

**A46 NEWARK TO WIDMERPOOL
IMPROVEMENT
NOTTINGHAMSHIRE**

METAL DETECTING SURVEY

For

SCOTT WILSON LIMITED

on behalf of

**BALFOUR BEATTY
CIVIL ENGINEERING LIMITED**


CA PROJECT: 2828
CA REPORT: 10133

NOVEMBER 2010

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CONTENTS

SUMMARY	3
1. INTRODUCTION	5
<i>The site</i>	5
<i>Archaeological and historical background</i>	5
<i>Objectives of the Metal Detecting Survey</i>	7
<i>Methodology</i>	7
2. RESULTS	9
<i>Area 3</i>	11
<i>Area 4</i>	12
<i>The Finds</i>	13
3. DISCUSSION.....	15
4. CA PROJECT TEAM	16
5. REFERENCES	17
APPENDIX A: METHODOLOGY SUPPLIED BY THE DESIGNER'S SPECIALIST BATTLEFIELD ADVISOR	18
APPENDIX B: TABLE OF FINDS	21
APPENDIX C: SUMMARY OF FINDS BY ARTEFACT TYPE AND MATERIAL	36
APPENDIX D: ARCHIVE QUANTIFICATION	39

LIST OF ILLUSTRATIONS

Fig. 1	Site location plan (1:25,000)
Fig. 2	Areas 1 -4; all finds (1:10,000)
Fig. 3	Area 1 Roman finds from metal detecting survey (1:5000)
Fig. 4	Area 1 Late medieval/early post-medieval finds from metal detecting survey (1:5000)
Fig. 5	Area 2 Prehistoric finds from metal detecting survey (1:5000)
Fig. 6	Area 2 Roman finds from metal detecting survey (1:5000)
Fig. 7	Area 2 Medieval finds from metal detecting survey (1:5000)
Fig. 8	Area 2 Late medieval/early post-medieval finds from metal detecting survey (1:5000)
Fig. 9	Area 3 Roman finds from metal detecting survey (1:5000)

Fig. 10 Area 3 Medieval finds from metal detecting survey (1:5000)

Fig. 11 Area 3 Late medieval/early post-medieval finds from metal detecting survey (1:5000)

Fig. 12 Area 4 Roman finds from metal detecting survey (1:5000)

Fig. 13 Area 4 Medieval finds from metal detecting survey (1:5000)

Fig. 14 Area 4 Late medieval/early post-medieval finds from metal detecting survey (1:5000)

Fig. 15 Photos: working shot, north of Moor Lane

Fig. 16 Photos working shot, south of Moor Lane

Fig. 17 Photos working shot looking southeast to Eden Spa

Fig. 18 Photos working shot, Elston

Fig. 19 Gold Coin Ra No. 433

Fig. 20 Gold Coin Ra No. 433

Fig. 21 Lead shot

SUMMARY

Project Name: Metal Detecting Survey, A46 Newark to Widmerpool Improvement
Location: East Stoke, Nottinghamshire
NGR: SK 7444 4775 to SK 7647 4996
Type: Metal Detecting Survey
Date: 18 to 27 March and 11 to 13 May 2009
Location of Archive: To be deposited with Millgate Museum, Newark

An archaeological metal detecting survey was undertaken by Cotswold Archaeology and Cotswold Wessex Archaeology between March 2009 and April 2009 at the request of Scott Wilson Limited on behalf of Balfour Beatty Civil Engineering Limited. The survey was undertaken on land to the east of the village of East Stoke between Thorpe (NGR: SK 7647 4996) in the north and Syerston (NGR: SK 7444 4775) in the south as part of the A46 Newark to Widmerpool Improvement. The survey was undertaken to establish potential evidence for the Battle of Stoke Field (1487), including potential Battle Actions/Scenes such as arrow storms or skirmishes that may be preserved in the topsoil as distributions of metal objects. In the event no such evidence was identified.

A total of five Roman coins was recovered, the earliest of which was a worn Republican issue. In addition two probable brooch fragments and lead pot repairs were recovered which may also date to this period. No clear spatial patterning of Roman artefacts could be identified given the small number of finds.

Three medieval coins, dating to the 14th century, were identified. These included a small and fragmentary gold coin. The remaining medieval objects, which appear to represent stray finds associated with the nearby settlement of East Stoke, could not be closely dated. No artefacts definitively attributable to the Battle of Stoke Field were recovered.

Earlier post-medieval coins consisted of silver issues of Elizabeth I and James I. The remaining identifiable coins or tokens dated after 1700 through to the 1940s.

Objects of post-medieval and later date constituted the majority of dateable finds. Lead shot of varying size was recovered, with a small number exhibiting flattening or other distortion,

resulting from impact. The shot identified would be appropriate for matchlock/muskets in the period spanning the 17th to earlier 19th centuries, with a reasonably high likelihood these relate to the 17th century civil wars and actions during the sieges of Newark. A proportion may however relate to non-military firearms which continued in use into the modern period.

A total of 124 copper-alloy buttons, typical of the 18th century or later periods was also recovered.

1. INTRODUCTION

- 1.1 Between March and May 2009 Cotswold Archaeology (CA) carried out an archaeological metal detecting survey for Scott Wilson Limited on behalf of Balfour Beatty Civil Engineering Limited on land to the east of East Stoke between Millfield Lane, Thorpe (NGR: SK 7647 4996) and Greengate, Syerston (NGR: SK 7444 4775) as part of the A46 Newark to Widmerpool Improvement (Fig. 1). The metal detecting survey was undertaken as part of the mitigation requirements for Stage 1 of the A46 Newark to Widmerpool Improvements during advanced works (Balfour Beatty/Scott Wilson 2009).
- 1.2 The archaeological metal detecting survey was carried out in accordance with a detailed Written Scheme of Investigation (WSI) produced by Scott Wilson Ltd (2009). The fieldwork also followed English Heritage Guidance *Our Portable Past: a statement of English Heritage policy and good practice for portable antiquities/surface collected material in the context of field archaeology and survey programmes (including the use of metal detectors)* (EH 2006), the Management of Archaeological Projects (English Heritage 1991) and the *Management of Research Projects in the Historic Environment (MORPHE): Project Manager's Guide* (EH 2006).

The site

- 1.3 The survey area covers approximately 37.8ha in area and comprises predominantly arable fields (Fig. 1). It is situated c. 320m west of the centre of East Stoke on undulating land. The area is bounded to the north by Millfield Lane, Thorpe, to the south by Greengate, Syerston and is surrounded on all sides by arable fields.
- 1.4 The underlying geology throughout the survey area comprises Triassic mudstones, including Mercia mudstone. (IGS 1979)

Archaeological and historical background

- 1.5 The English Heritage Registered Battlefield site for the Battle of Stoke Field lies c. 300m to the west of the current works. The battle was fought on the 16th June 1487 between the army of the Earl of Warwick (Yorkist rebels) and the forces of the

Crown (Henry VII). The registered battlefield area extends into the centre of East Stoke village. A mass grave (see A230 in Chapter 7, Appendix 7.2 in the Environmental Statement – Balfour Beatty/Scott Wilson 2007a), consisting of 11 semi-articulated individuals, was previously located in a ditch to the southeast of the present East Stoke village adjacent to the A46 (NGR SK 7526 4946). Other burials, possibly associated with the battlefield, have been identified in the back plots of properties fronting the current A46 within East Stoke (Ursilla Spence, pers. comm.).

- 1.6 Recent scholarship has focused on the exact location of the battle lines and the subsequent lines of retreat, not least because of the implications of this research on the English Heritage Registered Battlefield area, which is defined to the west of the present A46. The associated 1995 English Heritage report suggests that the Yorkists congregated on the ridge of high ground near Burnham Furlong and attacked the Earl of Oxford's men in a south or south easterly direction (EH 1995). According to tradition, the rebel army were dispersed northwards towards the Trent and the Red Gutter, a small gully leading down to the Trent floodplain.
- 1.7 An alternative hypothesis, advanced by the Battlefields Trust suggests that the battle took place on heath land called the Flintham Lings near to Flintham village. After defeat in the initial confrontation, the rebel army was then pursued for approximately 3.5km in a north easterly direction, with the final phase of the battle occurring near the present settlement of East Stoke.
- 1.8 A memorial stone inscribed 'here stood the Burrand Bush planted on the spot where Henry VII placed his standard after the Battle of Stoke (June 16 1487)' survives to the southwest of the village of East Stoke (NGR SK 7421 4943).
- 1.9 Immediately beyond the survey area and the current road improvements, on Elston Lane, is a stone trough (see H126 in Chapter 7, Appendix 7.2 in the Environmental Statement – Balfour Beatty/Scott Wilson 2007a and 4.20.6 in the Historic Landscape Baseline Report, Balfour Beatty/Scott Wilson 2006), positioned on a spring line below the site of a former ancient willow tree (NGR SK 7537 4898). The site is known as Willow Runnel or Rundle Willow. The trough is probably of 19th-century date but the spring and the original willow tree may point to an earlier origin for this historic landscape feature. Tradition records this as a location where one of the soldiers from the Battle of Stoke Field fell, telling his companions that if he died there then a spring would always run from this site.

Objectives of the Metal Detecting Survey

- 1.10 The objectives of the metal detecting survey, as defined in the accompanying WSI, were:
- To mitigate adverse impacts on potential evidence for the Battle, including potential Battle Actions/Scenes such as arrow storms or skirmishes that may be preserved in the topsoil as distributions of metal objects;
 - To recover and analyse metal objects that may be associated with the Battle of Stoke Field from the topsoil through a programme of archaeological metal detecting survey;
 - To determine and contribute to an understanding of the current density, character, spatial extent and clustering of metal objects that may be associated with the Battle of Stoke Field and an interpretation of their spatial distributions with specific reference to the battle; and
 - To identify areas that may be the locations of mass graves or other burials associated with the Battle of Stoke Field.

Methodology

- 1.11 A staged approach to the survey strategy was adopted to ensure comprehensive ground coverage within each of the 4 metal detecting survey areas (the latter were previously defined by Scott Wilson in consultation with Nottinghamshire County Council and English Heritage). An appropriate working offset was employed either side of any upstanding metal fences, powerlines or other obstructions in order to avoid unnecessary interference. The survey area was divided into transects, positioned parallel and 10m apart (as per the instructions of the Designer's Specialist Battlefield Advisor, Tim Sutherland; see Appendix A for Method Statement) and following methods used by the Battlefield Trust at the Battle of Edge Hill. The Consultant's Method Statement describes how the transects were laid out and surveyed in. Any subsequent, intensive survey was to be undertaken within transects spaced at 2.5m intervals aligned perpendicular to the original survey. One such area, measuring approximately 5.4ha at the southern limit of Area 2 adjacent to Lodge Lane, was subject to the more intensive survey methodology.
- 1.12 The metal detecting survey was carried out by suitably qualified and experienced metal detector operators, using only high performance metal detectors, with a

discrimination mode to allow non-ferrous, ferrous or all metals to be targeted. The use of steel toe capped boots by the metal detector operators was prohibited during the survey to prevent interference during the survey.

- 1.13 In the first instance, metal detectors were set to detect non-ferrous artefacts only (as per the advice of the Designer's Battlefield Specialist). Where hotspots of significant archaeological material were identified, more intensive metal detecting was to be undertaken. All readings were investigated, as per the requirements of the Archaeological Design, but any object potentially buried at a lower depth than the topsoil was not recovered. In the event all artefacts were retrieved.
- 1.14 The extent of the metal detecting area, the transects and baselines were established by staff of either Cotswold Archaeology or CotswoldWessex Archaeology, using a Leica GPS Rover 1200 to an accuracy of not less than ± 50 mm. The archaeological surveyor also surveyed to an accuracy of not less than ± 50 mm the location of each metal detector reading where an object was recorded and/or where the object was still buried beneath topsoil. The location and type of any obstruction or source of interference was also surveyed. All survey points were tied into the OS datum and national grid as well as visible field boundaries. The survey data was downloaded to a portable laptop computer at regular intervals during, and at the end of, each working day. In addition, each metal detectorist worked with a hand held GPS which tracked waypoints and transect locations, allowing quantification of transect periods and excavation times. This data is currently held within the site archive.
- 1.15 Each object that had been recorded was allocated a unique ID number. The sequence of unique ID numbers was entered onto an index of finds/database containing a description of the object.
- 1.16 A suitably qualified archaeological finds specialist was available on site throughout the metal detecting survey to provide advice and to undertake 'first aid' conservation treatment. All finds recovered were individually inspected by the finds specialist. No items constituting 'Treasure' in accordance with the 1996 Treasure Act were recovered (as items from different findspots, the recovery of the gold half noble (Ra. 433) and the silver issues (Ras. 21, 73, 117, 140, 251, 283, 299 and 318) do not constitute treasure).
- 1.17 All artefacts recovered were processed in accordance with CA Technical Manual 3: *Treatment of Finds Immediately After Excavation* (1995). The archive and artefacts

from the metal detecting survey are currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner the artefacts will be deposited with Millgate Museum, Newark along with the site archive.

2. RESULTS

- 2.1 This section presents a description, by period, of the distribution of artefacts within each area of the survey, followed by a description of the main categories of artefacts recovered (The Finds). The distributions of the finds are depicted on Figures 2 to 14 inclusive and are presented in tabular form in Appendix B. Finds from the metal detecting survey were scanned and recorded onto an Access database from which tables 1 and 2 (Appendix B) are adapted. A summary of finds presented by artefact type and composition is presented as Appendix C.
- 2.2 No constraints, other than existing watercourses, roads, and modern above- and below-ground utility services, were encountered during the course of the survey. No evidence of night-hawking was identified during the survey. The survey was undertaken in moderate, if variable weather conditions, with the associated soil conditions generally being moist. It remains undetermined whether these ground and atmospheric conditions influenced the recovery of artefacts during the survey.
- 2.3 For the purposes of this report, the recovered artefacts have been dated to the following periods: prehistoric (before AD 43), Roman (AD 43 to AD 410), medieval (AD 410 to AD 1399), late medieval/early post-medieval (AD 1400 to AD 1799), and modern (AD 1800 to AD 2009). Artefacts dating to the modern period are not considered within the following results section nor are illustrated, but are included in the databases within Appendix B.
- 2.4 It should be noted that Tim Sutherland, the Designer's Battlefield Specialist, suggested that any finds recovered during the survey that dated from the late 14th to the early 16th century may be associated with the Battle of Stoke Field. However, due to difficulties accurately dating artefacts from this time period, with the exception of coins, it was to be anticipated that battle related artefacts may be categorised as either medieval or late/medieval/early post-medieval in date.

Area 1

- 2.5 Area 1 was 10.67ha and was located between Greengate, Syerston and Lodge Lane, Elston. One Roman artefact, 42 late medieval/early post-medieval objects, and 43 modern artefacts were recovered.

Roman (Fig. 3)

- 2.6 A single Roman coin, a worn Republican issue (Ra. 283), was the only Roman find recovered from this area. Of a total of five Roman coins recovered from the survey as a whole, this was the earliest.

Late medieval/early post-medieval (Fig 4)

- 2.7 Six coins from this period were recovered, the majority of which were 18th-century halfpennies. A silver issue coin of Elizabeth I (Ra. 251) was also recovered.
- 2.8 Buttons formed the largest artefact group (22 in total) recovered within Area 1. Due to difficulties accurately dating this class of objects, the distribution plot of buttons depicted on Fig. 4 (and all other figures) must be viewed with caution as later modern material is undoubtedly included within the assemblage.
- 2.9 Three pieces of lead shot (Ra 265, 269, and 271) were recovered from the southern extent of Area 1, and although noteworthy with regards the aims of the survey, such a limited assemblage prohibits detailed interpretation. Further artefacts recovered included two harness fittings (Ra 97 and 254), a belt/strap fitting fragment (Ra. 93), and studs (Ra 84, 261, 274, and 286).

Area 2

- 2.10 Area 2 was 9.26ha and was located between Lodge Lane and Elston Lane, Elston. A total of 254 artefacts dating from the prehistoric through to the modern period were recovered (2 prehistoric, 7 Roman, 18 medieval, 123 late medieval/early post-medieval, and 104 modern).

Prehistoric (Fig. 5)

- 2.11 Two pieces of prehistoric worked flint were observed and recovered during the survey.

Roman (Fig. 6)

- 2.12 A single worn *radiate* dating to c. 260-290 AD (Ra. 422) was recovered from this area. A probable brooch fragment (Ra. 440) is also of possible Roman date. Lead pot repairs (Ras. 17, 335, 381, and possibly 473) may also date to this period, although medieval dating is also possible. One sherd of pottery was also recovered (Ra. 383).

Medieval (Fig. 7)

- 2.13 Two coins, both probably dating from the 14th century, were recovered from this area (Ras. 73 and 433). The small and fragmentary gold coin (Ra. 433) may have been folded as scrap. There were numerous other medieval-dated objects from this area, though none can be closely dated including two spindlewhorls (Ra. 19 and 78), a copper-alloy fragment of cauldron rim (Ra. 46), and items of dress including a ring brooch (Ra. 428), a buckle (Ra. 492) and a belt/strap fitting (Ra. 44). Also recovered was a sewing ring or ring-thimble (Ra. 461), probably of 14th or 15th-century date.

