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**A421 GREAT BARFORD BYPASS, BEDFORDSHIRE
TRIAL TRENCH EVALUATION
INTERIM REPORT (PART 2) ZONE 3
APRIL AND MAY 2004**

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Abstract

Northamptonshire Archaeology is carrying out a trial excavation along the proposed route of the Great Barford Bypass, Bedfordshire. The route extends from the Black Cat Roundabout on the A1 and runs to the north and west of Great Barford, linking up at its western end to the Bedford Southern Bypass near Water End. The route has been divided into four zones.

The first part of the interim report (Part1) includes the introduction and background to the project, the general archaeological background, the excavation methodology and details of the archaeological findings in Zones 1 and 2. This part (Part 2) of the report details the archaeological findings from Zone 3, which extends from the farm track to the south of High Barns Farm to just beyond the stream to the west of Green End (Barford) Road. Fieldwork in Zone 4 is ongoing and will be reported on at a later date.

The trial excavation identified five key areas of archaeological interest in Zone 3. These consisted of three areas of late Iron Age/Roman and two areas of medieval settlement and agricultural activity. Three of these areas had previously been identified from aerial photographs, documentary research or chance discovery. The late Iron Age/Roman remains were generally located on the high ground above the streams that intersect the line of the bypass. They consisted of a probable field drainage network and boundary ditches, a small farming settlement, and an area of more marginal activity to the north of an area of occupation identified in the 1970s during the construction of a gas pipeline. In addition, an isolated crouched burial was discovered, possibly associated with the Iron Age/early Roman site in Zone 4.

Two medieval settlement sites were revealed adjacent to the streams in the valleys. One of the sites may be related to the 'lost' hamlet of East End. Both sites dated to the 11th/12th centuries, with some evidence for later activity in the 14th century. Similarities in the date, historical development, location and character of the two sites suggest major changes in the settlement pattern in this part of north Bedfordshire towards the end of the 12th century. Relict ridge and furrow and post medieval field boundaries were also discovered.

1 INTRODUCTION

Northamptonshire Archaeology (NA), acting on behalf of JacobsGIBB, is carrying out a trial excavation along the proposed route of the Great Barford Bypass, Bedfordshire (Fig 1). The route has been divided into four zones and the fieldwork has been completed in Zones 1 to 3.

The first part of the interim report (Part1) has previously been issued (NA 2004) and includes the introduction and background to the project, the general archaeological background, the excavation methodology and details of the archaeological findings in

Zones 1 and 2. This part of the report (Part 2) details the results of the trial trenching carried out in Zone 3. This zone extends from the farm track to the south of High Barns Farm (NGR TL 132 535) to just beyond the stream to the west of Green End (Barford) Road (NGR TL 113 527). Part 3 (forthcoming) will detail the archaeological findings in Zone 4.

The trial excavation in Zone 3 commenced on 19th March 2004 and was completed on 29th April 2004. Fieldwork is still in progress in Zone 4.

2 ARCHAEOLOGICAL BACKGROUND

The proposed route of the bypass passes close to or cuts through three areas of archaeological interest registered on the Bedfordshire County Council Heritage and Environment Section (BCCHES) Historic Environment Record (HER).

In the field (Field 15) to the east of Birchfield Road and extending as far as the stream at the base of the slope is the suggested site of the deserted medieval hamlet of East End (HER 9916). Identified from old pre-enclosure maps and an enclosure map of 1824, it consisted of an area of old enclosure with small closes or pightles and two small greens. No visible trace of the settlement survives. The site type conforms to the pattern of scattered settlements that characterized the landscape of north Bedfordshire in the medieval period. The road corridor lies *c* 80m to the north of this area.

Further to the west, adjacent and to the east of Green End (Barford) Road, there is an area of Romano-British settlement and activity (HER 9833), discovered during the construction of a gas pipeline in 1976. Construction work revealed two features containing several sherds of Romano-British pottery in the side of the pipe trench. The site lies immediately to the south of the road corridor, in Field 16.

The third area of archaeological interest registered in the SMR is HER 9963 (Field 18). It lies on the north-east facing slope above the small stream that flows south-westwards, past the medieval moated manor site of 'The Creakers', towards Green End. The road corridor cuts through the centre of this area. From available information this site appears to comprise an area of ploughed out ridge and furrow earthworks.

3 EXCAVATION RESULTS

A total of 58 trenches (Trenches 92 to 106 and 108 to 150) were excavated in Zone 3 (Fig 2), each trench being 50m long and 2.0m wide. It was not possible to excavate Trench 107 due to the proximity of overhead power lines, and it was agreed with BCCHES that the density of trenches in the vicinity was sufficient not to have to move it to a new location. Zone 3 incorporates Fields 12 to 18. A summary of the features and related finds is given in Appendix 1. The suggested dates for the features are provisional and may be subject to change once the records and finds have been assessed in more detail.

The topsoil and subsoil cover was generally the same as that recorded in Zones 1 and 2. The topsoil typically varied in thickness between 0.22m and 0.34m; the subsoil was rarely more than 0.35m thick and was occasionally intermittent. In most cases where they occurred, alluvial and colluvial deposits were generally associated with late Pleistocene/early Holocene environmental trends and probably formed under periglacial conditions. However, forest clearance and subsequent soil erosion following the introduction of farming in the Neolithic period could have been a factor in their formation in some places, particularly in Fields 17 and 18. The natural substrate across the zone was boulder clay.

Archaeological remains were generally encountered at a depth of between 0.20m and 0.45m below ground level across the zone. Damage to the upper surfaces of archaeological features by modern ploughing was generally low to moderate, with some deeper damage to individual features being caused by the insertion of land drains.

For clarity, the medieval/post-medieval furrows have been separated from the other archaeological features and are shown on a separate figure (Fig 10), and land drains and other modern features have not been shown.

3.1 Field 12, Trenches 92 to 97 (Fig 3)

Field 12 lay on level ground and extended westwards from the farm track running south of High Barns Farm as far as the hedgerow separating it from Field 13. Six trenches (Trenches 92 to 97) were excavated in this field.

In common with the findings from the adjacent field to the east (Zone 2, Field 11), the trenches revealed a network of small, linear gullies, several small ditches up to *c* 0.9m wide and 0.5m deep, and several small pits. They generally contained a single fill and were sealed by the subsoil, although due to the disturbance of the subsoil by deep ploughing, this relationship could not be confirmed in every case. A single base sherd of Roman whiteware was recovered from the fill of one of the gullies in Trench 93. As was previously postulated (NA 2004, section 5.11), the gullies and ditches are probably part of a Romano-British field drainage system, although it is possible that the pottery is residual and the features are in fact later in date. The need for drainage on the boulder clay, with no slope to aid the transfer of ground and surface water, was evident in the large number of modern land drains that criss-crossed the trenches.

3.2 Field 13, Trenches 98 to 103 (Figs 4 and 10)

This pasture field extended westwards from its boundary with Field 12 as far as the small, deeply incised stream flowing south from Birchfield Farm towards Great Barford. A hedgerow separated it from Field 14 to the south. In the eastern half of the field the ground was relatively level but towards the centre it began to slope steeply down towards the stream. Ground conditions in this field were generally poor due to waterlogging. Trenches 98 to 103 were excavated in this field.

The earliest remains discovered in this field date to the late Iron Age/early Roman period. These remains consisted of three, possibly four parallel ditches up to *c* 1.0m wide and 0.5m deep in Trench 100, a smaller ditch running on a different alignment through Trenches 99 and 100, and a small pit or posthole in Trench 101. Several sherds of flint-tempered and shell-gritted wares, dating to the late Iron Age/early Roman period, were recovered from these features.

At the eastern end of Trench 98 there was an intersection between two gullies, one of which produced two sherds of Roman greyware. The presence of these unabraded sherds adds weight to the interpretation that the gullies and ditches in the adjacent fields to the east are part of a Romano-British field drainage system.

Remnants of medieval/post-medieval furrows, aligned from north-west to south-east, were recorded in Trenches 100, 102 and 103 (Fig 10).

3.3 Field 14, Trenches 104 and 105 (Fig 4)

Technically part of Field 12, this block of land was originally a small triangular field, separated from Field 12 to the east by a continuation of the hedgerow between Fields 12 and 13. It was bordered to the west by the small stream passing by Field 13. The ground sloped relatively steeply down to a narrow strip of level ground adjacent to the stream. Two trenches (Trenches 104 and 105) were excavated in the north-west corner of this field.

No archaeological remains were revealed in either trench, although a thick deposit of alluvium/colluvium was recorded in Trench 105. This deposit consisted of sterile, brownish orange silty sand, and a sondage revealed that it was up to 1.2m thick and overlay greyish blue clay. Towards the base of the deposit there were greyish blue clay involutions, formed in a periglacial environment, indicating that the deposit is almost certainly pre-Holocene in date.

