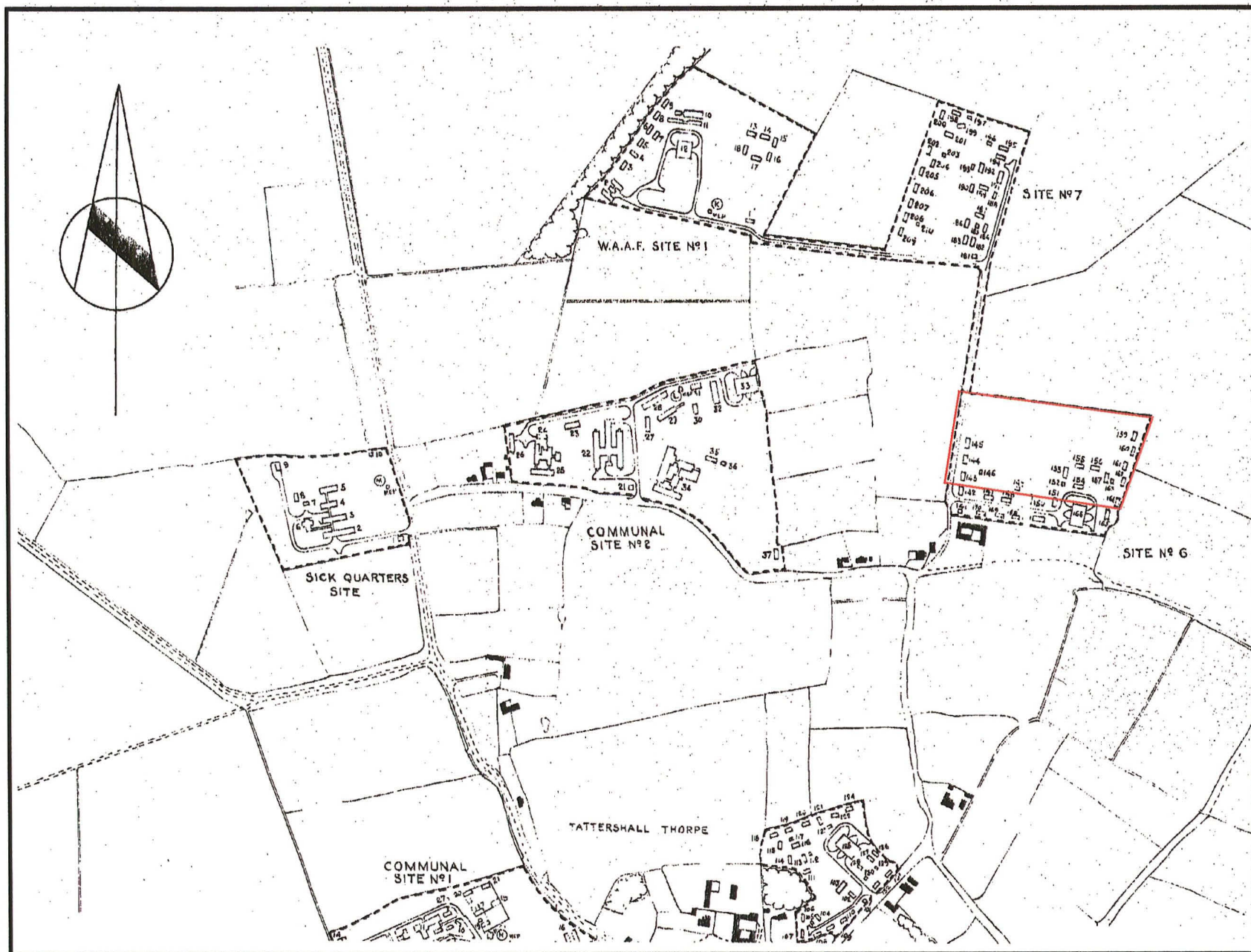
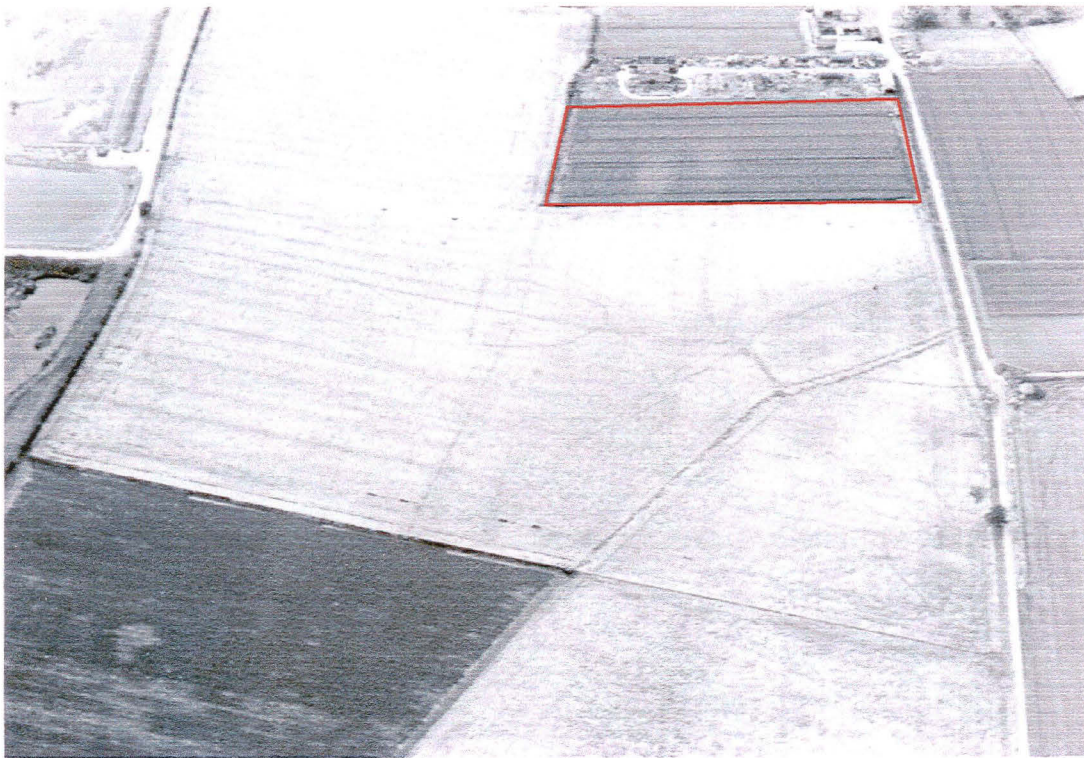


Fig. 7 RAF buildings on the application site in 1946. (Source: Air Ministry Record Site Plan of dispersed sites at RAF Woodhall Spa, dwg. 2354/46. Information provided by Department of Research & Information Services, Royal Air Force Museum, Hendon. Reproduced with permission).

THE PLATES



PI. 1 Air photograph showing the area of the proposed quarry extension, July 1979, looking south. An unharvested crop covers the site. To the north and south are cropmarks of ridge and furrow. Further north, and to the east, are ditches forming a field system, a polygonal and other enclosures, and pits. (TF 224 603; 2918/1, 21.7.1979, P. Everson. Copyright reserved).



PI. 2 The application site, looking north-east from the farm track.



PI. 3 The application site, looking south-east.



PI. 4 The hedgerow along the northern edge of the application site (looking east, with the quarry to the north).