Late medieval/early post-medieval (Fig. 8)

- 2.14 Seven coins and tokens were retrieved including a worn Irish-minted sixpence dateable to 1606/7 (Ra 21). The remainder of the coins are likely to be 18th-century, or possibly later in date (Ra 75, 80, 322, 348, 350, and 366). Buttons again formed the largest single artefact class, with 60 individual items being recovered. However, the probable inclusion of later buttons (as previously detailed in section 2.5 above) should be noted.
- 2.15 Twenty-two pieces of lead shot were recovered, the majority from the more intensively surveyed area adjacent to Lodge Lane. Three of the recovered shot were large in size (in excess of 15mm diameter) suggestive of use with 17th to earlier 19th-centuries matchlock/muskets. The smaller shot may be broadly contemporary, possibly being derived from pistols or carbines of the period, although the possibility that it is later in date should not be overlooked.

Area 3

- 2.16 Area 3 was 6.26ha and was located Elston Lane, Elston and Moor Lane, East Stoke. A total of 40 artefacts dating from the Roman through to the modern periods were recovered (4 Roman, 1 medieval, 18 late medieval/early post-medieval, and 17 modern).

Roman (Fig. 9)

- 2.17 Two coins were recovered from this area; a worn and illegible As (Ra. 1) dated to the 1st/2nd centuries AD and a *radiate* fragment dated to c. 260-290 AD. A probable brooch fragment (Ra. 236) and a fragment of glass (Ra. 220) were also recovered.

Medieval (Fig. 10)

- 2.18 Only one medieval object, part of a plano-convex lead spindlewhorl (Ra. 11), was recovered from this area.

Late medieval/early post-medieval (Fig. 11)

- 2.19 Two tokens, a Nuremberg jetton ('reckoning counter') of 16th-century type (Ra. 3) and a copper gilt token which had been perforated for suspension (Ra. 232), were recovered within Area 3.

- 2.20 Ten buttons were recovered, along with two pieces of lead shot.

Area 4

- 2.21 Area 4 was 10.26ha and was located between Moor Lane and Millfield Lane, East Stoke. A total of 113 artefacts dating from the Roman through to the late modern period were recovered (1 Roman, 6 medieval, 37 late medieval/early post-medieval, 69 modern).

Roman (Fig. 12)

- 2.22 A single illegible *Denarius* fragment (Ra. 117) was the only Roman find recovered from this area.

Medieval (Fig. 13)

- 2.23 A silver possible farthing (Ra. 140) dating from the 14th century was recorded from this area. A biconical spindlewhorl (Ra. 110) and four horseshoes were also recovered.

Late medieval/early post-medieval (Fig. 14)

- 2.24 Two illegible half pennies, and an illegible lead token recovered with Area 4 may be representative of activity during the latter part of this period. Buttons again dominated the assemblage, with 16 being recovered. Three pieces of lead shot

(one large and two small), two buckles, and two studs were retrieved along with miscellaneous items such as a cloth seal, a knife and horseshoes.

The Finds (by Ed McSloy with identification of selected medieval and later coins by Edward Besly)

- 2.25 Finds from the metal detecting survey were scanned and recorded onto an Access database from which tables 1 and 2 in the appendix are adapted. Selected items were X-rayed to assist with identification (X-ray plates 11441–3 and 11761).

Coins

- 2.26 A total of 61 coins or tokens are listed (table 1), the majority of relatively recent dating. There are five Roman coins, the earliest of which is a worn Republican issue (Ra. 283). Unusually coins of the early Roman period (Ras. 1, 117 and 283) are more numerous in the recovered assemblage than those of the Later Roman period (later 3rd and 4th centuries AD). Fourth-century small bronzes, typically very common from excavated assemblages are entirely absent.
- 2.27 Three medieval coins were identified (Ra. 73, 140 and 433), all probably of the 14th century. The small and fragmentary gold coin (Ra. 433) may have been folded as scrap.
- 2.28 'Earlier post-medieval' coins consist of silver issues of Elizabeth I (Ra. 251) and James I (Ra. 21). The later coin is a worn Irish-minted sixpence with harp design to the reverse and dateable to 1606/7. In addition to the coins of this period there is a Nuremberg jetton ('reckoning counter') of 16th-century type (Ra. 3) and a farthing token of Thomas Burrowes type (Ra. 138), struck in Nottingham in the early 1660s for use as small change.
- 2.29 The remaining identifiable coins or tokens date after 1700 and up to the 1940s. Among items of interest are a George II Irish-issue halfpenny (Ra. 101), a copper gilt token in the form of a George II 'third guinea', which had been perforated for suspension (Ra. 232), and an example of a John Wilkinson 'industrial token' (Ra. 366) of the kind issued privately as small change in the 1790s following the suspension of official copper coins.

Other objects

- 2.30 Items of possible Roman date are restricted to two probable brooch fragments (Ra. 236 and Ra. 240). Lead pot repairs (Ra. nos. 17, 109, 381 and 335) may also date to this period, although medieval dating is also possible.
- 2.31 Medieval-dated objects are more numerous, though none can be dated closely. A bi-conical spindlewhorl with crude raised decoration cast into its surfaces is similar to a later medieval example from the Austin Friary, Leicester (Clay 1981, 139–40). Medieval dating is thought likely for further lead whorls of biconical (Ra. 110), plano-convex (Ra. 11) or flat/irregular form (Ra. 78, 249 and 394). A medieval sewing ring or ring-thimble (Ra. 461) probably of 14th or 15th century date is also recorded. Items of dress include examples of copper-alloy ring brooch (Ra. 428) buckles (Ra. 492) and belt/strap fittings (Ras. 44, 93 and 342), all which are broadly of later medieval date (13th to 14th centuries). A lead-alloy mount or badge (Ra. 103) is also medieval, its cast decoration of spokes/petals with pellets in between, known for example from disc-shaped weights from the period (Egan 1998, fig. 233 and 235).
- 2.32 Objects of post-medieval and later date form the majority of dateable finds, with few items of individual note. A hook and eye dress fitting (Ra. 171) and two brass animal ('crotal') bells (Ra. 96 and 291) are among the few items which probably date to the 16th or 17th centuries. Lead shot of varying size was recovered in some quantity, a small number exhibiting flattening or other distortion, resulting from impact. The shot has been broken down for convenience as large (in excess of 15mm diameter) and small (in the range 15-7mm). Shot described as 'large' (six items) would be appropriate for matchlock/muskets in the period spanning the 17th to earlier 19th centuries, with a likelihood these relate to the 17th-century civil wars and actions during the sieges of Newark. The smaller shot (23 items) is suitable for use with pistols or carbines and may similarly relate to this period of activity. However the possibility that this smaller shot may be from non-military firearms, including fowling pieces and shotguns, in use over a longer period possibly including modern times, should not be overlooked.
- 2.33 A total of 124 buttons of copper-alloy; some with white-metal plating are recorded: most are larger, flat buttons typical of the 18th century or later periods. Few are decorated or inscribed; 'livery' buttons marked 'in Gresham, Newark' (Ra. 345 and 356); an example with pheasant design (Ra. 63) and an example (Ra. 259) marked GCR (Grand Central Railways?) are exceptions.

3. DISCUSSION

- 3.1 A total of five Roman coins was identified, the earliest of which was a worn Republican issue (Ra. 283). Unusually, coins of the early Roman period (Ras. 1, 117 and 283) are more numerous than those of the Later Roman period (later 3rd and 4th centuries AD). In addition two probable brooch fragments and lead pot repairs may also date to this period. Given the small number of recovered finds no clear concentration or spatial patterning can be identified for this period, although it should be noted that six of the Roman objects were recovered within the more intensively surveyed area within Area 2. It is noteworthy that only one Roman artefact, an illegible *Denarius* fragment, was recovered from Area 4 within close proximity to the Roman small town of *Ad Pontem*.
- 3.2 A low level of artefactual material dating to the medieval period was recovered within the survey area, with two areas of concentration (Areas 2 and 4) close to known areas of medieval settlement at Elston and East Stoke respectively. Three medieval coins (Ras. 73, 140 and 433), all probably dating to the 14th century, were recovered. The small and fragmentary gold coin (Ra. 433) may have been folded as scrap. This material exhibited no significant distribution patterning, and is interpreted as stray losses.
- 3.3 No definitive evidence for either skirmishes or pitched battles relating to the Battle of Stoke Field was recovered from the site. A higher incidence of medieval and particularly of late medieval/early post-medieval artefacts was recovered from the southern limit of Area 2, adjacent to Elston Lane, during the initial survey. The possibility that these higher recovery levels were representative of medieval/early post-medieval activity led to the undertaking of the more intensive, 2.5m spaced transect, secondary survey. No further definitive evidence of battlefield, or indeed occupation activity, was identified during this subsequent survey although the recovery of artefacts understandably increased. Subsequent evaluation and a watching brief within this area did not identify evidence of archaeological features or deposits within the area adjacent to Elston Lane.
- 3.4 Buttons formed the largest recovered artefact class within the late medieval/early post-medieval period (108 buttons in total). However, as has been noted above within section 2.5, due to difficulties accurately dating this class of objects the

quantity and distribution of these artefacts must be viewed with caution as later modern material is undoubtedly included within the assemblage. It remains difficult to attribute the recovery of the buttons to little more than casual losses within the agricultural areas adjacent to Elston and East Stoke.

- 3.5 Lead shot of varying size was recovered in some quantity, a small number exhibiting flattening or other distortion suggestive of impact or ricochet. The shot would be appropriate for the period spanning the 17th to earlier 19th centuries and was concentrated in the central part of the metal detecting survey area (Area 2), although again the underlying distortion to the dataset created by the secondary, more intensive survey should not be overlooked. As has been noted above (section 2.29) the larger shot would be appropriate for use by matchlock/muskets in the period spanning the 17th to earlier 19th centuries, and may be indicative of a civil war skirmish associated with the sieges of Newark. The smaller shot is possibly contemporary although its usage in both military and non-military contexts remains open.
- 3.6 In conclusion, the metal detecting survey, although an appropriate methodology to identify and define later medieval battlefields, did not in this instance recover evidence for either skirmishes or pitched battles relating to the Battle of Stoke Field and it may be concluded that it is unlikely that the battle was fought within the area of current road improvement. By contrast, the recovery of lead shot within the survey area is suggestive of a previously unrecorded conflict, most likely associated with the 17th-century siege of Newark.

4. CA PROJECT TEAM

Fieldwork was undertaken by Tim Havard assisted by Rebecca Riley and Teresa Gilmore. The metal detector survey was undertaken by Clifford Beresford, Phil Dunning, Dave Raybould, Pete Smith, Barry White. The report was written by Stuart Joyce. The illustrations were prepared by Lorna Gray. The archive has been compiled by Teresa Gilmore, and prepared for deposition by James Johnson. The project was managed for CA by Cliff Bateman.

5. REFERENCES

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APPENDIX A: METHODOLOGY SUPPLIED BY THE DESIGNER'S SPECIALIST BATTLEFIELD ADVISOR

THE BATTLE OF EAST STOKE (AD1487)

The primary aim of the metal detector survey at East Stoke is to record evidence of the Battle of Stoke Field (AD1487). The most definitive evidence of a late medieval battle is currently believed to be arrowheads and the human remains of those who fought in the conflict. In order to achieve this a set of procedures should be instigated that would replicate or improve upon the results of the Towton Battlefield Archaeological Survey. The Towton Survey remains the only multidisciplinary archaeological assessment targeting a medieval battlefield (AD1461) to produce definite and widespread proof of the conflict. The survey results comprise hundreds of late medieval artefacts, and extensive human remains. The artefacts generally date from the fifteenth century although some appear earlier or later, possibly due to an earlier use of a design or because the artefacts have had a prolonged use. This would suggest that evidence of the Battle of Stoke Field might therefore initially appear to be 14th, 15th or even 16th century artefacts.

In order to produce survey results for the Battle of Stoke Field, which will be comparable with others produced both nationally and internationally, the general procedures recommended by the Battlefields Trust should be employed. These are highlighted in the document 'History from the Field: The Edgehill Battlefield Survey' (see below).

The procedures employed by the Battlefields Trust have been found to be effective on postmedieval battlefields where lead shot is expected. However, late medieval battlefields such as the example at East Stoke are expected to exhibit very few if any lead shot. For example, only one 3cm diameter lead ball (from a hand gun) has been located from the medieval period during the Towton Survey and this might be the earliest yet found in such a British context. Slight changes to the standard procedure should therefore be considered. Nonferrous metals should initially be targeted due to the large number of ferrous metal signals across most agricultural land. The survey should initially search for non-ferrous metal artefacts that were once worn by the contemporary combatants and their horses. These would have been lost by, or ripped off those taking part in the conflict. Typical of these might be strap and lace ends, belt buckles and buckle plates, badges and brooches, buttons, harness rings, belts studs, strap fittings and decoration, coins, purse frames, finger rings, etc. Non-ferrous artefacts of a more military nature might include knife and sword pommels and chapes, etc. Identifications of concentrations of such artefacts should highlight the main area of the battlefield.

Once such concentrations have been identified these can be targeted for ferrous artefacts. Ferrous artefacts which might be expected are - buckles and buckle plates off armour, small armour fittings, fragments of broken blades, whole or fragments of spurs, weapon fragments (such as knife or sword guards), horse shoes (medieval types are distinctive from modern examples), and arrowheads. The work at Towton, which has recovered over 200 medieval arrowheads, suggests that these will now probably not remain in a typical arrowhead shape but might look like amorphous rusty concretion. However, at Towton a degraded arrowhead can usually be identified by its socket aperture, often the only distinguishing part of it. The Stoke metal detector surveyors will need to see examples of these medieval arrowheads so that they will recognise them if any are found.

The arrowheads are the key to the location of not only the medieval battle but also the internal elements within it. At Towton a linear alignment of non-ferrous artefacts was also found to contain ferrous arrowheads and was interpreted as marking the initial deployment of opposing troops. This linear concentration in turn led to the location of the main area of mass graves from the conflict (not to be mistaken with the secondary area of mass graves which lay approximately one mile from the centre of the battlefield).

METHODS

Those carrying out the East Stoke Metal Detector Survey might find the following information of use:

- Only experienced metal detectorists should be used.
- Only high performance metal detectors should be used which have a discrimination mode to allow non-ferrous, ferrous or all metals to be targeted.
- Hand held GPS units (e.g. Garmin eTrex instruments) should be used in association with each metal detector. This can be fixed to the stem of the detector by cable ties keeping the instrument away from the user thereby giving a clearer and more consistent signal. It should be set to record its location every 15 seconds. This provides a time element for each survey and the separate elements within it. The site should be divided into transects along which each detectorist should work in a standard and progressing movement of arcs, approximately 1.5 metres in length. 'Way Points' can be used at the beginning and

end of each transect and at the location of each recovered artefact. The GPS should be turned off during extended stops, such as breaks for lunch etc. so that the time element is not prolonged.

- All detectors should be adequately spaced during use so as not to cause interference with each other.
- A sampling strategy of 10m transects is suggested initially due to the large area to be covered. Ideally these should not lie close to modern field boundaries, such as metal fences or electric fences due to disturbances often associated with such features.
- All potentially significant artefacts should be individually bagged and located to the greatest degree of accuracy possible with the equipment available. The hand held GPS units on each detector should provide general finds location measurements with an accuracy of a few metres depending upon the conditions at the time of use. A total station should be available when needed for the greatest possible degree of accuracy in order to locate each artefact individually.
- All hand held GPS units should use the Wide Area Augmentation System (WAAS) provided for Europe by the Euro Geostationary Navigation Overlay Service (EGNOS), which was activated in April 2004.
- Non-ferrous metals should initially be targeted due to the large number of ferrous metal artefacts found across most agricultural land.
- During the metal detector survey the opportunity should also be used to scan the surface with the naked eye for artefacts, bones, teeth, etc. (At Towton the first human remains were recorded during a metal detector survey.) All significant artefacts should be recorded.
- If large or linear concentrations of artefacts are highlighted by this first phase, then the second phase can return to the concentrations and cover the same ground again using either 5m transects or 2m transects depending upon its size and artefact density.
- If large or linear concentrations are confirmed to be of the correct period, the search for ferrous metals or all metal can then be initiated. This should aim to cover the whole area highlighted and significantly beyond until the artefact cluster diminishes.
- Due to the excessive amount of ferrous material that will probably be encountered during a 'ferrous' or 'all metal' search, ferrous metals that cannot be identified as being possibly related to the conflict or that are of an identifiably modern manufacture should be reburied in the same location. Ideally some form of marker should be used to record this location - such as spray paint if the ground is to be left uncultivated so that it is not re-excavated by mistake during subsequent surveys. This procedure significantly reduces the need to stabilise post excavation ferrous artefacts and then the cost of potentially radiographing each one.
- All non-ferrous artefacts should be recorded but not necessarily retained. This will provide a sample of all artefacts from all periods in addition to those relating to the conflict without the need for costly conservation. This will also provide an estimate of modern contamination from refuse, such as aluminium cans and ring pulls from drinks cans which once identified and recorded can be discarded. Excessive areas of contamination such as former dumps, foundations or cinder features should not be recorded in detail but be marked around their margins.
- Artefacts of significant archaeological value and those with a definite relationship to the battle that lie within close proximity to each other should also have their locations recorded using a total station as this is a more accurate form of recording than a hand held GPS. For example, the hand-held GPS will not provide an accurate record of the locations of artefacts still lying above a small or narrow feature. A hoard of objects that was once buried together but which have been scattered by the plough, need to be planned in detail in order to reveal accurate data in high resolution without any of the bias inherent in the hand held GPS.