3.4 Field 15, Trenches 106 and 108 to 122 (Figs 4 and 5)

Field 15 extended westwards from the small stream separating it from Fields 13 and 14, as far as Birchfield Road. The field lay on a moderately steep, east-facing slope, and levelled out on the valley bottom. Sixteen trenches (Trenches 106 and 108 to 122) were excavated in this field.

The field contained two distinct areas of archaeological remains. The earliest of these lay at the top of the slope and adjacent to Birchfield Road. The features broadly date to the late Iron Age/early Roman period and belong to an area of settlement and activity focused immediately to the west of Birchfield Road (Field 16). The second area dated to the medieval period and lay at the base of the slope, adjacent to the stream. The medieval remains were cut into the layer of alluvium/colluvium that was also recorded in Trench 105, on the opposite side of the stream.

The late Iron Age/early Roman features were revealed in Trenches 121 and 122. They comprised four curvilinear ditches, up to *c* 1.0m wide and 0.5m deep, and two relatively

large linear ditches, one of which was 1.7m wide and 0.7m deep. There were also two smaller ditches, one of which may be a furrow. The two curvilinear ditches at the western end of Trench 121 describe an arc of 11.5m, and possibly form a ring ditch that would have served to drain rainwater from the eaves of a roundhouse. The other two probably form a small pen or enclosure. Excavation of two of the ditches in Trench 122 produced a sherd of Roman greyware and several sherds of grog-tempered and shell-gritted ware. These features lie on the eastern periphery of the settlement.

The medieval remains by the stream (Trenches 106, 108, 109, 111 and 112) were complex, comprising large and small ditches, gullies, pits and postholes. They clearly represent an area of settlement, possibly related to the 'lost' hamlet of East End (HER 9916). However, given the distance between the area identified as the site of the lost hamlet in the HER and the remains revealed in the trial trenches, it is possible that the remains belong to another, previously unrecorded settlement.

Of particular interest were an area of burning, interpreted as an external hearth, and an arrangement of postholes possibly forming the corner of a small building in Trench 106. In Trench 109 a linear spread of pebbles forming a metalled surface may be part of a track, possibly following the course of the stream up the valley to the medieval moated manor site north of Little Birchfield Farm.

Based on the pottery recovered from many of the features, the site largely dates to the 12th century, although several features are later and date to the mid 14th century. This suggests that the settlement may have been abandoned or moved towards the end of the twelfth century, possibly to be succeeded by the hamlet of East End that occupied the higher ground to the south-west. Alternatively, the settlement of 'East End' may have been more substantial in the earlier medieval period, and later went into decline with the more marginal area by the stream being abandoned.

No archaeological remains were revealed in Trenches 113 to 120.

3.5 Field 16, Trenches 123 to 140 (Figs 6 to 8)

Field 16 incorporated two modern fields and extended from Birchfield Road to Green End (Barford) Road. The ground was level and formed a plateau of higher ground on a spur between two small valleys, with the roads following the crest of the slopes to the north-east and south-west. Twenty-one trenches (Trenches 123-140) were excavated in this field, revealing two areas of late Iron Age/early Roman settlement and activity.

At the eastern end of the field and adjacent to Birchfield Road (Trenches 125 to 128) there was a focus of late Iron Age/early Roman occupation, probably a small farming settlement, the eastern periphery of which had been revealed in Trenches 121 and 122 in the adjacent field.

The features included several large enclosure or boundary ditches, over 2.0m wide and up to 1.0m deep, containing a sequence of fills that included charcoal rich deposits. A number of gullies and several pits were also revealed. Sample excavation of a number of these features produced a moderate assemblage of late Iron Age/early Roman pottery and animal bone.

The second area of Romano-British activity was revealed at the western edge of the field, close to Green End Road. These remains are almost certainly associated with the Romano-British features uncovered in 1976 during the construction of the gas pipeline (HER9833). In Trench 140 there was a large, irregular feature, possibly a quarry pit, comprising a number of relatively deep pits or scrapings, the fills of which produced late Iron Age/early Roman pottery. The pits were sealed by layers of soil and gravel that appear to have been deliberately laid down to level the ground. Immediately to the north-east, in Trench 135, there were a number of intercutting pits, gullies and ditches which produced pottery of a similar date.

Excavation in the areas between and around these two areas of settlement revealed only very marginal activity, consisting of a number of isolated small pits and gullies, most of which contained no dating evidence. No archaeological remains were revealed in Trenches 124, 129, 131, 133 and 139.

In Trench 123 there was a post-medieval ditch in direct alignment with the hedgerow to the east of Birchfield Road. This feature probably represents a former field boundary. The presence of a land drain in the side of the ditch suggests that the ditch was deliberately backfilled in modern times when the boundary was removed to suit modern agricultural practices. The ditch was cut into cold phase colluvium, which was up to 0.6m thick at the northern end of the trench.

3.6 Field 17, Trenches 141 to 148 (Fig 9)

Field 17, which contained nine trenches (Trenches 141 to 148), consisted of three modern fields separated by low earth banks. The field lay on a south-west facing slope that extended from Green End (Barford) Road, down as far as a small stream in the valley. On the lower slope furrows could be seen as faint cropmarks running downslope towards the stream.

Excavation of Trenches 141 to 146 revealed a random pattern of linear and curvilinear gullies, several ditches and a number of pits. The majority of these features appeared to cut the subsoil, suggesting that they are relatively recent in date, and are either post-medieval or modern. However, the subsoil was relatively thin (*c* 0.10-0.15m thick) and in some places absent on the upper slope of this field, and plough disturbance was particularly evident, with many plough scars in the natural substrate. It is therefore possible that some of these features may in fact be earlier and that they have been heavily truncated by ploughing. Excavation of a sample of these features produced a small quantity of abraded pottery sherds dating from the late Iron Age to medieval periods.

A number of the features, particularly the pits, were ambiguous in nature and it is likely that some of them may be vegetation features. The parallel ditches in Trenches 143 and 145 had the appearance of furrows, but excavation showed that some of them were in excess of 0.5m deep.

At the base of the slope, in Trenches 147 and 148, there was evidence for medieval activity on the north-east bank of the stream. In Trench 148 there was a dense spread of inter-cutting features, consisting of ditches, large pits, smaller pits and postholes. Similar

features were also found at the south-east end of Trench 147. Pottery recovered from excavated features largely dates to the 11th/12th centuries, with a smaller quantity dating to the 14th century. The pottery assemblage is remarkably similar to that recovered from the medieval features in Field 15 (Trenches 106-112), suggesting that major changes in the settlement pattern in this area may have been occurring at the end of the 12th century.

The medieval features were cut into a thick layer of colluvium that may mask earlier remains. This deposit comprised orangey brown silty clay with occasional pebbles, and differed considerably from the clean, sterile colluvium exposed in the trenches by the stream in Fields 14 and 15. The grubby appearance of the colluvium suggests that it may be anthropogenic in origin, the result of forest clearance and ploughing on the slope above the stream. The presence of Iron Age features cut into this deposit in Trench 149 (see 3.7 below) indicates that it may have formed in the earlier prehistoric period, sometime after the advent of farming (*c* 4,200BC).

3.7 Field 18, Trenches 149 and 150 (Fig 9)

Field 18 lay on the north-east facing slope above the small stream that flows south-eastwards, past the medieval moated manor site of 'The Creakers', towards Green End. The field lay within HER 9916, an area of ploughed out ridge and furrow. In places the furrows could be seen as feint cropmarks running downslope towards the stream. The field contained five trenches, however only the two easternmost trenches (Trenches 149 and 150) have been included in Zone 3. The remaining trenches lie within Zone 4.

Trench 149 lay on the lower slope close to the stream, within a badger enclosure that had been erected to prevent badgers recolonizing a cleared sett. The trench cut through a former field boundary, marked by a broad, relatively shallow ditch and a grubbed out hedgerow. The size of the ditch suggests that it may in fact be a holloway between two fields, leading downslope towards the stream.

At the south-east end of the trench there was a small ditch, two pits and a grave. Near the centre of the trench there was also a larger ditch, seen mostly in section. This feature could not be excavated due to flooding by groundwater.

The earliest feature was the grave, which contained the remains of a crouched adult burial (see section 5.2 below), facing south. On the advice of BCCHEs a burial licence was obtained (Licence No: 29277) and the skeleton was fully excavated. There were no attendant grave goods. The style and posture of the burial and the recovery of three sherds of grog-tempered ware from the fill of the grave suggests that the burial probably dates to the Iron Age/early Roman period. However, this date would have to be confirmed by carrying out further specialist analysis of the pottery and by obtaining a radiocarbon date from the skeletal remains.

One of the pits, which was in close proximity to the grave, had a diameter of *c* 1.0m, a depth of 0.4m, and contained medieval pottery dating to the 14th century. Pottery of a similar date was also recovered from the large ditch in the centre of the trench. No dating evidence was forthcoming from the other ditch or pit, so it is not known if they are medieval or are associated with the earlier burial.