It is worth considering that, as a general rule, the majority of the dead were probably buried near to where they died. This might have been in specially prepared features or reused features such as open pits or ditches. At Towton, the mass graves coincided with areas of arrowheads that were probably deposited during the earliest phase of the battle in the centre of the battlefield.

As the primary aim of the metal detector survey at East Stoke is to record evidence of the Battle of Stoke Field then the most significant evidence would be the arrowheads used during the battle - because they will define areas of combat - and the graves of the fallen. If either or both of these are located the results of the survey will be highly significant and of national or international importance.

FURTHER READING

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APPENDIX B: TABLE OF FINDS

Table 1: Coins

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed type
1	475475.8	348969.7	CuA	Roman	DR011	As. Worn and illegible (1st/2nd centuries AD)
3	475593.9	348962.3	CuA	Post-med	BW011	Nuremberg jetton
21	475279.9	348730	Ar	Post-med	BW024	Sixpence James I. Irish second issue. Harp on reverse + legend 'HENRICVS ROSAS REGNA IACOBVS'. MM escallop?- 1606-7
22	475276.9	348706.6	CuA	Post-med/Modern	DR044	halfpenny. Illeg
26	475359.4	348738.1	CuA	Modern	PD045	penny. Illeg
30	475264.8	348668.8	CuA	Modern	BW031	halfpenny. V. worn/Illegible
32	475252.4	348663.6	CuA	Modern	PAS047	halfpenny George V. Dated 1921
33	475224.8	348657.9	CuA	Modern	PD054	halfpenny. George V. 1910-36
53	475102.4	348285.2	CuA	Post-med/modern	KW065	halfpenny. V. worn and illeg.
66	474926.1	348543.9	CuA	Modern	KW066	farthing. Victoria 1837-1901. (illeg)
73	474986.6	348397.3	Ar	Medieval	PAS079	Penny. Edward II. London (class 10cf3a). c. 1307-8. Slightly worn
75	475018.8	348365.9	CuA	Post-med	KW082	Illegible coin, probably Victorian penny
76	474936	348381.1	CuA	Modern	DR086	Halfpenny. George VI. Dated 1940
80	474938.9	348402.8	CuA	Post-med	BW054	farthing size. Illeg
88	474927	348245.6	CuA	Post-med	PD091	George III. Gambling token: Rev: 'In Memory of the Good Old Days'. Dated 1797'
100	474949.9	348301.3	CuA	Post-med?	KW089	halfpenny? Illeg.
101	474921.1	348333.1	CuA	Post-med	KW086	halfpenny George II. Irish issue. Harp and 'Hibernia on rev.' dated 1742
102	474400.1	347717.5	CuA	Post-med/modern	JH000	Penny. Worn, illeg.
106	474769.	348501.4	CuA	Modern	KW022	halfpenny of Victoria. Dated 1862
111	475995.1	349751.4	Pb	Medieval/Post-med	KW093	Illeg
115	476049.4	349754.7	CuA	Post-med/modern	KW096	halfpenny. V. worn. Illeg
117	476056.2	349809.2	Ar	Roman	BW068	<i>Denarius</i> fragment. Illeg.
131	476160.7	349990.3	CuA	Post-med/modern	KW114	halfpenny. Illeg
138	475680.6	349493.2	CuA	Post-med	KW120	Farthing token. Thomas Burrowes, Nottingham. Undated early 1660s. (Boyne/Williamson Nott 58; Noerweb (SCBI 44) 3528)
140	475770.1	349466.5	Ar	Medieval	BW087	?farthing. Poss Edward II or III (c. 1307-77)
163	475889.9	349581.8	CuA	Post-med/modern	KW138	halfpenny. Illeg
183	475946.2	349447.3	CuA	Post-med	PAS107	illegible CuA coin. ?halfpenny
184	475953.3	349455.7	CuA	modern	KW155	penny. George VI. Dated 1940

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
185	475966.9	349424.4	CuA	Post-med	PD100	Illegible CuA coin. ?halfpenny
193	475919.9	349496.5	CuA	Post-med/modern	KW159	fragment. Illeg.
210	475963.4	349651.6	CuA	Post-med/modern	KW166	farthing? Illeg
228	475760.7	349269.7	CuA	Post-med/modern	BW133	farthing? Illeg
232	475723	349250.6	CuA	Post-med	BW135	Gilt copper. Perforated for suspension. Crown on reverse (as George III third guinea). Dated 1797
237	475681.5	349232.5	CuA	Any	PD127	Illegible CuA Coin
250	475815.5	349294.8	CuA	Roman	PAS159	<i>radiate</i> fragment (c. 260-90 AD)
251	474531	347988.6	Ar	Post-med	CB002	Half groat. Elizabeth I. Very worn (mm illeg.) Prob. 1559-77
280	474400.3	347717.6	CuA	Post-med	DR231	halfpenny. Illeg
283	474374.2	347770.3	Ar	Roman	PD170	Republican <i>denarius</i> . Obv. Male head with flowing hair (Bonus Eventus?) with sceptre behind. Rev. winged caduceous 'M PLAETORI; CEST EX SC'. Denarius - Marcus Plaetorius Cestianus. 59BC
284	474356.3	347792.9	CuA	Modern	CB022	halfpenny. Illeg
289	474352.8	347749.9	CuA	Modern	DR232	George V penny. Dated 1921
299	474836.7	348277.1	Ar	Modern	BW172	Sixpence. George VI. Dated 1940
303	474789.4	348166.6	CuA	Post-med	PD183	Illeg
307	474684.1	348107.4	CuA	Post-med/modern	CB036	halfpenny. Illeg
312	474589.3	348031.8	CuA	Post-med/modern	CB041	halfpenny. Illeg
318	475162.3	348248.5	Ar	Modern	PAS029	plain disc stamped 'R' in centre
322	475119.7	348276	CuA	Post-med	PAS038	worn and illegible. Halfpenny
339	475135.7	348398.7	CuA	Modern	PAS055	farthing. George VI. Dated 1939
347	475103.1	348386.8	CuA	Post-med/modern	PD063	farthing? Illeg
348	475101.9	348374.6	CuA	Post-med	DR058	Illegible coin or token
350	475106.4	348381.9	CuA	Post-med	DR059	Worn halfpenny. George II (1727-60)
365	475064.9	348320.3	CuA	Post-med/modern	BW028	illegible CuA coin
366	475060.8	348314.8	CuA	Post-med	PAS060	Wilkinson token. Worn. Obv. Reads 'John Wilkinson Iron Master'. Rev. shows forge/press. Dated 1790.
370	475117.2	348392.9	CuA	Modern	PAS067	worn farthing of Victoria. Date illeg. Early portrait
421	474979.9	348385.1	CuA	Modern	PAS105	penny dated 1907
422	475018	348442.6	CuA	Roman	DR081	<i>radiate</i> ; illeg (c. 260-90 AD)
433	474997	348434.5	Au	Medieval	DR085	half noble fragment. Prob. Edward III 1350s.
447	474964.9	348449.1	CuA	Post-med/modern	DR090	illegible coin
458	474912.6	348437.8	CuA	Modern	PAS137	Irish penny. Irish harp obverse, hen with chicks reverse. Dated 1937
486	474859.7	348469.9	CuA	Post-med/modern	PD170	illegible
491	474826.8	348475.8	CuA	Post-med/modern	PD198	halfpenny? Illeg

RA No	OS easting	OS northing	Material	Period	MD_waymarker	Detailed_type
494	474769.1	348501.5	CuA	Modern	PD248	George III halfpenny. Dated 1806

Table 2: objects

RA No	OS easting	OS northing	Material	Period	MD_waymarker	Detailed_type
2	475765.7	349381.323	Pb	Post-med	PAS002	15mm
4	475584	348999.802	CuA	Post-med	DR023	Domed button, complete
5	475559.5	348945.289	Pb	Any	PAS028	Spherical perforated weight
6	475540.4	348910.164	CuA	Any	KW027	strip fragment
7	475538.8	348899.425	Pb	Any	BW014	Cylindrical weight
8	475548.7	348897.102	CuA	Post-med	BW013	34mm diameter button, traces of gilding
9	475549.4	348878.027	CuA	Post-med/Modern	DR029	plain ring. 27mm
10	475515.8	348937.992	Fe	Post-med?	DR026	iron shaft
11	475624.7	349057.224	Pb	medieval?	PAS019	plano-convex fragment
12	475621.3	349049.4	CuA	Post-med	PD019	Plain, domed button, back broken
13	475465.4	348897.759	CuA	post-med/modern	KW030	farthing? Illeg.
14	475407.5	348862.211	Pb	Post-med	DR034	18mm
15	475401.4	348877.965	Pb	Post-med	PAS035	8mm
16	475411.2	348836.389	Pb	Any	KW033	strip with stamped ring & dot?
17	475418.4	348806.756	Pb	Roman/medieval	DR037	plug-type pot repair
18	475416.3	348796.272	Al	Modern	PD029	Aluminium bird leg ring
19	475385.4	348804.581	Pb	Medieval	BW020	Biconical and decorated
20	475386.2	348816.707	CuA	Modern	PD032	303 cartridge case
23	475299.7	348717.658	CuA	Any	BW026	strip fragment
24	475276.5	348695.362	Pb	Post-med	PD039	18mm
25	475308.1	348770.926	Pb	Post-med	KW040	8mm
27	475350.6	348780.28	Pb	Any	PAS040	disc. Unmarked
28	475342.5	348713.674	CuA	Post-med	BW029	Plain domed button
29	475366	348770.782	CuA	Post-med	PAS044	17mm diameter button. 4 leaf pattern decoration
31	475232	348653.259	CuA	Post-med	PD053	Plain button, back broken
34	475188.2	348630.176	Pot	Medieval	TS000	Midlands purple? jar with everted rim
35	475177.6	348617.348	CuA	Post-med/modern	KW049	belt loop
36	475208.7	348599.387	Pb	Post-med	KW050	13mm

RA No	OS easting	OS northing	Material	Period	MD_waymarker	Detailed_type
37	475114.6	348429.796	Pb	Post-med	PAS052	13mm
38	475099.8	348333.321	Pb	Post-med	KW055	8mm
39	475080.8	348333.004	CuA	Post-med	PAS055	18mm diameter plain button. Back broken
40	475045.8	348342.24	Fe	Modern	DR063	wedge or file
41	475048	348331.625	CuA	Any	BW038	Circular 3 spoked object - dial
42	475077.8	348334.473	CuA	Post-med	PAS056	Plain button, back button
43	475054	348328.522	CuA	Post-med	BW039	16mm diameter livery button
44	475086.9	348320.394	CuA	medieval	DR064	rectangular plates with inset rounded ends over rivets
45	475052.9	348306.983	Pb	Any	PAS059	rod, tapering to point
46	475148.2	348566.56	CuA	Medieval/Post-med	KW058	cast vessel fragment
47	475147.8	348577.92	CuA	Modern	DR067	small calibre, round-ended. ?.22
48	475123.2	348497.437	Pb	Post-med	PAS066	13mm
49	475151.9	348251.712	CuA	Post-med	KW066	spectacle type
50	475160.8	348244.83	CuA	Post-med	KW067	Concentrial square decoration CuA Button
51	475173.8	348235.518	Pb	Post-med	KW068	8mm
52	475227.1	348198.712	Pb	Medieval/Post-med	KW069	spherical; perforated
54	475124.7	348328.372	Pb	Post-med	PD073	8mm
55	475062.1	348454.306	Pb	Modern	KW073	round-ended; .22?
56	475057.1	348456.871	CuA	Post-med	KW074	flat button, back broken
57	475002.1	348492.055	Fe	Modern	KW075	Large ring
58	475001.6	348491.841	Pb	Any	KW076	lump
59	474945	348495.333	CuA	Modern	PD078	cartridge case. .303 rifle/mg
60	474912.6	348514.872	CuA	Modern	PD079	tractor fitting/brass bedstead
61	474970.9	348513.669	CuA	Post-med	KW077	Plain, flat button, back broken
62	475032.7	348416.316	Pb	Post-med	DR080	9mm
63	475033.8	348416.291	CuA	Post-med/modern	DR079	Livery button. Pheasant decoration
64	475066.8	348396.609	Pb	Post-med	DR078	strip
65	474929.6	348540.467	Fe	Modern	KW078	Fe rivet
67	474924.6	348542.046	CuA	Modern	KW080	cartridge case .303
68	474957.8	348461.88	CuA	Any	DR081	rod
69	474901.8	348494.364	Sn	Post-med	DR082	Pewter/tin plain button
70	474908.5	348446.954	Pb	Post-med	PD082	12mm
71	474918.3	348428.084	CuA	Post-med	KW084	13mm button. Back broken
72	474971.5	348407.032	CuA	Modern	PAS080	drawer handle

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
74	474971.5	348383.841	CuA	Post-med	BW053	two-piece sub-rectangular frame (shoe or knee)
77	474875	348490.342	Pb	medieval?	KW085	plain, flat-faced
78	474830.8	348458.358	Pb	medieval?	PAS089	Mis-casted spindlewhorl
79	474770.7	348498.2	CuA	Post-med	PAS090	decorated button. Back broken
81	475015.6	348331.546	CuA	Post-med	DR085	13mm diameter four hole button
82	474901.3	348318.374	Tin	Modern	PAS093	decorative circular mount or brooch
83	474893.6	348307.597	CuA	Modern	PAS094	drawer handle
84	474912.9	348296.702	CuA	Post-med	DR091	Plain button. Back broken
85	474898.6	348235.075	CuA	Post-med	BW056	Button back
86	474882.4	348249.872	CuA	Modern	DR092	pistol or smg
87	474922.7	348273.148	CuA	Post-med	BW055	Plain domed button, back broken
89	474929	348266.328	CuA	Post-med	KW088	hanger fragment?
90	474959	348258.981	CuA	Modern	BW059	fabric rivet
91	474941.1	348231.449	CuA	Modern	BW058	toy gun barrel. White metal plated
92	474967	348310.473	Fe	Any	PD092	smelting slag (Tap slag)
93	474976.1	348288.002	CuA	Medieval/Post-med	BW060	belt or furniture fitting. Cast ring with loop below
94	474991.9	348253.762	Pb	any	KW090	round-sectioned; tapering
95	474979	348232.417	CuA	modern	KW091	ring-headed screw fitting
96	475025.5	348289.902	CuA	Post-medieval	PD095	Crotal bell.
97	474842.5	348221.216	CuA	Post-med	PAS101	plain. 30mm
98	474838	348212.633	CuA	Any	PAS102	sheet fragment
99	474960.2	348239.985	Pb	Any	DR095	lump
103	475985.5	349746.204	Pb	Medieval	JH019	disc-shaped mount. Cast with floral/pelleted design similar to medieval weights
104	476018.5	349783.49	Pb	Any	PD022	lump
105	476027.7	349755.25	CuA	Post-med/modern	BW009	Belt fitting
107	476022.5	349757.975	CuA	Medieval/Post-med	JH020	cast vessel fragment - foot
108	476027.7	349755.232	CuA	Post-med	PD014	16mm diameter button. Back broken.
109	476058.5	349773.899	Pb	Roman/medieval	JH014	plug-type pot repair
110	475985.5	349746.204	Pb	medieval?	BW064	Biconical spindlewhorl
112	476018.5	349783.49	CuA	Modern	KW098	pocket watch part?
113	476022.5	349757.975	CuA	Any	DR106	Plain dis or button
114	476027.7	349755.232	Pb	Any	DR107	disc. Unmarked
116	476058.5	349773.899	CuA	Modern	BW065	tube

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
118	476041.4	349808.019	CuA	Post-med	KW100	Plain domed button
119	476073.2	349821.963	CuA	Post-med	DR114	Plain, flat button, back complete
120	476086	349883.741	Tin	Modern	KW103	or die-cast metal toy vehicle. Blue-painted
121	476085.2	349896.173	CuA	Post-med	BW073	Plain, flat button. Back broken
122	476123.5	349919.922	Pb	Modern	KW105	toy soldier base
123	476120.7	349921.191	tin	Modern	KW106	folded sheet
124	476118.1	349937.306	Al	Modern	BW077	lump
125	476109.5	349927.01	CuA	Modern	KW107	cartridge case fragment. .303
126	476144.4	349943.091	Pb	Any	BW079	lump
127	476122.7	349958.257	Pb	Any	KW111	bar
128	476114.9	349970.904	Pb	Any	KW110	Cylindrical fragment
129	476131.9	349963.245	CuA	Modern	KW112	cartridge case. 0.22?
130	476144.6	349991.786	CuA	Post-med	BW081	plain, flat button
132	476157.9	350002.024	Pb	Any	DR127	lump
133	476157.8	350038.343	Al	Modern	BW083	Piece of miscellaneous aluminium. Machine etching
134	476148.3	350031.831	Al	Modern	KW116	lump
135	476172.9	350021.796	CuA	Post-med	KW117	plain, flat button, back broken
136	476182.5	350026.109	Pb	Any	BW085	spill
137	476191.5	350035.935	Fe + CuA	Post-med	DR130	knife blade with cua collar/bolster
139	475712.2	349472.902	Fe	Medieval?	KW121	Iron Horseshoe
141	475715.8	349470.386	CuA	Post-med	KW122	two-piece trapezoidal shoe or knee; central bar missing
142	475745.4	349454.422	Pb	Post-med	KW123	9mm; flattened
143	475744.1	349454.384	Pb	Any	KW124	lump
144	475777	349471.411	Fe	Modern	BW093	Iron rivet
145	475771.8	349485.932	Pb	Medieval/Post-med	DR135	distorted; incomplete
146	475776.6	349484.062	Fe	Medieval?	DR000	Iron Horseshoe
147	475776.6	349484.06	Fe	Post-med-modern	DR000	horseshoe
148	475776.6	349484.061	CuA	Modern	BW091	rolled strip with rivet hole
149	475793.6	349487.467	CuA	Post-med	KW126	Plain ring. 30mm
150	475810.2	349488.885	CuA	Post-med	DR136	Post-med domed button, back broken
151	475749.9	349498.623	CuA	Modern	KW130	round ended small calibre .22?
152	475838.7	349506.981	Fe	Medieval?	KW129	Iron Horseshoe
153	475805.8	349528.622	Pb	modern	BW094	small calibre; flattened
154	475807.8	349539.524	Pb	Any	DR141	spill
155	475807.8	349551.385	CuA	Post-med/modern	KW132	sheet rolled to cone with rivet holes