Trench 150 contained two gullies and a possible pit. No dating evidence was recovered from these features.

4 THE FINDS

4.1 The worked flint by Andy Chapman

Trench 108, context 34 produced a small cluster of four hard-hammer struck flints in a fine vitreous flint. Trench 109, context 20, produced a further two flakes and there is a retouched ovate from Trench 111, context 07. This area may therefore have been a focus for Neolithic activity.

Trenches 138 to 153 produced only 13 pieces of flint; two from Trench 138, four from Trench 148, one from Trench 149 and six from Trench 153. This group comprises largely unworked flint, comprising four heavily patinated natural pieces, one pot lid (frost-fractured) flake and five irregular shattered pieces that are all damaged from rolling. This leaves only three undiagnostic flakes; one associated with the crouched burial in Trench 149, and two flakes from Trench 153, although neither of these are from prepared cores and could be products of accidental damage.

4.2 The Iron Age and Roman pottery by Tora Hylton

Trial trenching within Zone 3 (Trenches 92-150) produced a group of late Iron Age/early Roman pottery. A total of 537 sherds with a combined weight of 6.677kg were recovered from 42 individual deposits in 20 trenches. A summary of the pottery by context is given in Appendix 2.

The pottery was recovered from two distinct areas lying to the north-west of Great Barford. The highest concentration (85% by weight) derived from a complex of features straddling Birchfield Road (Trenches 122, 125-128). The second concentration (12% by weight) was recovered from a series of features straddling Barford Road (Trenches 135, 137, 140, 141, 143). Smaller amounts (3%) were recovered from outlying trenches to the north-east and east of the deserted medieval hamlet of East End (Trenches 93, 98-101, 108) and to the south-west (Trenches 146, 148-149).

Most of the pottery appears to be of local origin and is represented by late Iron Age forms in grog-tempered and shell-gritted fabrics, together with a small number of sand-tempered hand made wares and an undiagnostic sherd of flint-tempered ware. Domestic wares are represented by tablewares, storage vessels and cooking pots, some displaying features reminiscent of Gallo-Belgic type wares. In common with the material from Zone 2, the assemblage displays similarities to the late Iron Age wares from the Iron Age and Romano-British Farmstead at Norse Road, Bedford (Slowikowski 2001, 11). There are channel-rimmed jars in grog-tempered and shell-gritted wares and jars and large storage vessels in grog-tempered fabrics.

There is a small number of 1st/2nd century wares; the highest concentration was recovered from the upper fill of a large ditch in Trench 127, close to Birchfield Road. The material

includes necked jars, shallow dishes in greyware, together with two very small sherds of 'London Type Ware', one decorated with a compass-drawn half circle (Tyers 1996, 170-71). Imported wares are represented by five sherds of Samian, including one sherd with moulded decoration and part of a base ring from a Type ?31/31R bowl (Webster 1996, 34).

Much of the late Iron Age/early Roman material derived from a complex of features identified during a geophysical survey in 2003, which straddles Birchfield Road, to the north-west of Great Barford. In addition there was a concentration of the Late Iron Age/Roman material adjacent to Barford Road. The range of material is typical of that found on late Iron Age domestic settlements, but the presence of 1st and 2nd century material adjacent to Barford Road, suggests that the settlement continued into the 2nd century.

4.3 The medieval pottery by Paul Blinkhorn

A total of 380 sherds (total weight = 2,686g) was examined from selected contexts. Where appropriate, the codings and chronology of the Bedfordshire County Archaeology Service type-series were used. The following ware is not covered by this:

F319: **Lyveden/Stanion 'A' Ware**. c. AD 1150-?1400. Handmade/Wheel finished. Moderate to dense, ill-sorted shelly limestone platelets up to 3mm, sparse to moderate red ironstone up to 10mm, occasional quartz, oolites, black ironstone. Produced at numerous kilns in the villages of Lyveden and Stanion in north-east Northants. Fabric usually grey with blue-grey or brown surfaces, although other surface colours, such as buff, red, purple or orange are not uncommon. 5 sherds, 75g.

The following are coded according to the BCAS system:

F100: B01: **St Neots Ware**. AD900-1050, and T1(2), AD1000-1200. 10 sherds, 99g.
F205: C12, **Stamford ware**, 10th – 12th C. 1 sherd, 2g.
F330: B07: **Medieval shelly ware**, c. 1100-1400. 269 sherds, 1,831g.
F360: C03: **Fine sandy ware**, 12-13th C. 48 sherds, 387g.
F361: C59a: **Coarse sandy ware**, 12-13th C. 3 sherds, 19g.
F324: C09: **Brill/Boarstall Ware**, 13th – 15th C. 9 sherds, 29g.
F329: C10. **Potterspury ware**, M13th – 15th C. 1 sherd, 10g.
F365: E01: **Late medieval reduced ware**, M14th – 16th C. 29 sherds, 191g.
F401: E02: **Late Medieval Oxidized Ware**, M14th – 16th C. 3 sherds, 33g.

The pottery occurrence by number and weight of sherds per fabric type is given in Appendix 3.

4.4 The post-medieval pottery by Tora Hylton

One sherd of 16th/17th century glazed red earthenware was recovered from Trench 126. It was recovered from the surface of a ditch and is probably intrusive.

4.5 The worked stone by Andy Chapman

An irregular fragment of fine-grained sandstone was retrieved from Trench 143 (ditch fill 14314, SF16). This has no evidence of working surviving on it. The upper surface has been weathered, all the edges are slightly rounded and one edge is heat reddened, suggesting that the stone has come from an oven lining or some other stone-built structure.

5 ENVIRONMENTAL EVIDENCE

5.1 Geological overview by Steve Critchley

The solid geology, according to British Geological Survey sheet 204, consists of the Oxford Clay Formation. This is entirely obscured by glacial tills of the Anglian Glaciation.

Trenches 92-103

These exposed glacial tills of the Anglian Glaciation. These were seen to be stiff, light grey to light brown chalky clays with a variable clast content. The clasts comprised chalk, flint, limestone, sandstone, fossils and patches of orange-brown sand and gravel. There was considerable variability from trench to trench, in particular relating to the clast content.

Periglacial cryoturbation and ground ice features were noted, including sand wedge polygons, ice crack fills and involutions. Such features were more extensive on the hilltops with variable development of colluvium on the slopes.

Trenches 104-109

These trenches cut alluvium associated with the prehistoric forerunner of the current small stream. Alluvium extended upslope for some distance and consisted of reddish to yellowish brown clays, silts and gravely silts, probably an inter-mingling of colluvium and fluvial sediment. Some patches of till with a large clast content were noted in 107 and are possibly solifluction lobes. There was some evidence of lateral channel fills of sandy clayey gravels.

Trenches 110-150

Excavation of these trenches revealed glacial tills similar to those described above for trenches 92-103. Trench 123 cut at right angles a minor palaeochannel filled with gravely clays and silty sands-cold phase colluvium.

Periglacial ground ice features were noted in some of the hilltop trenches. Channel fills of rounded to sub-rounded orangey brown flinty gravels were seen in Trench 147. These were poorly sorted with a calcareous rich matrix. An area of colluvium was noted in Trenches 148 and 149 consisting of a structureless clayey gravel, into which had been cut archaeological features of late prehistoric and medieval date.

5.2 **The Human Burial** by Stephanie Vann

An individual inhumation (context 14907) was recovered from Trench 149, grave cut [14917]. Poorly preserved and fragmentary in nature, with significant amounts of root erosion, it appears to be about 40% complete. The majority of the recovered skeletal elements comprised the skull and long bones. The central axis of the body, consisting of the vertebrae, ribs and pelvis, were all absent with the exception of a few small fragments.

An adult, this individual appeared to be approximately 25-35 years in age based upon the assessment of tooth wear (Brothwell, 1981, 72). It is worth noting that all of these teeth were loose, however they appeared to have been originally located in the left mandible. This was the only section of mandible and maxilla to have been recovered and the sockets of this were quite badly damaged.

It was not possible to determine the sex of the individual given the virtual absence of identifiable pelvic bones and the highly fragmentary nature of the skull. The lack of complete long bones also made it difficult to determine the stature of this individual. The longest identifiable section of femur measured approximately 200mm in length and consisted solely of shaft, both epiphyses being absent. This was consistent with the state of preservation of all the long bones for which no articular surfaces survived.

There was evidence for interproximal neck caries on three of the surviving molars and premolars, this being in an advanced stage on one molar (Brothwell, 1981, 155). This is comparable to the evidence from the medieval cemeteries of the Church and Priory of St Andrew, Fishergate in York where “the molars were the teeth most likely to exhibit carious lesions, followed by the premolars, the canines and the incisors, with the interproximal surfaces being the commonest site for the lesions” (Stroud and Kemp, 1993: 200).

There were also slight amounts of calculus on most of the recovered teeth. This results from mineral deposition in bacterial plaque adhering to inadequately cleaned teeth, and is not uncommon amongst excavated human remains. At the medieval cemeteries of St Andrew, Fishergate, calculus “was present to some degree on the teeth of the majority of adults and approximately half the subadults” (Stroud and Kemp, 1993, 200). If left untreated, this can become a tissue irritant, leading to inflammation of the gums and periodontal disease.

No other examples of pathology could be seen upon the bones of this individual.

5.3 Animal Bone by Karen Deighton

Animal bone recovered from the excavation was scanned to assess the potential for future work. Identifiable, ageable and measurable bones (after Von Den Driesch 1976) were noted. Ageable elements included cheek tooth rows and bones with fusion and neonatal bones. The assemblage had previously been washed.

Fragmentation was fairly heavy and a high frequency of surface abrasion was noted. Although bone was recovered from a range of sediment types the level of preservation appeared to remain consistent, however this assumption could be biased by the small sample sizes available for examination. Four instances of canid gnawing were noted and burnt bone was observed in two contexts. No evidence of butchery was observed however this could be due to the poor surface condition of the bone. Trenches 101, 111, 112 and 121 produced indeterminate bone fragments only. A summary of the identifiable species by context is given in Table 1 below.

Table 1 Quantitative summary of identifiable species, Zone 3

Species	Cow (<i>Bos</i>)	Sheep/goat (<i>Ovicaprid</i>)	Pig (<i>Sus</i>)	Dog (<i>Canid</i>)	Horse (<i>Equus</i>)	Deer (<i>Cervid</i>)	Hare/rabbit (<i>Oryctolagus</i>)	L.ungulate	S.ungulate	Total
Trench										
100	1									1
106	2				1					3
109	1	4								5
122	1									1
123					1					1
125	7	14	4		2			4		31
126	5	7	4	1			1			18
127	3	2			1			1	1	8
137	2	3	1							6
140	1									1
147	1								1	2
148	2	1			2	1				6
Total	26	27	9	1	7	1	1	5	2	78

The assemblage consists of the major domesticates plus horse, deer, dog and rabbit. The species composition was slightly more diverse than zones one and two. A partial horse skull was noted in Trench 125. Juvenile cattle bone was observed in the same trench. Two concentrations of bone were noted, firstly from Trenches 106-112, which correspond to the site of a deserted medieval settlement, and secondly from Trenches 122-127 which correspond to an Iron Age/Roman settlement. Bone was also present in trenches along two narrow corridors of medieval settlement (Trenches 137, 140, 147 and 148).

Approximately 70-80% of the bone was identifiable to species and some could be aged and measured. As with Zones 1 and 2 this would indicate that if further bone were collected during subsequent excavations, statements could be made regarding the

economy and animal husbandry practices at the site. It may also be possible to study temporal changes as bone was recovered from at least two periods.

5.3 Environmental Indicators

A total of 22 environmental samples have been taken from dateable contexts in Zone 3. However, it has been agreed with BCCHES that the processing and analysis of the environmental samples at this stage of the project is not required.

6 INTERPRETATION AND CONCLUSIONS

Trial excavation in Zone 3 identified five key areas of archaeological interest along the proposed route of the road corridor. These consisted of three areas of late Iron Age/Roman and two areas of medieval settlement and agricultural activity. Three of these areas had previously been identified from aerial photographs, documentary research or chance discovery.

The late Iron Age/Roman remains were generally located on the high ground above the small streams that intersect the line of the bypass. At the east end of Zone 3 there was a continuation of the possible field drainage system, comprising a network of small gullies, which had previously been revealed by trial excavation in Zone 2. The western extent of this system was defined by three, possibly four, parallel ditches that followed the crest of the slope above the easternmost stream. It is not known if these ditches are associated with the field drainage system or belong to an earlier phase of activity.

The second area of late Iron Age/Roman activity lay to the west, on the opposite side of the valley, straddling Birchfield Road. Previously identified from aerial photographs and geophysical survey, this focus of settlement, probably a small farm, consisted of several reasonably large enclosure or boundary ditches, pits and gullies, and at least one ring ditch. A concentration of features of a similar date was revealed adjacent to Green End Road, though these could not be characterized with any certainty. They probably represent marginal activity related to a focus of activity to the south of the road corridor. The presence of archaeological remains dating to the Romano-British period in this area was recorded during the construction of a gas pipeline in 1976. It is also worth mentioning at this point the discovery of the probable Iron Age crouched burial in Trench 149. This isolated prehistoric feature occurred in an area of relatively concentrated medieval activity, and is probably associated with the Iron Age settlement in Zone 4 to the west.

The areas of medieval activity were situated in the valley bottoms, by the side of small streams. Both sites were foci of settlement and broadly dated to the 11th/12th centuries, with some evidence for later activity dating to the 14th century. One of the sites is probably associated with the 'lost' hamlet of East End, which had been identified from old pre-enclosure maps. Both sites were remarkably similar in date, historical development, location and character, suggesting major changes in the settlement pattern in this part of north Bedfordshire towards the end of the 12th century. Other landscape

A421 GREAT BARFORD BYPASS, BEDFORDSHIRE
INTERIM REPORT (PART 2) ZONE 3

features dating to the medieval period included ploughed out ridge and furrow. Several post-medieval field boundaries were also recorded.

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APPENDIX 1

Summary of features and finds

Abbreviations

P pottery; WS worked stone

*residual artefact

LIA late Iron Age

Field no.	Trench no.	Feature type	Artefacts	Provisional date
12	92	Gully [9205]	-	Roman?
		Gully [9207]	-	Roman?
		Gully [9209]	-	Roman?
		Gully [9211]	-	Roman?
		Gully [9213]	-	Roman?
		Gully [9215]	-	Roman?
		Gully [9217]	-	Roman?
		Gully [9219]	-	Roman?
	93	Gully [9305]	-	Roman?
		Gully [9307]	-	Roman?
		Gully [9309]	P	Roman
		Gully [9311]	-	Roman?
		Gully [9315]	-	Roman?
		Gully [9317]	-	Roman?
		Pit [9313]	-	Roman?
	94	Gully [9406]	-	Roman?
		Gully [9408]	-	Roman?
		Gully [9410]	-	Roman?
		Gully [9412]	-	Roman?
		Pit [9404]	-	Roman?
	95	Gully [9506]	-	Roman?
		Gully [9508]	-	Roman?
		Gully [9510]	-	Roman?
	96	Gully [9604]	-	Roman?
		Gully [9607]	-	Roman?
		Gully [9609]	-	Roman?
		Gully [9615]	-	Roman?
		Gully? [9617]	-	Roman?
Pit [9611]		-	Roman?	
Pit [9613]		-	Roman?	
97	Gully [9705]	-	Roman?	
	Gully [9707]	-	Roman?	
	Gully [9710]	-	Roman?	
	Pit? [9712]	-	Roman?	
	Pit [9715]	-	Roman?	
13	98	Gully [9805]	P	Roman
		Gully [9807]	-	Roman
	99	Ditch [9905]	P	LIA/early Roman

Field no.	Trench no.	Feature type	Artefacts	Provisional date
	100	Ditch [10005]	P	LIA/early Roman
		Ditch [10007]	-	LIA/early Roman?
		Ditch [10009]	-	LIA/early Roman?
		Ditch [10011]	-	LIA/early Roman?
		Ditch [10015]	-	LIA/early Roman?
	101	Posthole [10013]	-	LIA/early Roman?
		Furrow [10017]	-	Medieval/Post-medieval
		Furrow [10019]	-	Medieval/Post-medieval
		Furrow [10021]	-	Medieval/Post-medieval
	102	Furrow [10205]	-	Medieval/Post-medieval
	103	Furrow [10305]	-	Medieval/Post-medieval
		Furrow [10307]		Medieval/Post-medieval
		Furrow [10309]		Medieval/Post-medieval
14	104	No archaeology	-	
	105	No archaeology	-	
15	106	Ditch [10628]	P	12 th century
		Ditch [10630]	P	12 th century
		Ditch [10632]	P	12 th century
		Ditch [10634]	P	12 th century
		Gully [10611]	-	Medieval?
		Gully [10652]	P	12 th century
		Gully [10654]	-	Medieval?
		Pit [10606]	-	Medieval?
		Pit [10608]	-	Medieval?
		Pit [10613]	P	12 th century
		Pit [10624]	P	Mid 14 th century
		Pit [10636]	P	12 th century
		Pit [10638]	-	Medieval?
		Pit [10642]	-	Medieval?
		Pit [10656]	-	Medieval?
		Pit [10658]	-	Medieval?
		Pit [10660]	-	Medieval?
		Pit [10662]	-	Medieval?
		Posthole [10616]	-	Medieval?
		Posthole [10618]	-	Medieval?
		Posthole [10620]	-	Medieval?
		Posthole [10622]	P	12 th century
		Posthole [10640]	-	Medieval?
		Posthole [10644]	P	12 th century
		Posthole [10646]	-	Medieval?
		Posthole [10648]	-	Medieval?
		Posthole [10650]	-	Medieval?
		Hearth [10626]	P	Mid 14 th century
	107	Not excavated		