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
156	475789.1	349572.143	CuA	Modern	BW100	shield-shaped
157	475778	349586.363	CuA	Modern	DR144	Machine decoration late button
158	475781.8	349597.082	CuA	Modern	KW194	door hinge
159	475791.9	349605.323	CuA	Post-med	DR145	Plain flat button, tinned
160	475805.2	349584.883	CuA	Post-med/modern	DR146	D-Ring
161	475810.5	349582.306	CuA	Modern	KW135	spoon handle fragment
162	475849.6	349570.966	CuA	Post-med	KW136	palin ring. 25mm
164	475853.5	349567.848	CuA	Modern	KW139	pocket watch internal plate
165	475880.3	349586.539	Pb	Any	DR149	cylindrical weight
166	475864	349608.535	Pb	Any	DR150	strip
167	475833.4	349627.564	CuA	Post-med	BW105	plain flat button, back broken
168	475816.8	349648.116	Pb	Any	DR151	sheet fragment
169	475826.1	349630.815	Fe	Modern	KW128	Iron rivet
170	475759.5	349551.653	Fe	Medieval?	KW142	Iron Horseshoe
171	475868.1	349640.187	CuA	Post-med	DR154	hook & eye
172	475908.5	349640.134	CuA	Post-med	KW145	folded
173	475917.8	349656.317	CuA	Post-med	DR157	Plain flat button, corroded. Tinned
174	475905.5	349687.033	Pb	Any	KW144	Conical
175	475863.7	349686.566	CuA	Post-med/modern	KW147	Plain flat, small. Loop broken
176	475843.6	349410.818	CuA	Post-med	BW117	Plain flat, button, back broken
177	475841.6	349447.659	Pb	Post-med	DR162	15mm
178	475850.5	349454.126	CuA	Post-med	BW115	plain, flat button
179	475861.2	349437.762	CuA	Post-med	KW151	domed object; scalloped edge?
180	475903.5	349401.246	Fe	Post-med	KW150	horseshoe
181	475924.7	349388.578	Pb	Post-med	KW149	cylinder
182	475937.3	349383.317	CuA	Modern	DR165	Live 303 cartridge
186	475901	349436.435	CuA	Post-med	PAS106	2 holed button
187	475886.7	349480.07	CuA	Post-med	PAS105	Plain slightly domed button, back broken
188	475885.4	349481.092	Pb	Post-med	KW153	13mm; flattened
189	475875.7	349495.925	CuA	Modern	BW120	sawn at either end
190	475863.9	349515.16	CuA	Post-med/modern	KW161	rectangular frame. Central bar
191	475880.1	349517.813	CuA	Any	KW160	disc or large coin. Illeg
192	475890	349512.56	Pb	Post-med	PD104	lump
194	475897.1	349516.754	CuA	Post-med	KW158	rectangular buckle frame fragment
195	475941	349484.992	Pb	Modern	KW154	handle/fitting

RA No	OS easting	OS northing	Material	Period	MD_waymarker	Detailed_type
196	475903.8	349481.084	Fe	Modern	PD103	Riveted strip
197	475954.5	349487.415	CuA	Modern	KW157	rectangular plate
198	476001.8	349451.963	Ar	Modern	DR168	swastika brooch with foliate decoration. 'sterling' on reverse. Clasp missing
199	476010.4	349467.763	CuA	Post-med/modern	DR169	Small, rectangular from thin sheet with repousse dec.
200	475948.3	349503.475	CuA	Post-med/modern	DR170	small disk. Loop broken
201	475920.8	349518.826	CuA	Post-med	PAS110	Plain, domed button
202	475921.3	349529.219	CuA	Post-med	PAS115	plain flat button, back broken
203	475932.7	349545.885	CuA	Post-med	BW122	Plain, 4-holed button.
204	475956.5	349521.182	CuA	Post-med/modern	PD108	folded rectangular with 2 x rivets
205	475999.8	349518.923	Pb	Any	PAS118	faceted lump
206	476032	349547.308	CuA	Modern	BW123	washer
207	476003.7	349551.127	CuA	Modern	PD107	Sheet fragment - identification/serial plate
208	475970.8	349534.602	CuA	Post-med	DR175	dome-headed stud
209	476024.4	349598.861	CuA	Modern	PD111	rivet
211	475980.7	349599.26	Pb	Medieval/Post-med	PAS124	cloth seal fragment. No legend visible
212	475996.5	349671.188	CuA	Modern	PAS120	buckle or hinge fragment
213	475993.7	349672.366	CuA	Post-med	KW168	dome-headed stud
214	475986.4	349688.276	CuA	Post-med/modern	KW095	Plain, tinned button. Back broken
215	476006.9	349779.209	CuA	Modern	BW000	stamped design. Illeg
216	475980.1	349712.334	Pb	Post-med	KW172	spill
217	475972.9	349695.503	CuA	Modern	KW163	fitting/handle
218	475913.5	349578.432	Pb	Post-med	PAS114	13mm
219	475902.3	349561.335	CuA	Post-med	PAS111	Rectangular frame
220	475882.5	349551.387	Glass	Roman?	TS000	nat green rolled over rim
221	475767.5	349354.494	CuA	Modern	PAS130	Modern large CuA rivet
222	475780.9	349342.101	CuA	Post-med	PAS129	Post-medieval plain button, loop on back
223	475788.1	349337.936	CuA	Post-med	PD120	incomplete. From tamped sheet
224	475789.3	349324.922	CuA	Post-med	PD121	Front button plate
225	475778.3	349330.501	CuA	Modern	PD122	oval links (plug chain?)
226	475768.7	349334.657	CuA	Post-med	KW176	plain flat button, back broken
227	475768.8	349313.508	CuA	Post-med	DR188	Tinned plain flat button
229	475751.8	349299.227	CuA	Post-med	KW178	Plain flat button
230	475726.5	349286.321	CuA	Post-med	PAS135	Flat button, legend 'Lacey Newark'
231	475728.5	349272.314	CuA	Post-med	DR191	Plain flat button, back broken. Tinned
233	475740.3	349248.376	CuA	Modern	KW181	Rivet

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
234	475705.6	349251.67	Pb	Any	KW180	sheet fragment
235	475698.9	349256.998	CuA	Modern	KW179	spoon handle fragment
236	475697.5	349257.811	CuA	Roman?	PD128	Coiled thin rod.
238	475678.3	349234.425	Pb	Post-med	PAS142	14mm
239	475683.4	349218.673	CuA	Post-med	PAS141	Small plain flat button, back broken
240	475700.9	349206.431	Pb	Any	PAS140	disc
241	475706.8	349200.784	Pb	Any	KW183	large conical weight
242	475687.6	349189.742	CuA	Modern	BW139	flat drawer mount?
243	475662.1	349171.159	CuA	Post-med	BW138	rectangular frame with central bar. Small
244	475661.1	349171.989	Pew	Modern	KW186	Handle
245	475649.9	349169.369	CuA	Modern	KW185	furniture fitting (teardrop-shaped)
246	475646.8	349169.871	CuA	Post-med	DR197	strip/spoon handle
247	475639.6	349162.486	CuA	Modern	PAS147	watch winder
248	475627.5	349148.376	CuA	Modern	PAS148	furniture fitting (teardrop-shaped)
249	475624.8	349151.782	Pb	Any	BW141	Distorted
252	475621.5	349126.443	CuA	Modern	CB003	percussion cap
253	474539.1	347984.058	CuA	Any	PAS164	disc or coin. V. corroded
254	474601.9	347985.338	CuA	Post-med	BW155	from bar
255	474565.6	347945.334	CuA	Modern	PD161	switch mount?
256	474532.9	347948.036	Pb	Any	PD160	sheet fragment
257	474522.1	347953.688	CuA	Post-med	DR218	tinned plain flat button
258	474511.3	347939.827	Pb	Post-med	PAS167	mount/stud
259	474507.2	347930.543	CuA	Modern	BW157	Legend GCR.
260	474471.5	347935.485	CuA	Modern	CB007	cartridge case. .303
261	474464.2	347929.833	CuA	Post-med	CB006	dome-headed stud
262	474462.4	347930.061	CuA	Post-med	PAS168	Semi-circular piece
263	474500.7	347934.73	CuA	Post-med/modern	BW158	2 part button with fabric surviving
264	474528.7	347911.884	CuA	Modern	CB010	percussion cap
265	474422.1	347886.307	Pb	Post-med	PAS171	irregular
266	474419.6	347899.2	CuA	Post-med/modern	CB011	2 piece button, rectangular hole
267	474454.9	347869.212	CuA	Post-med	CB012	Plain flat button, raised shank
268	474463.7	347862.993	CuA	Post-med	PAS174	Legend: ?NODDALL NEWARK
269	474465.4	347827.466	Pb	Post-med	CB014	17mm
270	474480.8	347795.277	CuA	Post-med	CB015	Die cast 4 hole button
271	474472.8	347799.993	Pb	Post-med	PAS175	lump

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
272	474463	347828.835	CuA	Post-med	PAS176	Plain, flat button, raised shank
273	474456.8	347832.289	CuA	Post-med	CB016	Plain flat button
274	474439.6	347819.853	CuA	Post-med	CB017	Small CuA stud
275	474411.1	347837.587	CuA	Modern	PAS177	square washer
276	474441.1	347840.55	CuA	Modern	BW162	Die cast 4 hole button. Legend: Our Superior Make
277	474409.6	347871.318	CuA	Post-med	PAS180	medium sized plain flat button
278	474410.6	347766.587	CuA	Post-med	DR228	4 hole flat button
279	474443.2	347771.525	CuA	Post-med	CB019	tinned, large plain flat button
281	474468.4	347778.261	CuA	Post-med	PAS183	Plain flat tinned button
282	474361	347753.369	CuA	Modern	CB021	round head with threaded shaft
285	474385.2	347774.607	Pb	Any	DR227	strip
286	474341.2	347834.702	CuA	Post-med	CB023	dome-headed
287	474338.6	347804.618	CuA	Modern	BW165	.303 rifle/mg
288	474311.1	347797.552	Tin	Modern	DR233	St Philomena pendant
290	474351.1	347751.463	CuA	Modern	PAS190	tinned button, attached thread
291	474897.2	348343.456	CuA	Post-med	BW169	Crotal bell
292	474901.2	348340.097	CuA	Post-med	BW171	Tinned, plain flat button
293	474906.7	348349.862	CuA	Post-med	DR238	Plain flat button
294	474882.4	348315.918	CuA	Post-med	PAS193	Post-medieval flat button
295	474875.7	348297.674	CuA	Modern	PAS194	furniture fitting - hook
296	474864.8	348305.69	CuA	Post-med	PAs195	Large plain flat button
297	474860.2	348283.21	Fe	Modern	CB028	key?
298	474856.7	348286.907	CuA	Post-med	CB027	Small plain flat button
300	474809.3	348247.444	CuA	Post-med	BW174	tinned plain flat button
301	474813.3	348186.676	CuA	Modern	PAS200	Small rectangular with central bar
302	474783.6	348182.267	CuA	Post-med	CB031	tinned, plain flat button
304	474770	348157.007	CuA	Any	PAS203	plano-convex; perforated through centre
305	474735	348133.712	CuA	Modern	CB034	rivet?
306	474724.7	348117.618	CuA	Modern	DR250	tinned button with circular rope design
308	474706.2	348093.688	CuA	Modern	CB037	furniture fitting. Plate from drawer handle?
309	474665.2	348063.323	Pb	Modern	DR253	lump
310	474612.4	348077.5	CuA	Post-med	CB039	Plain flat button
311	474600.7	348046.137	CuA	Post-med	PAS212	tinned, large plain flat button
313	474595.2	348028.333	CuA	Post-med	CB042	tinned button, small
314	474619.8	348010.38	CuA	Modern	CB043	.303 cartridge case

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
315	474638.1	348470.876	CuA	Modern	CB045	cartridge case. Pistol or smg
316	474608.9	348434.089	CuA	Modern	CB046	12 bore shotgun cartridge end. ELEY KYNOCH
317	475212.1	348208.673	Pb	Any	PAS018	sheet fragment
319	475161.6	348246.124	Pb	Modern	PAS030	bullet; distorted
320	475159	348244.737	Pb	Modern	DR027	5mm. Rounded end (0.22?)
321	475135.9	348254.61	CuA	Post-med	PAS033	rectangular buckle frame fragment
323	475102.8	348292.159	Pb	Post-med	PAS043	8mm
324	475096.5	348286.772	Pb	Any	BW018	lump
325	475117.8	348309.914	CuA	Post-med+	PD050	hinge fragment from triangular folded sheet
326	475118.7	348309.954	Pot	Post-med	-----	bodysherd of pmge, int brown glaze
327	475127	348329.522	Pb	Any	PAS044	sheet fragment
328	475094.5	348294.216	Pb	Post-med	PAS047	9mm
329	475106.5	348303.098	CuA	Post-med	BW019	tinned button, inner circle decoration
330	475103.8	348302.177	CuA	Post-med	DR043	half a plain flat button. Broken
331	475103	348311.129	Pb	Modern	PD053	0.22
332	475132	348348.115	Fe	Modern	DR042	Large flat fe washer
333	475045.1	348324.826	Pot	Post-med	-----	bodysherd of post med glazed pottery (?mid purp)
334	475045.5	348324.607	Fe	Modern	-----	hook.
335	475074.3	348303.317	Pb	Roman/medieval	BW022	plug-type pot repair
336	475077.5	348306.836	Pb	Any	BW023	sheet fragment
337	475091.9	348322.353	CuA	Post-med	DR047	largish plain flat button, back broken. Corroded
338	475120.7	348364.308	Pb	Post-med	DR048	9mm
340	475136.8	348398.861	Pot	Medieval	-----	sherd of green glazed jug fabric
341	475144.4	348411.094	CuA	Post-med	PAS054	plain ring
342	475118.4	348374.665	CuA	Medieval	PA056	belt mount; lobed
343	475117.3	348378.91	CuA	Post-med	DR051	Medium domed plain tinned button. Back broken
344	475128.9	348401.992	Pb	Post-med	PD060	9mm. Slightly flattened
345	475139.4	348420.402	CuA	Post-med	BW025	'In Gresham Newark' livery button
346	475118.6	348390.71	Pb	Any	BW028	strip
349	475093.4	348371.845	CuA	Post-med	PD064	Small corroded plain flat button. Back broken
351	475100	348386.803	Pb	Post-med	BW034	10mm
352	475105.6	348377.135	Fe	Any	PAS066	'S' -shaped hook fragment
353	475095	348363.05	Fe	Post-med	PAS065	Horseshoe fragment?
354	475095.3	348358.6	Pb	Any	BW027	lump
355	475101.4	348358.923	Pb	Modern	DR052	distorted 9mm pistol/smg