Field no.	Trench no.	Feature type	Artefacts	Provisional date
	112	Ditch [11207]	P	12 th century
		Ditch [11209]	-	Medieval?
		Ditch [11213]	P	Mid 14 th century
		Ditch [11217]	-	Medieval?
		Ditch [11220]	P	12 th century
		Ditch [11222]	-	Medieval?
		Ditch [11224]	P	12 th century
		Ditch [11226]	-	Medieval?
		Ditch [11228]	-	Medieval?
		Ditch [11230]	P	12 th century
		Ditch [11232]	-	Medieval?
		Gully [11211]	-	Medieval?
	Gully? [11215]	-	Medieval?	
	113	No archaeology	-	
	114	No archaeology	-	
	115	No archaeology	-	
	116	No archaeology	-	
	117	No archaeology	-	
	118	No archaeology	-	
	119	No archaeology	-	
120	No archaeology	-		
121	Ditch [12109]	-	LIA/early Roman	
	Ditch [12113]	-	LIA/early Roman	
	Ditch [12116]	-	LIA/early Roman	
	Ditch [12118]	-	LIA/early Roman	
122	Ditch [12211]	-	LIA/early Roman?	
	Ditch [12215]	-	LIA/early Roman?	
	Ditch [12219]	P	LIA/early Roman	
	Furrow? [12209]	P	Medieval/Post-medieval	
16	123	Ditch [12305]	-	Post-medieval
	124	No archaeology	-	
	125	Ditch [12507]	-	LIA/early Roman?
		Ditch [12509]	P	Roman
		Ditch?? [12511]	-	LIA/early Roman?
		Ditch [12515]	-	LIA/early Roman?
		Ditch [12517]	P	LIA/early Roman
		Ditch [12529]	-	LIA/early Roman?
		Pit [12527]	-	LIA/early Roman?
	126	Ditch [12605]	P	LIA/early Roman
		Ditch [12609]	P	LIA/early Roman
		Ditch [12611]	P	LIA/early Roman
Ditch [12616]		-	LIA/early Roman?	
Ditch [12618]		-	LIA/early Roman?	
Pit [12614]		-	LIA/early Roman?	
127	Gully? [12705]	P	LIA/early Roman	
	Ditch [12707]	P	LIA/early Roman	
	Ditch [12712]	P	LIA/early Roman	
	Ditch [12515]	-	LIA/early Roman?	

Field no.	Trench no.	Feature type	Artefacts	Provisional date
	144	Ditch [14405]	-	Unknown
		Ditch [14407]	-	Unknown
		Gully [14415]	-	Unknown
		Pit [14417]	-	Unknown
	145	Ditch [14504]	-	Unknown
		Ditch [14509]	-	Unknown
		Ditch [14513]	-	Unknown
		Ditch [14516]	-	Unknown
		Ditch [14518]	-	Unknown
		Pit [14507]	-	Unknown
	146	Pit [14605]	P	LIA/early Roman
		Pit [14607]	-	LIA/early Roman?
		Pit [14609]	-	LIA/early Roman?
	147	Ditch [14705]	P	Mid 14 th century
		Ditch [14707]	P	12 th century
		Posthole [14711]	-	Medieval?
		Posthole [14713]	-	Medieval?
		Furrow? [14709]	P	12 th century
	148	Ditch [14809]	P	Mid 14 th century
		Ditch [14810]	P	12 th century
Gully [14821]		-	Medieval?	
Gully? [14837]		-	Medieval?	
Gully? [14864]		-	Medieval?	
Pit [14814]		P	Mid 14 th century	
Pit [14817]		P	LIA/early Roman	
Pit [14819]		-	Medieval?	
Pit [14821]		-	Medieval?	
Pit [14823]		-	Medieval?	
Pit [14825]		-	Medieval?	
Pit [14827]		-	Medieval?	
Pit [14829]		-	Medieval?	
Pit [14831]		-	Medieval?	
Pit [14833]		P	11 th century	
Pit [14835]		P	12 th century	
Pit [14841]		-	Medieval?	
Pit [14847]		-	Medieval?	
Pit [14849]		P	12 th century	
Pit [14851]		P	12 th century	
Pit [14853]		-	Medieval?	
Pit [14855]		P	12 th century	
Pit [14857]		P	Mid 12 th century	
Pit [14859]		P	12 th century	
Pit [14861]		-	Medieval?	
Pit [14863]		P	12 th century	
Posthole [14843]		P	12 th century	
Posthole [14845]	-	Medieval?		
Furrow? [14839]	-	Medieval?		
18	149	Pit [14906]	P	LIA/early Roman
		Pit [14909]	P	Mid 14 th century
		Ditch [14913]	P	Mid 14 th century
		Ditch [14915]	-	Medieval
		Grave cut [14917]	P	LIA/early Roman

Field no.	Trench no.	Feature type	Artefacts	Provisional date
	150	Gully [15006] Gully [15010] Pit? [15012]	- - -	Unknown Unknown Unknown

Post-medieval pottery													1	11						
Total	14	253	5	77	16	154	4	11	9	172	1	1	36	748	21	725	1	1	108	1998

FABRIC TYPE	TRENCH/CONTEXT NUMBER																			
	12713		12807		13204		13504		13506		13704		13706		13710		13712		13714	
	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg
Late Iron Age/Early Roman Pottery																				
Grog tempered wares	3	49	1	2	1	1					22	115	11	44	7	49	13	144		
Flint tempered wares																				
Shell-gritted wares	20	203									2	14			4	46	7	36		
Misc. LIA coarsewares																				
Roman Pottery																				
Greyware	85	596																	1	12
Oxidised wares							2	5	6	6										
Samian	5	82																		
Whiteware	6	73																		
Post-medieval pottery																				
Total	119	1003	1	2	1	1	2	5	6	6	24	129	11	44	11	95	20	180	1	12

FABRIC TYPE	TRENCH/CONTEXT NUMBER																			
	13716		13719		13722		13724		13728		14012		14014		14104		14314		14604	
	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg	No/Wg
Late Iron Age/Early Roman Pottery																				
Grog tempered wares	4	17	8	57	1	19	9	65	2	4	9	41	2	4	1	4			1	2
Flint tempered wares																				
Shell-gritted wares	1	4							2	3			2	88			3	7	1	2

APPENDIX 3

THE POTTERY OCCURRENCE BY NUMBER AND WEIGHT OF SHERDS PER FABRIC TYPE

Fabric type	B01		C12		B07		C03		C59a		F319		C09		C10		E01		E02		Date
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	
10004	3	10																			11thC
10605					13	147	9	66	1	11											12thC
10607			1	2	1	2	1	2													12thC
10610					3	5															12thC
10612					3	8															12thC
10617					2	35															12thC
10621					2	5															12thC
10623					1	3											1	5			M14thC
10625					1	6											2	18			M14thC
10627					2	5															12thC
10629					1	6															12thC
10631					1	39	1	6													12thC
10633					49	339	7	111									6	88	1	7	M14thC
10812					6	17															12thC
10906					1	2															12thC
10915					2	3	3	4					2	5	1	10	2	10			M14thC
11107					10	37	2	6													12thC
11108					8	19															12thC
11110					11	39															12thC
11114					1	19															12thC
11126					1	3															M14thC
11144					5	32															12thC
11146					5	24	1	5													12thC
11147					1	1															12thC
11148					2	8															12thC
11206					2	8	6	44													12thC
11212					19	163							6	21			5	28			M14thC
11218	1	8																			11thC
11219					9	86															12thC
11223					3	16															12thC
11229							1	41													12thC
14205							8	34													12thC
14284					1	5															12thC
14704					5	36	3	8											1	15	M14thC
14706	1	7			8	123	1	11													12thC
14708					1	3															12thC
14804					2	3															12thC
14805					1	12															12thC
14806					13	45	2	12									2	19			M14thC
14807					6	24	1	6													12thC
14808					20	111	2	31													12thC
14813					1	2							1	3			7	11			M14thC
14830	2	8																			11thC
14832					8	75															12thC
14846					1	38															12thC
14848					1	5															12thC
14852					13	46															12thC
14854					4	55					5	75									M12thC
14856					13	139															12thC
14860					1	4															12thC
14862					1	10															12thC
14908					4	18			2	8											M14thC
14908																	3	5			M14thC

Fabric type	B01		C12		B07		C03		C59a		F319		C09		C10		E01		E02		Date
	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	
14912																	1	7	1	11	M14thC
Total	10	99	1	2	269	183 1	48	387	3	19	5	75	9	29	1	10	29	191	3	33	

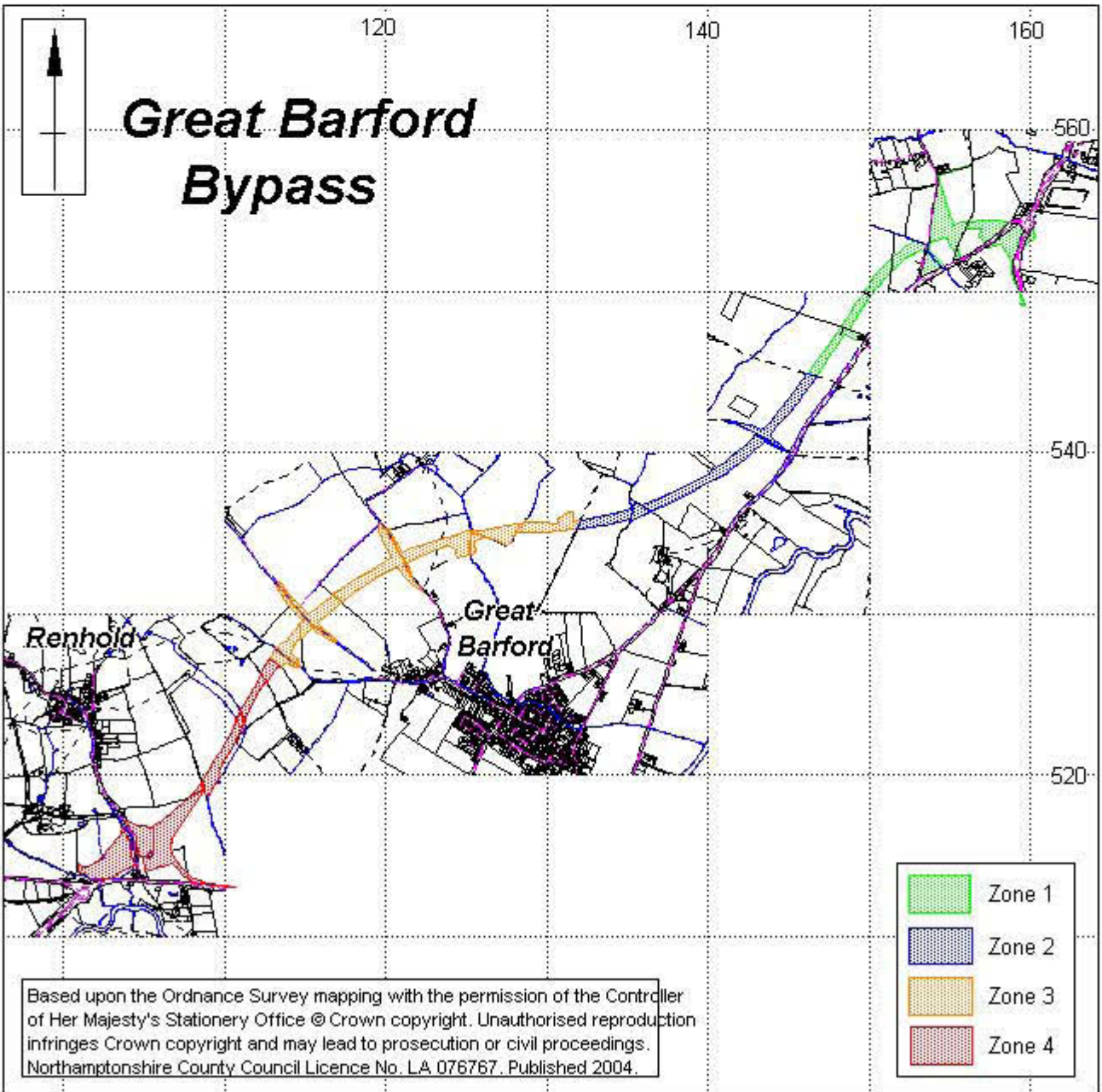
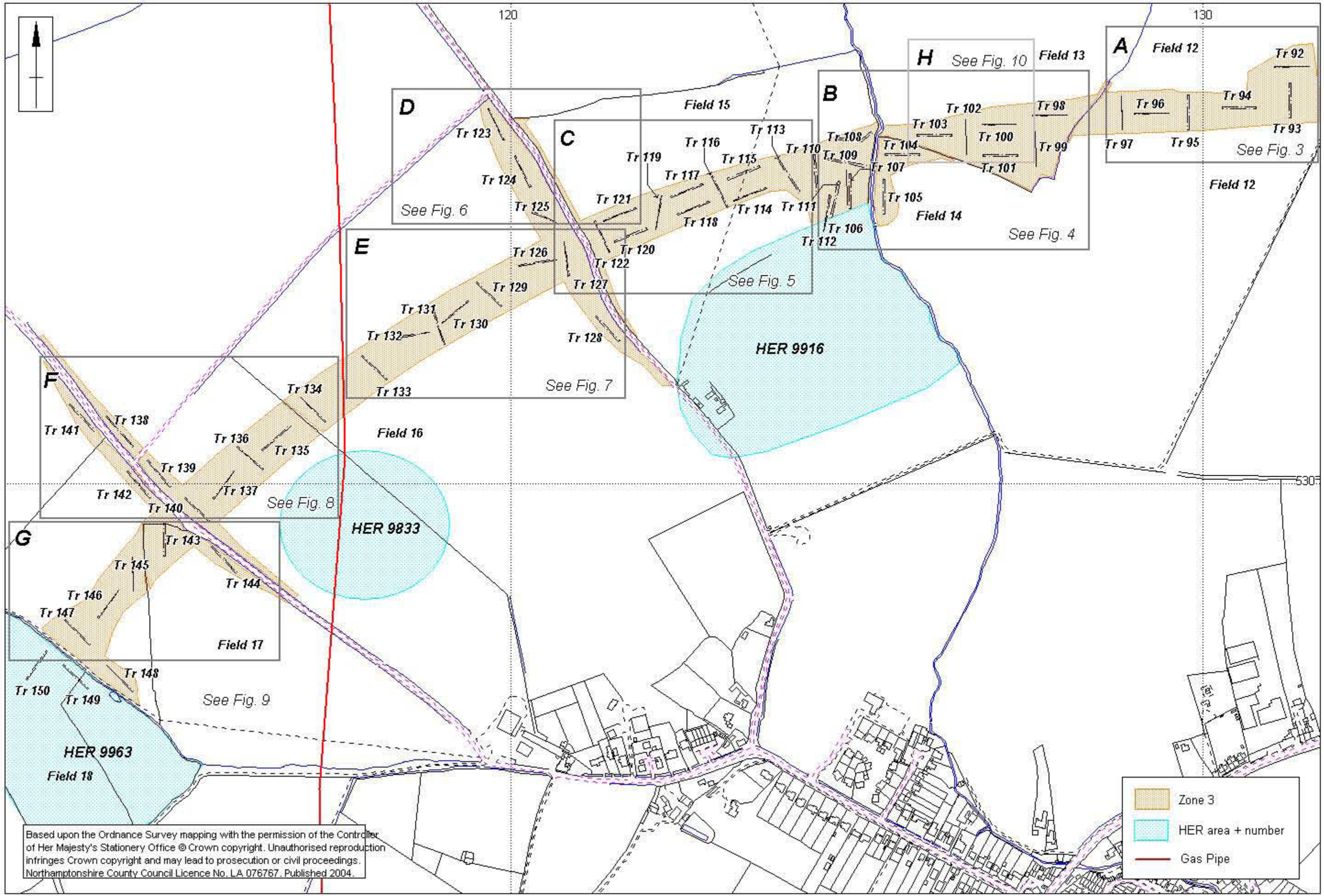