RA No	OS easting	OS northing	Material	Period	MD_waymarker	Detailed_type
356	475091.1	348357.969	CuA	Modern	PAS064	'In Gresham Newark' livery button fox design
357	475084.4	348355.922	Pb	Any	BW031	rolled sheet fragment
358	475086.1	348353.944	Pb	Any	DR057	strip fragment
359	475084.3	348348.049	Fe	Modern	PAS063	large short broad nail
360	475073.7	348337.398	Pb	Any	DR056	spill
361	475072.5	348335.824	Pb	Any	DR055	lump
362	475074.4	348333.783	Fe	Modern	PAS062	Iron bar - corroded
363	475086	348328.284	CuA	Post-med	PAS057	tinned plain flat button. Back broken
365	474875.7	348297.674	Fe	Any	PAS061	?flattened nail head.
367	475090.6	348282.565	Fe	Modern	DR044	Corroded strip of Iron
368	475231.8	348196.744	Fe	medieval?	DR010	Large flat horseshoe
369	475119.7	348397.525	Fe	Modern	PAS068	Large squareish fe ring.
371	475121.1	348402.776	CuA	Modern	DR060	or offcut of copper pipe
372	475127.8	348408.068	CuA	Post-med	PAS069	Small flat tinned button with circular decoration.
373	475137.8	348421.585	Pot	Post-med	PAS070	Midlands purple rim sherd
374	475132.1	348432.302	Pb	Any	BW033	Folded pb disc
375	475114.1	348409.554	CuA	Post-med	PD069	Small plain flat tinned button. Back broken
376	475108.2	348401.931	CuA	Post-med	PD068	Button front. Circular decoration
377	475089.5	348375.618	CuA	Modern	PD067	Small four-holed button
378	475075.5	348361.518	CuA	Post-med	BW036	plain rectangular frame
379	475077.7	348346.064	CuA	Post-med	BW030	button front. Tinned, domed plain
380	475093.1	348402.652	CuA	Post-med	BW040	complete large tinned plain flat button
381	475105.9	348420.288	Pb	Roman/medieval	BW039	plug-type pot repair
382	475023.1	348338.224	Fe	Modern	PAS075	miscellaneous lump of iron
383	475025.2	348340.734	Pot	Roman	PAS076	oxidised fabric rim
384	475039.3	348364.334	CuA	Post-med	DR065	plain button frontpiece
385	475086.8	348427.765	Fe	Any	DR---	?crucible
386	475098.6	348449.806	CuA	Modern	PD079	rivet piece
387	475044.6	348378.166	Pb	Post-med	PAS079	14mm. Split
388	475049.7	348390.703	CuA	Post-med	PD078	large tinned plain flat button. Back broken
389	475057.4	348392.434	Pb	Any	BW045	strip fragment
390	475018.2	348341.397	Pb	Any	PAS080	lump
391	475081.1	348432.922	Pb	Post-med	BW044	15mm
392	475017.5	348355.953	Flint	Prehistoric	RR---	flint flake
393	475016.3	348352.503	CuA	Post-med	PAS083	large plain flat button, back broken

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
394	475010.9	348342.711	Pb	Any	DR067	spindlewhorl or weight
395	475028.5	348369.135	Pb	Any	PAS085	sheet fragment
396	475012.5	348356.164	Pb	Any	BW047	lump
397	475011.8	348363.393	CuA	Post-med	PD084	shoe? buckle frame fragment
398	475024	348375.401	Pb	Modern	DR070	figurine. (horse hind quarters)
399	475025.6	348382.748	CuA	Post-med	PD085	Small flat plain button, back loop broken
400	475029.1	348379.643	Pb	Modern	BW048	lead soldier torso
401	475083.9	348447.218	CuA	Any	PAS086	lump
402	475090.5	348456.453	CuA	Post-med	PAS087	badly corroded medium sized plain flat button.
403	475020.6	348381.996	Pb	modern	PAS090	lead soldier/figurine fragment
404	474996.8	348357.28	Pb	Any	PAS093	spill
405	475030.9	348404.228	Pb	Modern	PAS094	arm from lead soldier
406	475030	348411.44	CuA	Post-med	BW050	small button back plate. Broken
407	475069.4	348459.437	Fe	Any	PAS110	nail head
408	475066.6	348471.5	CuA	Post-med	PD092	large tinned plain flat button. Back broken
409	475061.4	348472.323	Pb	Any	DR074	miscellaneous piece of lead
410	475013.7	348401.754	CuA	Post-med	PAS098	largeish plain flat button. Back loop present
411	475013.2	348399.438	CuA	Post-Med	PD099	domed button without back plate
412	474990.4	348376.493	Pb	Any	BW052	disc fragment
413	475030	348438.6	CuA	Post-med	PD095	complete. Plain flat button
414	475033.5	348445.702	CuA	Post-med	PAS102	small flat button, back broken
415	475050.4	348456.367	CuA	Modern	DR077	buckle plate fragment?
416	475053.7	348461.663	Pb	Any	DR076	lump
417	475053.7	348461.842	CuA	Modern	DR075	modern four hole domed button
418	475024.9	348437.212	CuA	Post-med	BW054	rectangular buckle frame fragment
419	475012.6	348426.491	Pb	medieval?	PD098	Perforated and with incised cross on base
420	474992.4	348374.653	CuA	Modern	DR078	small dome-shaped cap
423	475037.5	348455.579	Pb	Any	BW055	sheet fragment
424	475043.8	348464.753	CuA	any	PAS121	Small CuA Rivet
425	475043.8	348475.479	CuA	Post-med	DR082	small strap buckle plate
426	475039	348483.786	Pb	Any	BW058	lump
427	475018.9	348445.578	CuA	Post-med	PD101	modern four hole CuA button
428	475009.5	348448.025	CuA	Medieval	PAS095	Ring brooch, pin missing.
429	474977.8	348398.403	CuA	Post-med	BW059	domed. Shaft missing
430	474959.8	348371.625	CuA	Post-med	BW060	large button back plate, back loop broken

RA No	OS easting	OS northing	Material	Period	MD_waymarker	Detailed_type
431	475003.1	348438.716	CuA	Any	PAS111	sheet fragment
432	475030.1	348484.473	PB	Any	PD104	lump
434	474951.3	348382.831	Pb	Any	PAS114	strip
435	474969.6	348408.859	CuA	Post-med	PAS115	Large rectangular buckle loop
436	475001.9	348429.246	CuA	Post-med	PAS084	tinned medium sized plain flat button, loop broken
437	475000.2	348437.368	Pb	Any	PAS---	disc fragment
438	474991	348424.374	Pb	Any	PAS---	plain disc
439	474960	348413.489	CuA	Post-med	PAS120	Small flat plain button, back loop broken
440	474977	348424.531	CuA	Roman?	PD107	brooch fragment. Small fragment bow and catchplate
441	474989.6	348454.522	CuA	Post-med	BW056	small plain flat button, back broken
442	474995	348448.628	CuA	Any	PD108	distorted ring/strip
443	474986.1	348481.118	Flint	Prehistoric	DR---	broken blade fragment
444	474990.7	348473.838	CuA	Modern	PD111	rolled rubber solution tube
445	474984.5	348464.303	Fe	any	PD112	Miscellaneous piece of iron
446	475009.7	348483.774	Pb	Any	PAS122	spill
448	474958.1	348431.949	CuA	Any	BW065	flat square fragment
449	474931.8	348416.164	CuA	Post-med	PD116	plain flat button
450	474926.7	348412.407	CuA	Post-med	BW068	small plain flat button, back loop broken
451	474967.1	348466.848	CuA	Post-med/modern	PD117	thin pin/wire shaft
452	474974.1	348501.353	Pb	Any	PAS133	triangular shaped
453	474961.2	348483.802	Pb	Any	PAS134	rolled strip
454	474950.9	348481.709	CuA	Post-med	DR095	tinned small plain flat button, back loop broken
455	474967.3	348500.052	Pb	Any	PD123	lump or plug-type pot repair
456	474934.6	348452.987	Pb	Any	PD122	lump
457	474921.4	348445.79	CuA	Post-med	BW072	small plain flat button, back broken
459	474912.1	348432.05	Pb	Any	BW073	lump
460	474915.9	348430.98	Pb	Medieval/Post-med	DR096	pb cloth seal, folded over
461	474940.6	348481.204	CuA	Medieval	PD157	ring thimble
462	474948	348485.085	CuA	Medieval/Post-medl	PAS138	fragment of vessel rim
463	474961.7	348504.737	CuA	Post-med	PAS139	half of large corroded button.
464	474962.6	348507.949	CuA	Modern	PAS140	Plain ring. 28mm
465	474960.4	348508.87	CuA	Modern	PD126	thin buckle plate, folded
466	474957	348508.121	CuA	Modern	DR099	circular weight. '2' (ounces)
467	474933	348478.171	CuA	Post-med	BW076	large plain flat button, back loop broken.

RA No	OS easting	OS northing	Material	Period	MD_ waymarker	Detailed_type
468	474928.3	348484.125	CuA	Post-med	PAS145	small plain flat button, back loop present
469	474926.6	348489.431	CuA	Post-med	BW081	tinned plain flat button. Back loop not present
470	474922.4	348483.773	Pb	Modern	BW080	
471	474915.3	348488.273	CuA	Post-med	PD132	plain flat button, back loop folded. Gilded
472	474910.9	348479.571	CuA	Post-med	PD133	large plain flat button, corroded. Back broken
473	474900.5	348462.668	Pb	Roman/medieval	PAS148	pot repair? Or distorted shot
474	474893.3	348464.28	CuA	Post-med	PD138	Button back plate. Loop broken
475	474953.2	348516.293	CuA	Post-med	BW078	medium sized plain flat button, with back loop
476	474884.1	348450.388	Pb	Any	PD139	lump
477	474916.1	348501.763	CuA	Post-med/Modern	PD142	plain ring 30mm
478	474873	348462.038	Pb	Post-med	PD151	9mm
479	474898.4	348502.32	CuA	Post-med	PD154	gilded button. Back loop broken
480	474884.1	348481.486	Pb	Post-med	PD155	9mm
481	474879.7	348476.74	CuA	Post-med	PD156	Small plain flat button, with back loop
482	474865.7	348457.605	CuA	Modern	PD157	.303 rifle/mg
483	474901.9	348512.444	Pb	Any	PD160	lump/spill
484	474900	348511.779	Pot	Medieval	TS---	medieval jug strap handle
485	474861.6	348459.686	Pew	Post-med/Modern	PD163	Dessert spoon. Handle broken
487	474843.2	348453.977	CuA	Post-med	PD174	medium sized button with back loop
488	474844.7	348460.353	CuA	Post-med	PD177	Small plain flat button. Back broken
489	474837.1	348468.654	CuA	Post-med	PD186	medium sized button with back loop
490	474827.2	348462.658	Pb	Post-med	PD191	10mm
492	474813.5	348467.913	CuA	Medieval	PD205	single looped buckle with buckle plate
493	474802.7	348479.479	CuA	Post-medieval	PD218	Domed button, back loop folded over

APPENDIX C: SUMMARY OF FINDS BY ARTEFACT TYPE AND MATERIAL

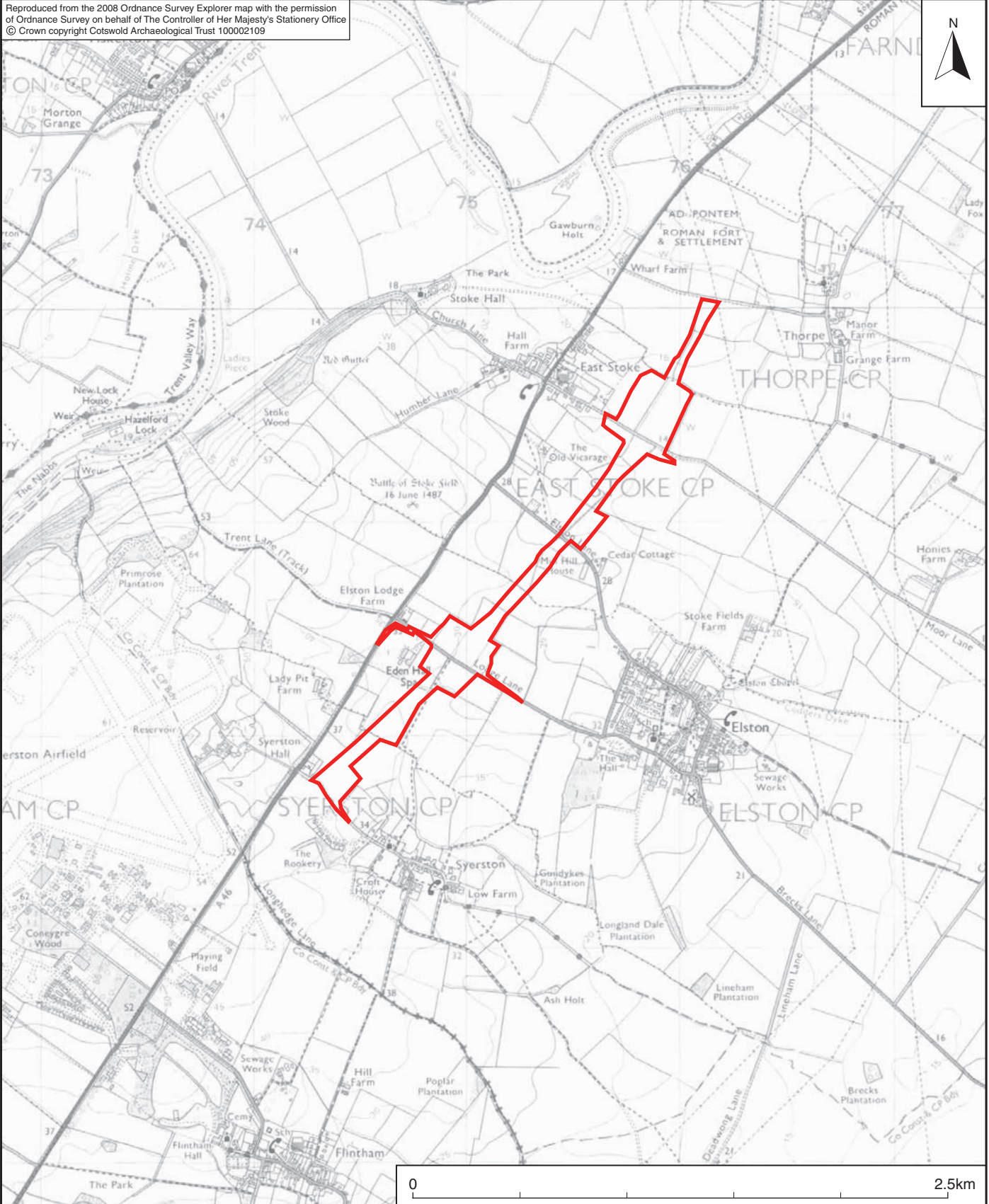
Item	No.	Other
?brooch pin	1	CuA
?Spindlewhorl	1	Pb
bar	1	CuA
Bell	2	CuA
Belt fitting	3	CuA
Bird ring	1	Al
Body	1	Pot
Brooch	1	Ar
Brooch	2	CuA
Buckle	19	CuA
Bullet	5	CuA
bullet	5	Pb
Button	124	CuA
Button	1	Sn
Cartridge	13	CuA
Cartridge	1	Pb
Chain	1	CuA
Cloth seal	1	Pb
Cloth seal?	1	Pb
Coin	8	Ar
Coin	1	Au
Coin	45	CuA
Coin/token	1	CuA
Disc	1	CuA
Disc	3	Pb
Dress hook	1	CuA
fitting	1	CuA
Flake	2	Flint
Flint tool	1	Flint
furniture fitting	3	CuA
hinge	2	CuA
Hook	1	Fe
Horseshoe	7	Fe
Jetton	1	CuA
Knife	1	Fe + CuA
Mount	2	CuA
Mount	1	Pb
Nail	2	Fe
Object	3	Al
Object	39	CuA
Object	10	Fe
Object	62	Pb
Object	2	Tin
Pendant	1	Tin
Pin	1	CuA
Pot	2	Pot
Pot mend	3	Pb
Pot repair	1	Pb
potsherd	2	Pot
Rim	2	Pot
Rim fragment	1	Glass
Ring	9	CuA
Ring	1	Fe
Rivet	6	CuA
Rivet	1	CuA & Fe
Rivet	3	Fe
Rivet	1	Pb
Screw	1	CuA
Shot	30	Pb


Slag	1	Fe
spill	1	Pb
Spindlewhorl	6	Pb
Spoon	2	Pew
Strip	1	CuA
Strip	2	Fe
Strip	1	Pb
Stud	6	CuA
Thimble	2	CuA
token	5	CuA
toy	1	CuA
Toy	5	Pb
Toy	1	Tin
Vessel	3	CuA
Washer	1	Fe
watch	1	CuA
Weight	1	CuA
Weight	7	Pb
?brooch pin	1	CuA
?Spindlewhorl	1	Pb
bar	1	CuA
Bell	2	CuA
Belt fitting	3	CuA
Bird ring	1	Al
Body	1	Pot
Brooch	1	Ar
Brooch	2	CuA
Buckle	19	CuA
Bullet	5	CuA
bullet	5	Pb
Button	124	CuA
Button	1	Sn
Cartridge	13	CuA
Cartridge	1	Pb
Chain	1	CuA
Cloth seal	1	Pb
Cloth seal?	1	Pb
Coin	8	Ar
Coin	1	Au
Coin	45	CuA
Coin/token	1	CuA
Disc	1	CuA
Disc	3	Pb
Dress hook	1	CuA
fitting	1	CuA
Flake	2	Flint
Flint tool	1	Flint
furniture fitting	3	CuA
hinge	2	CuA
Hook	1	Fe
Horseshoe	7	Fe
Jetton	1	CuA
Knife	1	Fe + CuA
Mount	2	CuA
Mount	1	Pb
Nail	2	Fe
Object	3	Al
Object	39	CuA
Object	10	Fe
Object	62	Pb
Object	2	Tin
Pendant	1	Tin
Pin	1	CuA
Pot	2	Pot