Fig. 1

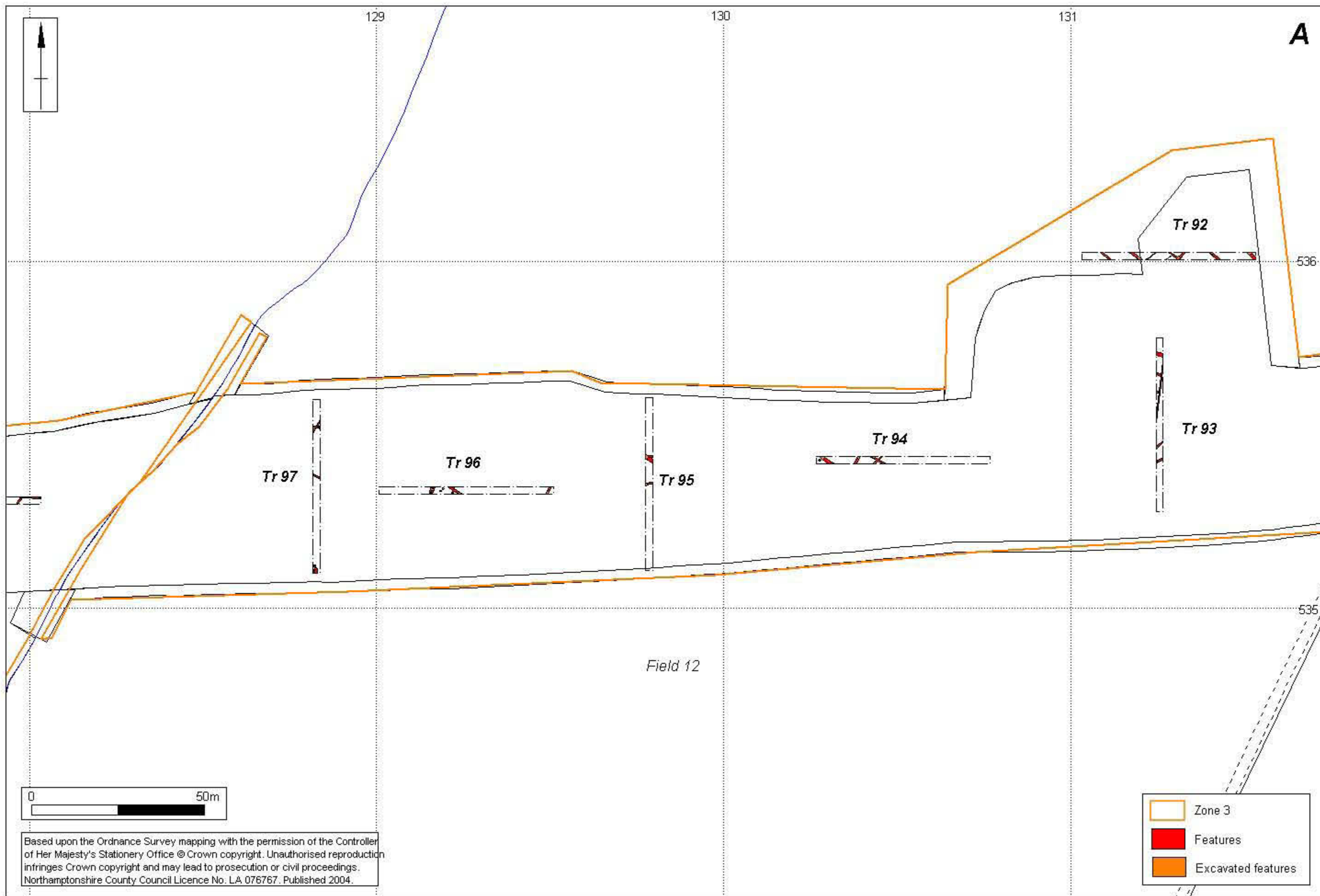


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- Zone 3
- HER area + number
- Gas Pipe

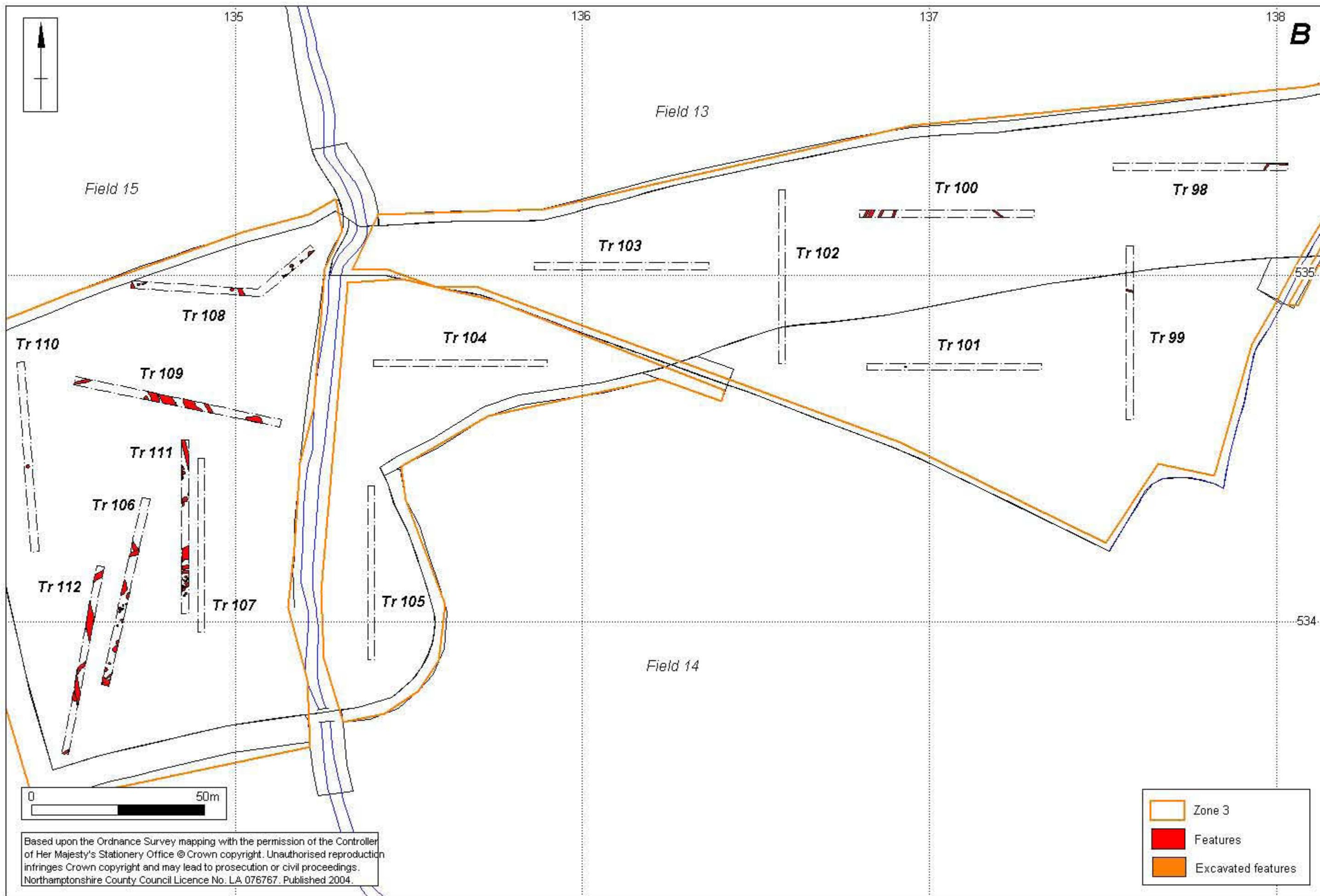
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Fig. 2