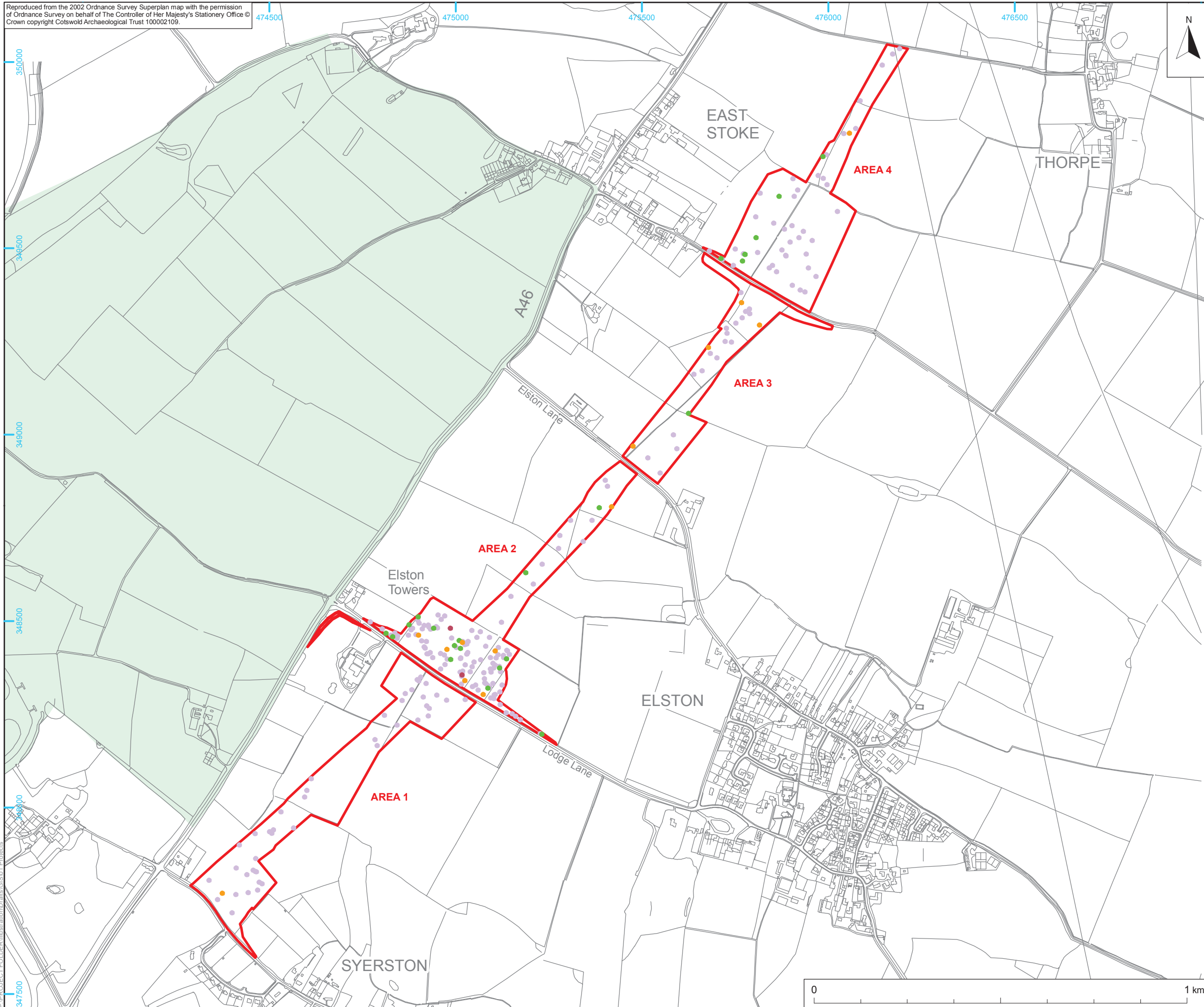
Pot mend	3	Pb
Pot repair	1	Pb
potsherd	2	Pot
Rim	2	Pot
Rim fragment	1	Glass
Ring	9	CuA
Ring	1	Fe
Rivet	6	CuA
Rivet	1	CuA & Fe
Rivet	3	Fe
Rivet	1	Pb
Screw	1	CuA
Shot	30	Pb
Slag	1	Fe
spill	1	Pb
Spindlewhorl	6	Pb
Spoon	2	Pew
Strip	1	CuA
Strip	2	Fe
Strip	1	Pb
Stud	6	CuA
Thimble	2	CuA
token	5	CuA
toy	1	CuA
Toy	5	Pb
Toy	1	Tin
Vessel	3	CuA
Washer	1	Fe
watch	1	CuA
Weight	1	CuA
Weight	7	Pb

APPENDIX D: ARCHIVE QUANTIFICATION

Item	No.	Other	Comment
Metal detecting recording sheets	12		A4 format
Photograph registers	2	-	A4 format
Black and white photographs	22		35mm print format
Colour photographs	22		JPG format
Database of retrieved artefacts	1		Microsoft Access 2003
Database of discarded artefacts	1		Microsoft Access 2003
Written Scheme of Investigation	1		A4 format and PDF format
Digital files	8		SHP format



 COTSWOLD ARCHAEOLOGY			
PROJECT TITLE A46 Newark to Widmerpool Improvement Metal Detecting Survey Report No. 10133			
FIGURE TITLE Site location plan			
DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
JB	1:25,000@A4	2828	1



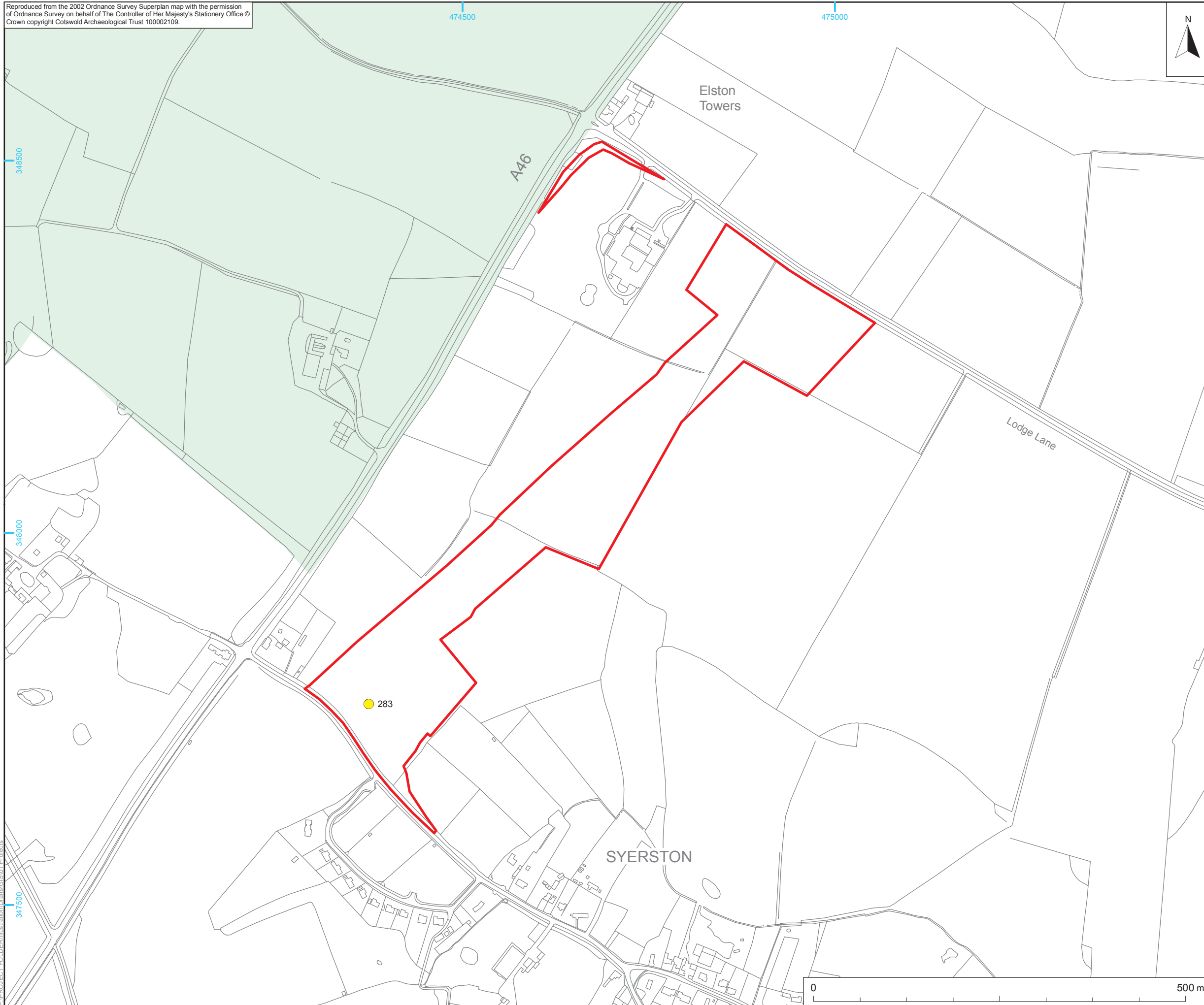
metal detecting area

Metal detecting results for all periods

Type

- prehistoric
- Roman
- medieval
- late medieval/early post-medieval

Registered battlefield (Battle of Stoke Field 1487)




 metal detecting area

Metal detecting results for the Roman period

Type

 coin

 Registered battlefield (Battle of Stoke Field 1487)

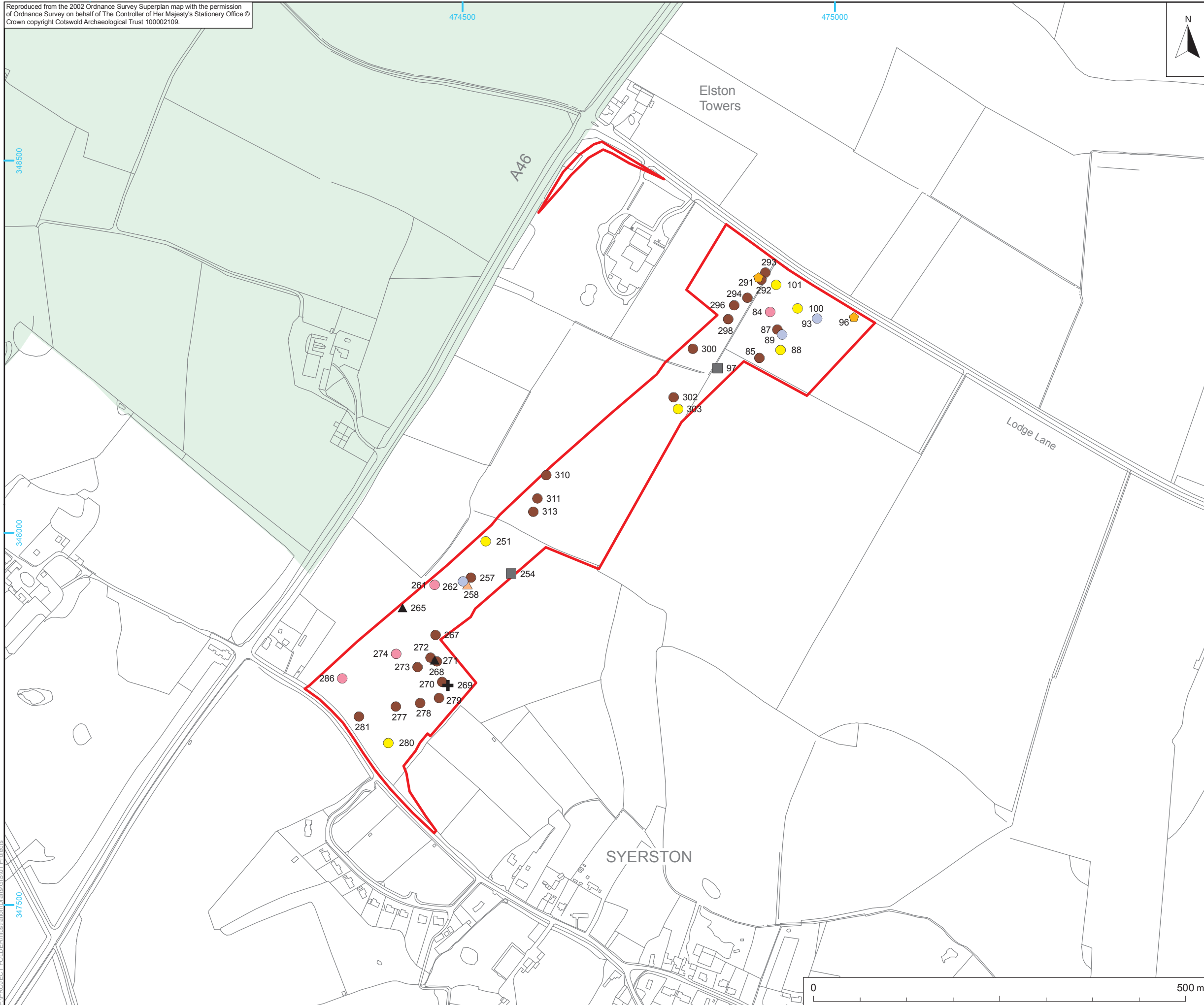


PROJECT TITLE
A46 Newark to Widmerpool Improvement
Metal Detecting Survey Report No. 10133

FIGURE TITLE
**Area 1: Roman finds from metal
detecting survey**

DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
LG	1:5000 @A3	2828	3





metal detecting area
Metal detecting results for late medieval/early post-medieval periods
Type
+ large lead shot
▲ small lead shot
● button
● coin
 harness fitting
● stud
▲ buckle
▲ rivet
◆ bell
● other
 Registered battlefield (Battle of Stoke Field 1487)

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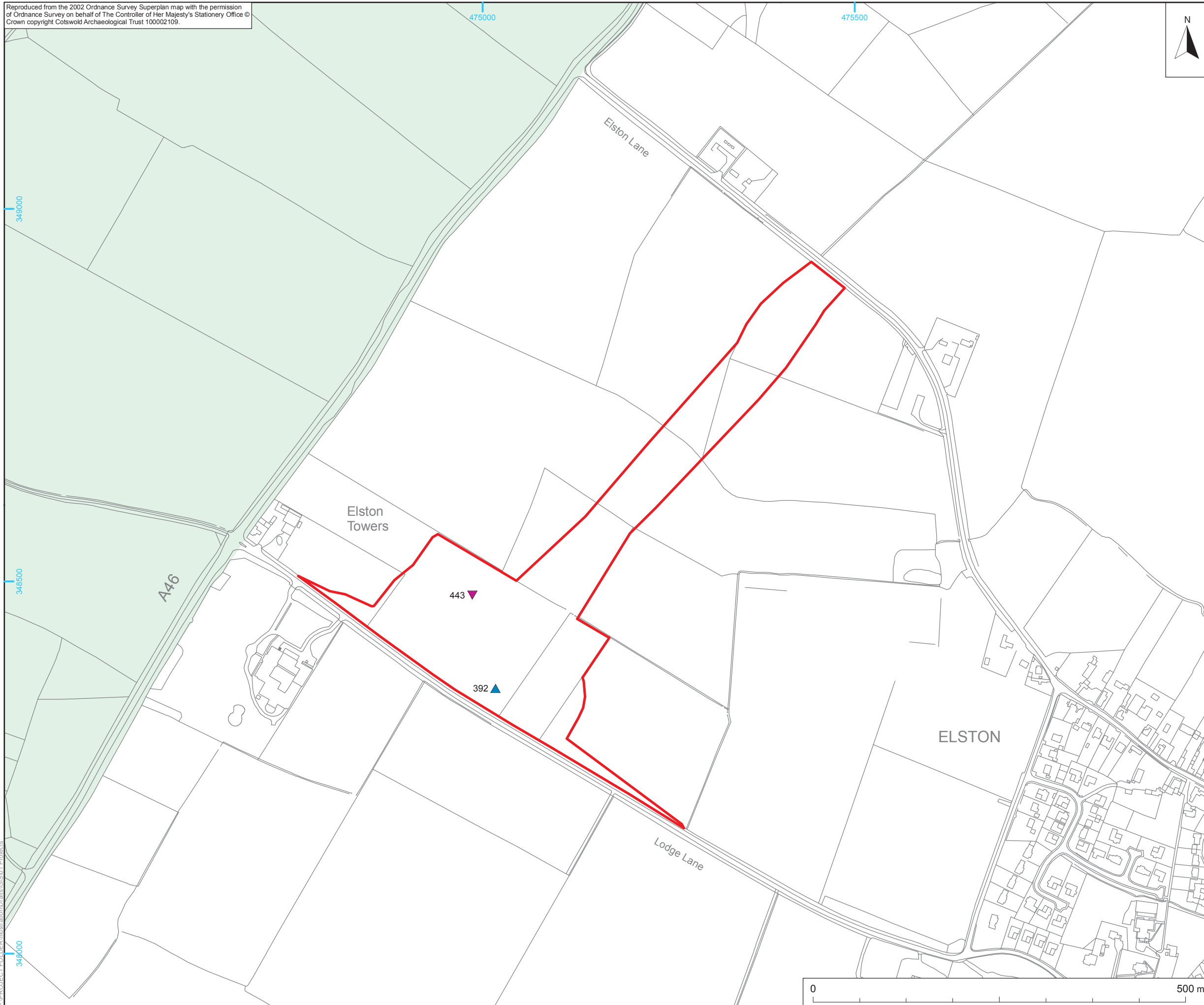






PROJECT TITLE
 A46 Newark to Widmerpool Improvement
 Metal Detecting Survey Report No. 10133

FIGURE TITLE
 Area 1: Late medieval/early post-medieval
 finds from metal detecting survey

DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
LG	1:5000 @A3	2828	4





 metal detecting area
Metal detecting results for the prehistoric period
Type
 flint flake
 flint tool
 Registered battlefield (Battle of Stoke Field 1487)

P:\PROJECT FOLDER\Illustration\Drawings\GIS\01 Projects

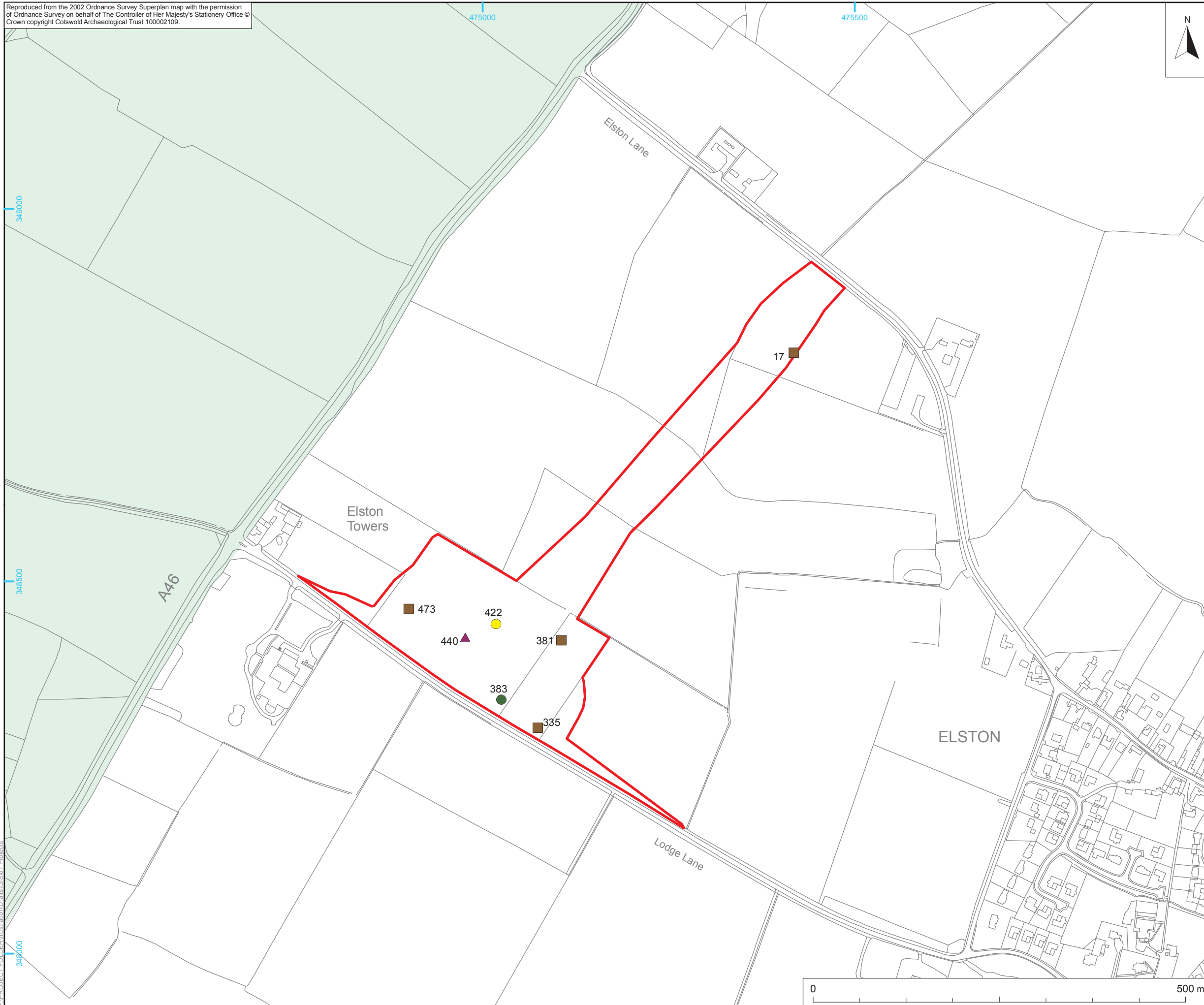








PROJECT TITLE
 A46 Newark to Widmerpool Improvement
 Metal Detecting Survey Report No. 10133

FIGURE TITLE
**Area 2: Prehistoric finds from metal
 detecting survey**

DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
LG	1:5000 @A3	2828	5





-  metal detecting area
- Metal detecting results for the Roman period**
- Type*
-  coin
-  pot sherd
-  pot repair
-  brooch pin
-  Registered battlefield (Battle of Stoke Field 1487)

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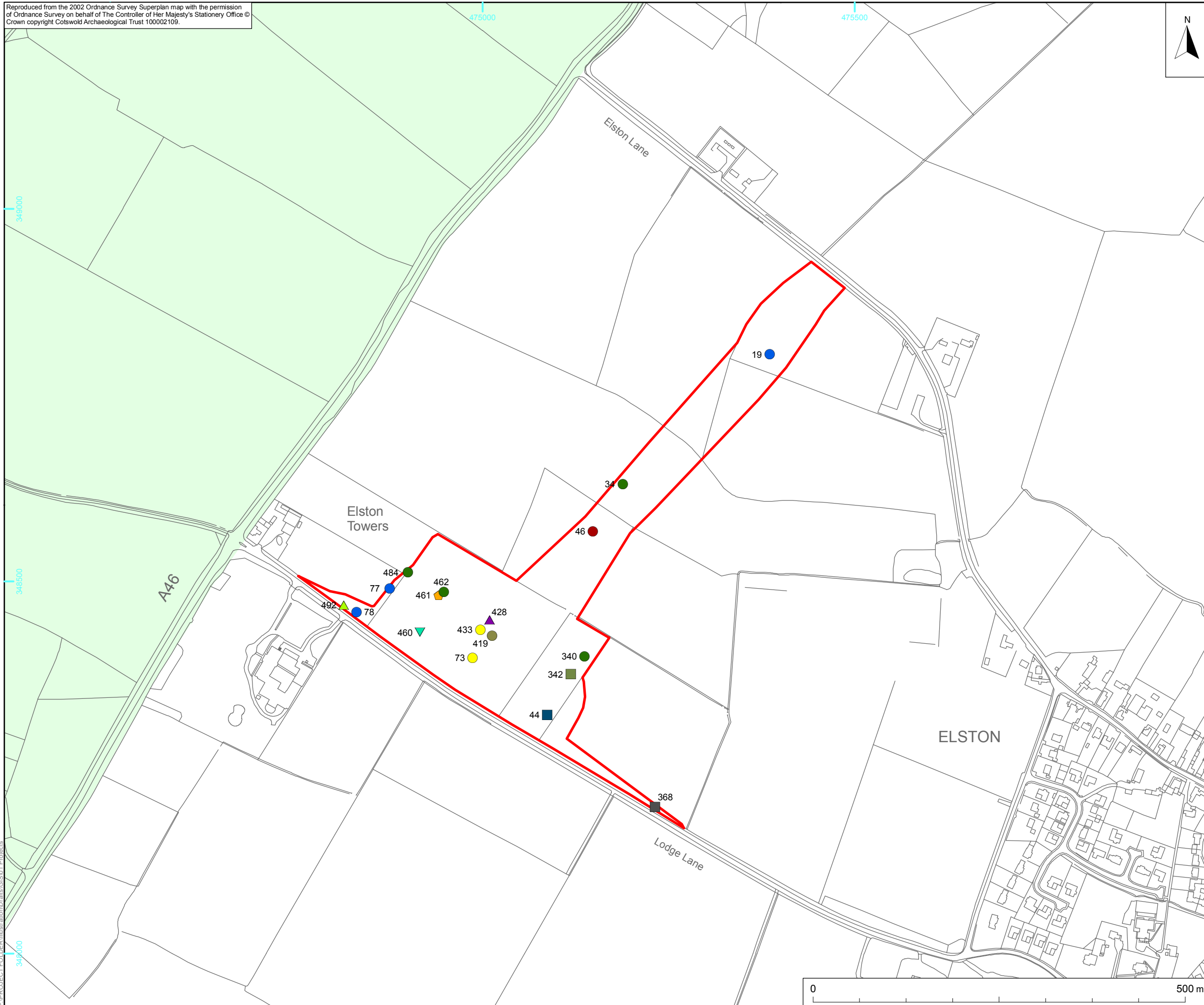


PROJECT TITLE
A46 Newark to Widmerpool Improvement
Metal Detecting Survey Report No. 10133

FIGURE TITLE
**Area 2: Roman finds from metal
detecting survey**

DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
LG	1:5000 @A3	2828	6





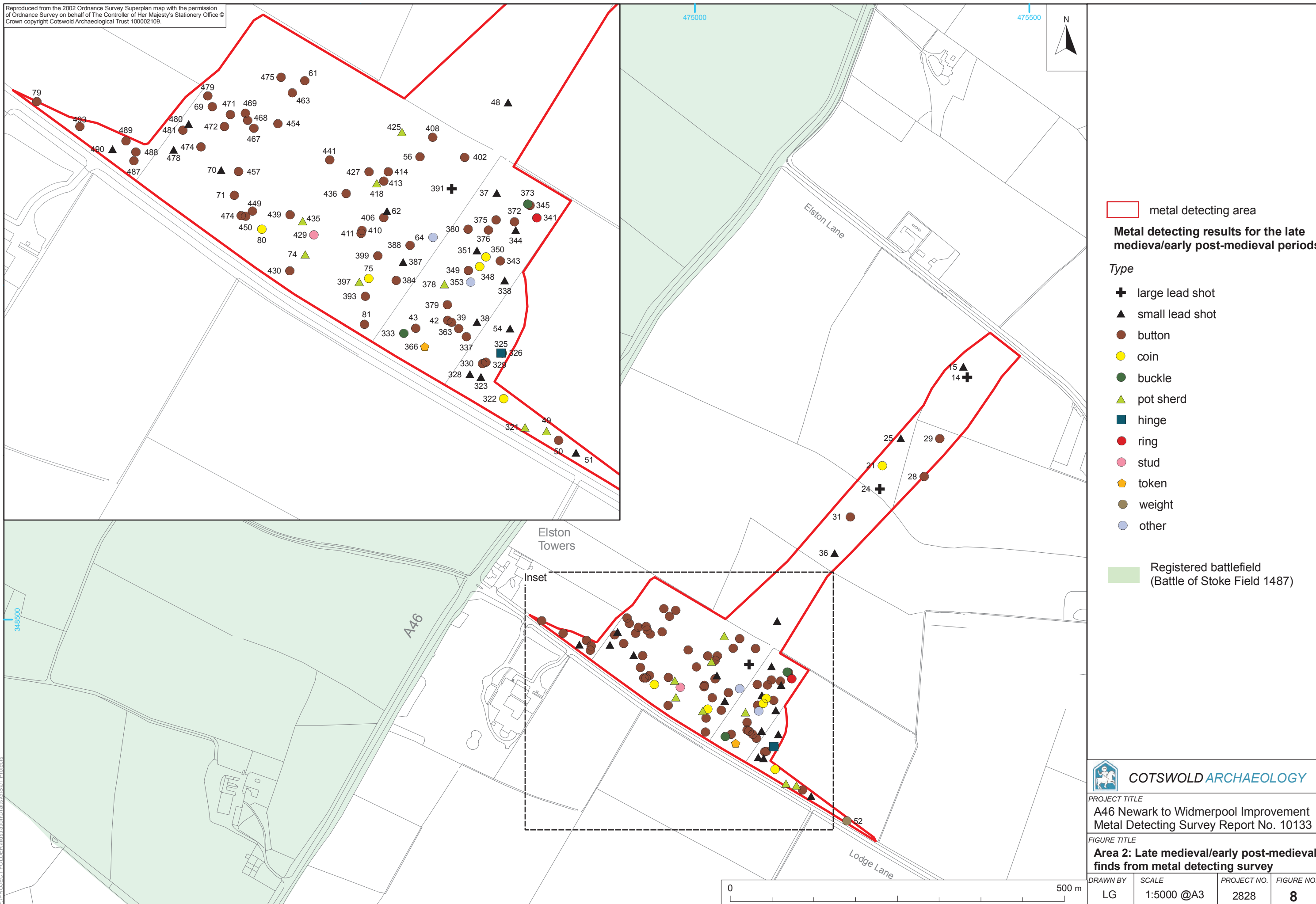
metal detecting area

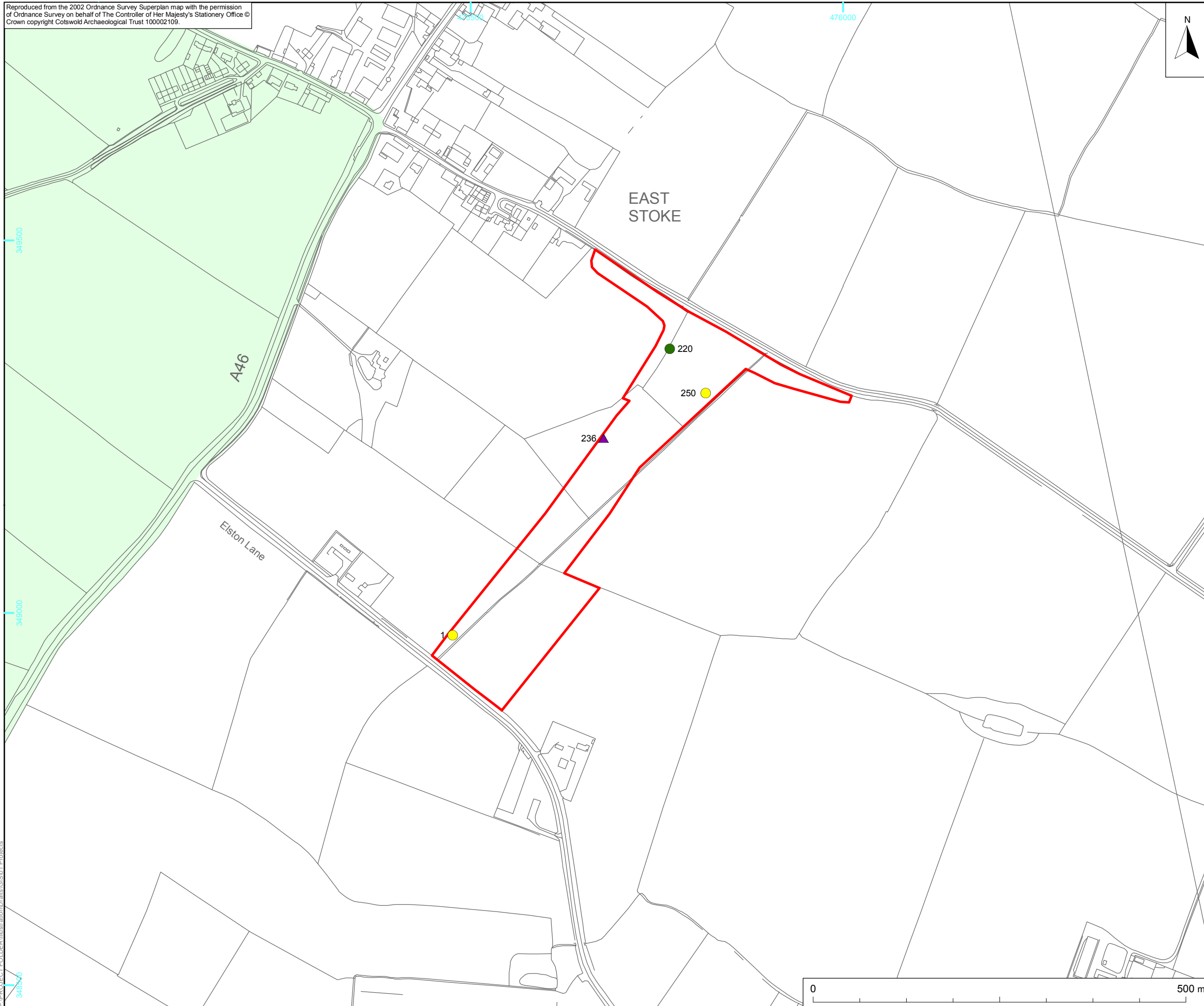
Metal detecting results for the medieval period

Type

- coin
- buckle
- pot sherd
- brooch
- belt fitting
- horseshoe
- hinge plate
- spindle whorl
- thimble
- cloth seal
- cauldron

Registered battlefield (Battle of Stoke Field 1487)





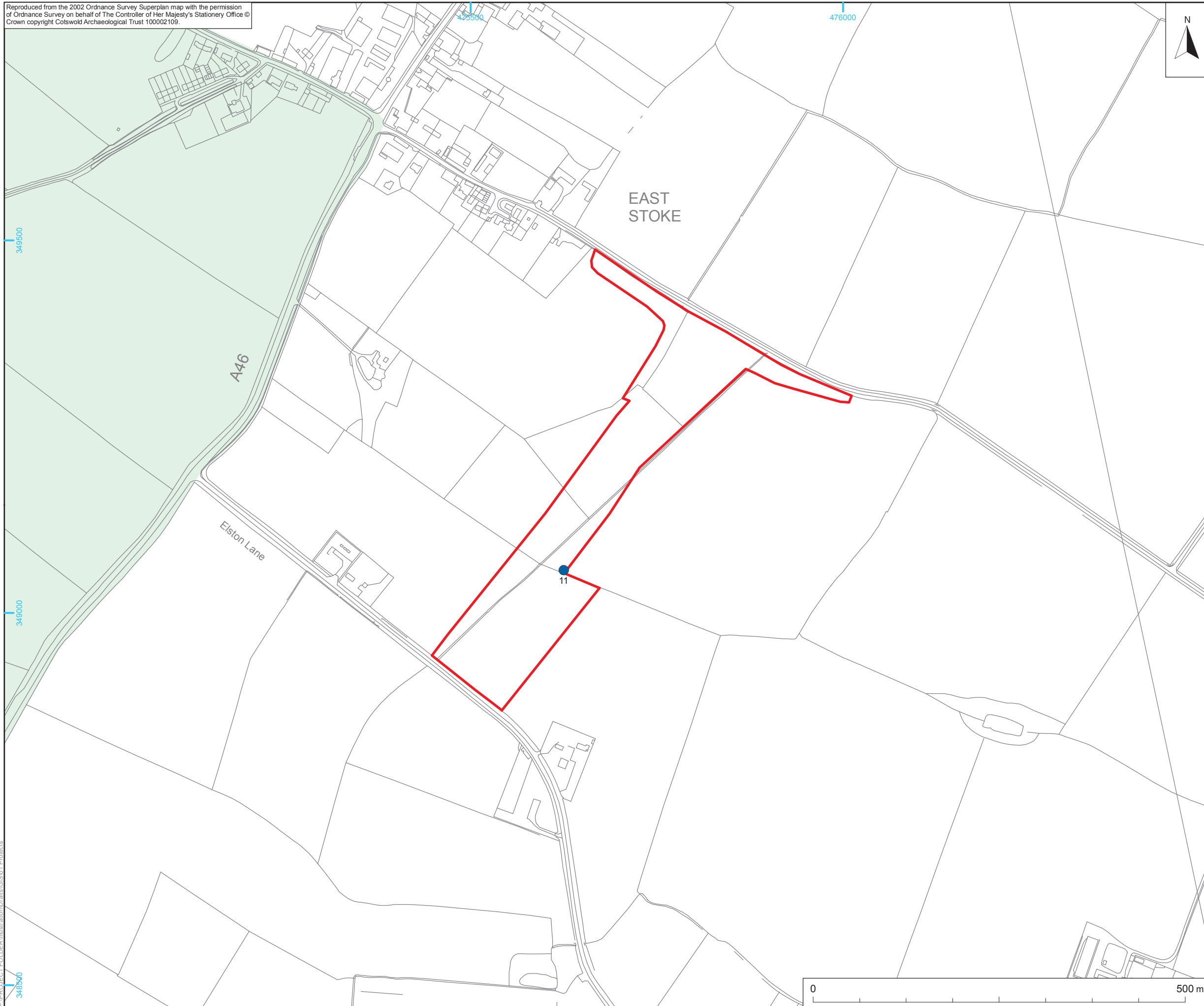
metal detecting area

Metal detecting results for the Roman period

Type

- coin
- brooch pin
- glass

Registered battlefield (Battle of Stoke Field 1487)



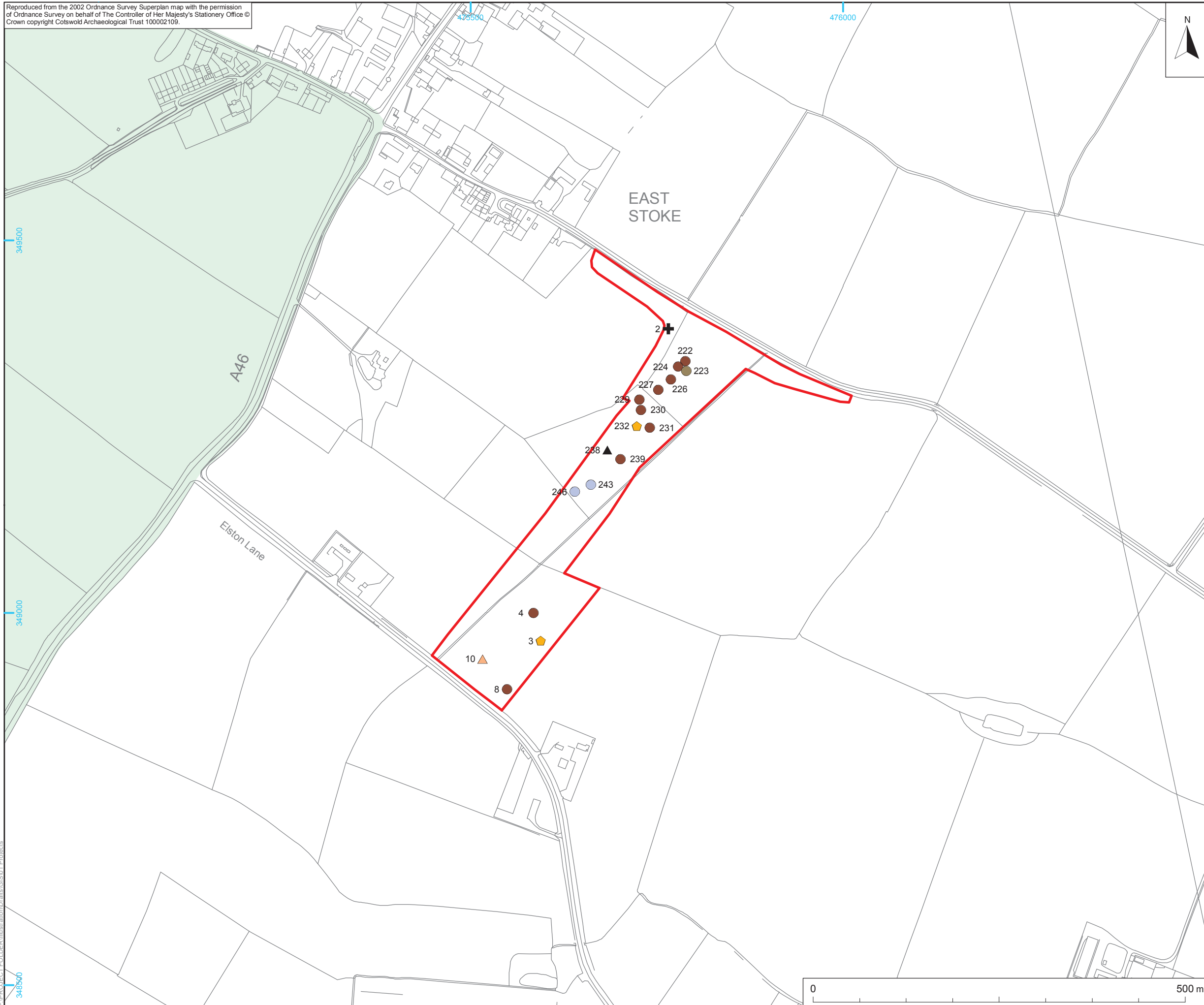
metal detecting area

Metal detecting results for the medieval period

Type

- spindle whorl








Registered battlefield (Battle of Stoke Field 1487)




 metal detecting area

Metal detecting results for the late medieval/early post-medieval periods

Type

-  large lead shot
-  small lead shot
-  button
-  token
-  thimble
-  rivet
-  other

 Registered battlefield (Battle of Stoke Field 1487)



PROJECT TITLE
**A46 Newark to Widmerpool Improvement
 Metal Detecting Survey Report No. 10133**

FIGURE TITLE
**Area 3: Late medieval/early post-medieval
 finds from metal detecting survey**

<small>DRAWN BY</small> LG	<small>SCALE</small> 1:5000 @A3	<small>PROJECT NO.</small> 2828	<small>FIGURE NO.</small> 11
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475500

476000

476500

N

350000


349500

EAST
STOKE

THORPE

A46


Elston Lane

 metal detecting area

Metal detecting results for the Roman period

Type

 coin

 Registered battlefield
(Battle of Stoke Field 1487)

117



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

A46 Newark to Widmerpool Improvement
Metal Detecting Survey Report No. 10133

FIGURE TITLE

**Area 4: Roman finds from metal
detecting survey**

DRAWN BY
LG

SCALE
1:5000 @A3

PROJECT NO.
2828

FIGURE NO.
12



475500

476000

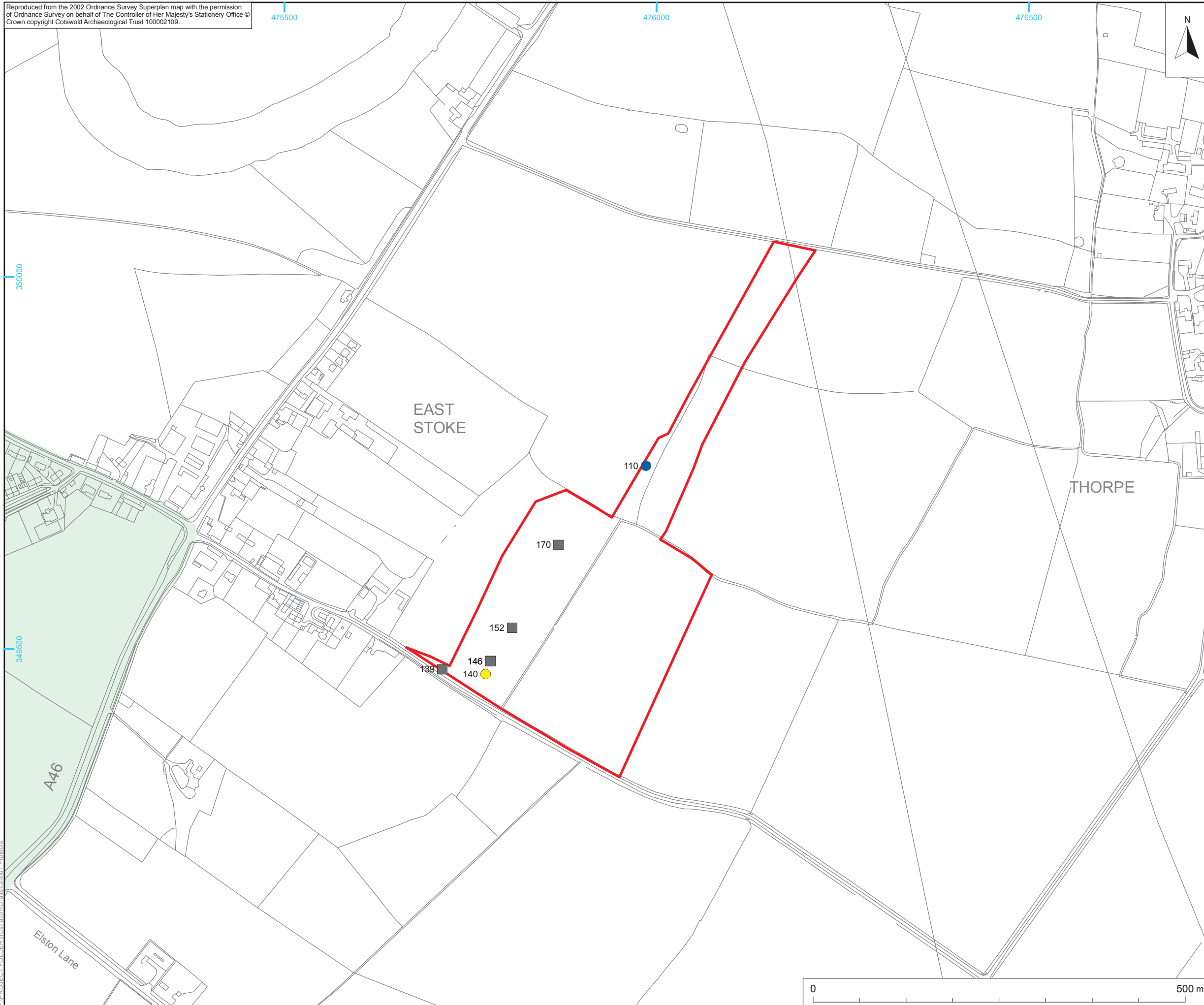
476500

N

350000

349500

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metal detecting area

Metal detecting results for the medieval period

Type

● coin

■ horseshoe

● spindle whorl

Registered battlefield
(Battle of Stoke Field 1487)



PROJECT TITLE
A46 Newark to Widmerpool Improvement
Metal Detecting Survey Report No. 10133

FIGURE TITLE
**Area 4: Medieval finds from metal
detecting survey**

DRAWN BY	SCALE	PROJECT NO.	FIGURE NO.
LG	1:5000 @A3	2828	13

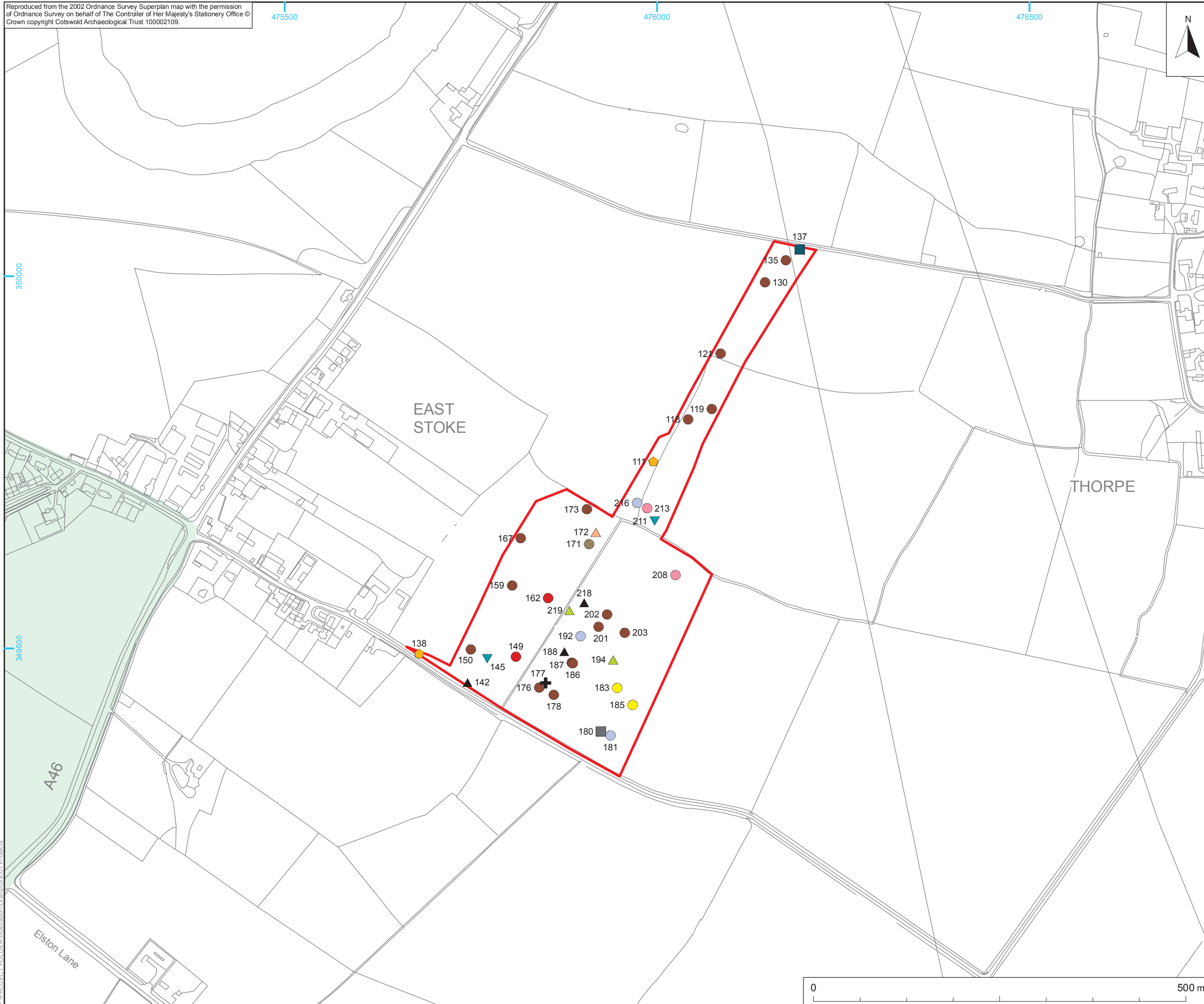


475500

476000

476500

N



metal detecting area

Metal detecting results for the late medieval/early post-medieval period

Type

- large lead shot
- small lead shot
- button
- coin
- buckle
- ring
- stud
- cloth seal
- dress hook
- token
- horseshoe
- knife
- strip
- other

Registered battlefield
(Battle of Stoke Field 1487)



15



16

15 Working shot, north of Moor Lane

16 Working shot, south of Moor Lane



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

A46 Newark to Widmerpool Improvement
Metal Detecting Survey Report No. 10133

FIGURE TITLE

Photographs

DRAWN BY

LG

SCALE

n/a

PROJECT NO.

2828

FIGURE NO.

15&16



17



18

17 Working shot, looking south-east to Eden Spa

18 Working shot, Elston



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

A46 Newark to Widmerpool Improvement
Metal Detecting Survey Report No. 10133

FIGURE TITLE

Photographs

DRAWN BY

LG

SCALE

n/a

PROJECT NO.

2828

FIGURE NO.

17&18

19



20



19 Gold coin Ra No. 433

20 Gold coin Ra No. 433



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

A46 Newark to Widmerpool Improvement
Metal Detecting Survey Report No. 10133

FIGURE TITLE

Photographs

DRAWN BY

LG

SCALE

n/a

PROJECT NO.

2828

FIGURE NO.

19&20



21 Lead shot



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

A46 Newark to Widmerpool Improvement
Metal Detecting Survey Report No. 10133

FIGURE TITLE

Photograph

DRAWN BY

LG

SCALE

n/a

PROJECT NO.

2828

FIGURE NO.

21