Scale 1:1000

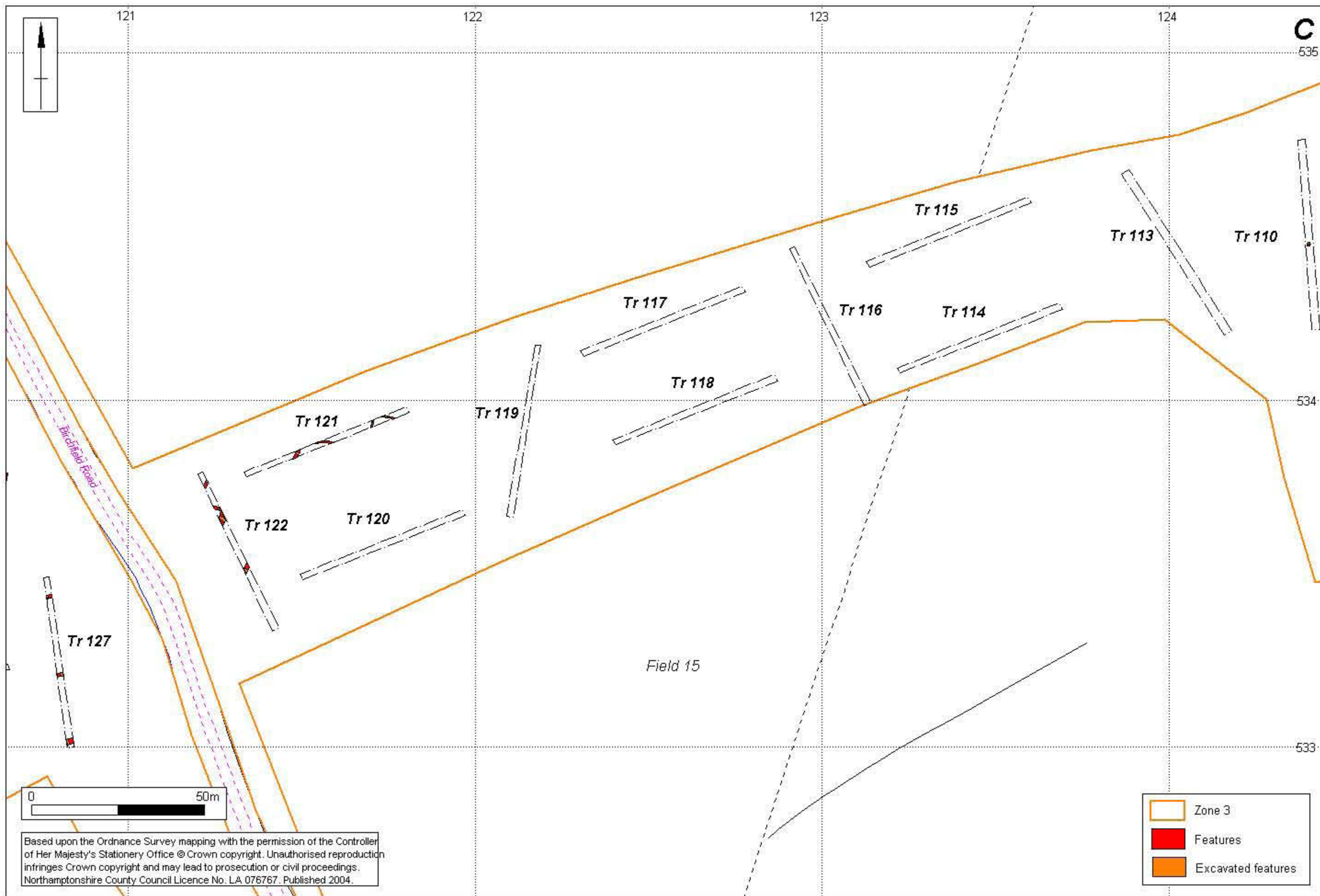
Fig. 3



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Scale 1:1000

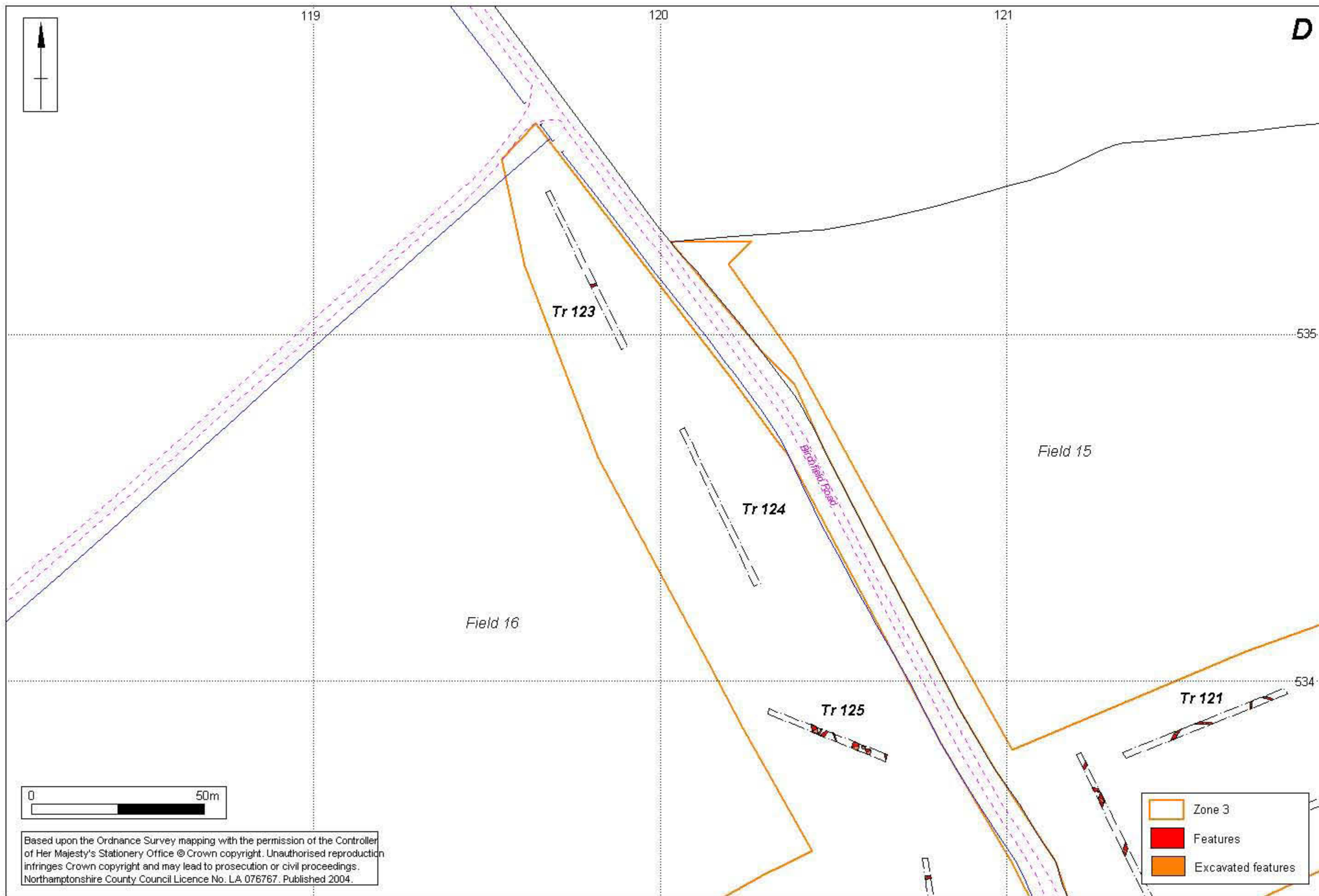
Fig. 4



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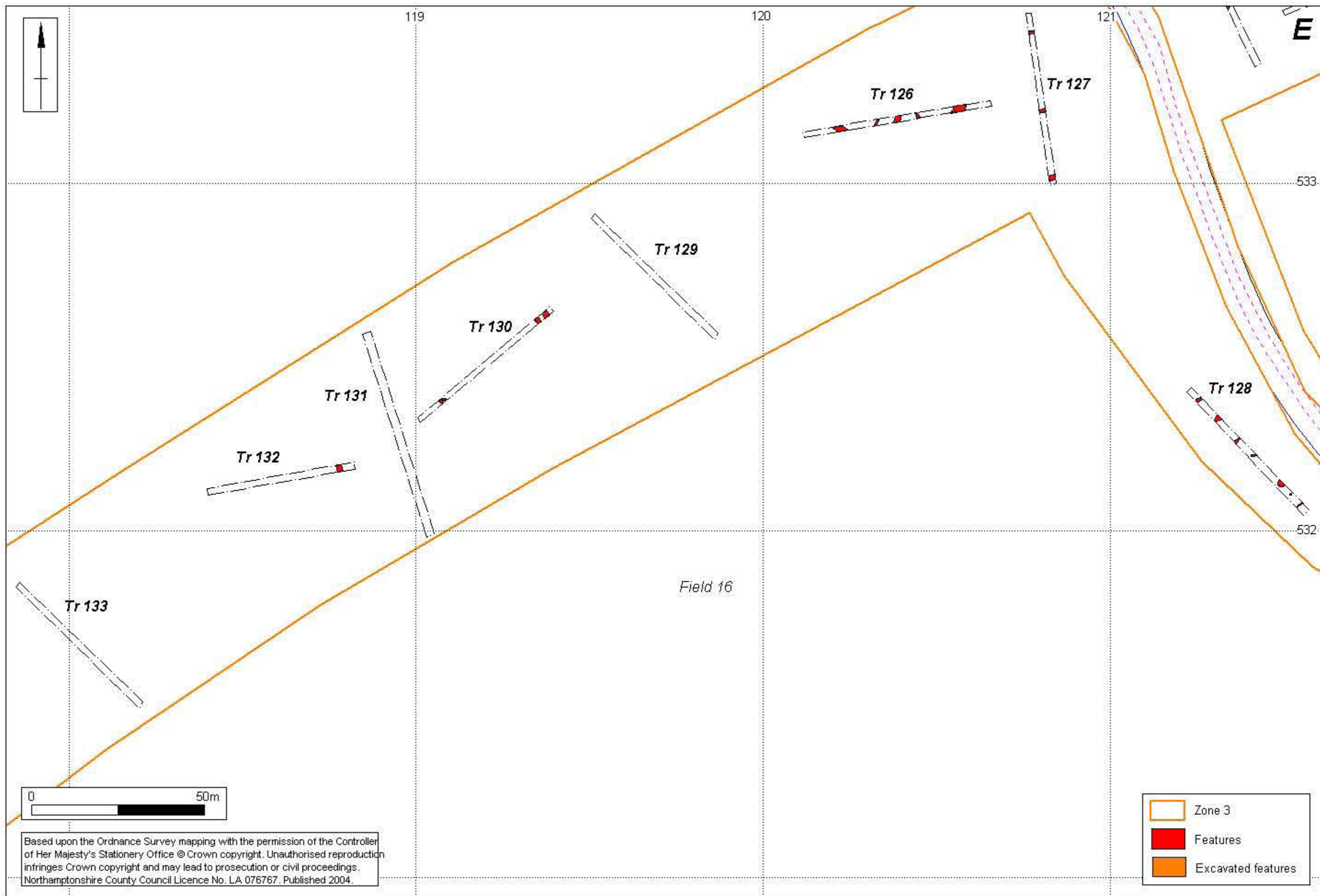
Scale 1:1000

Fig. 5



Scale 1:1000

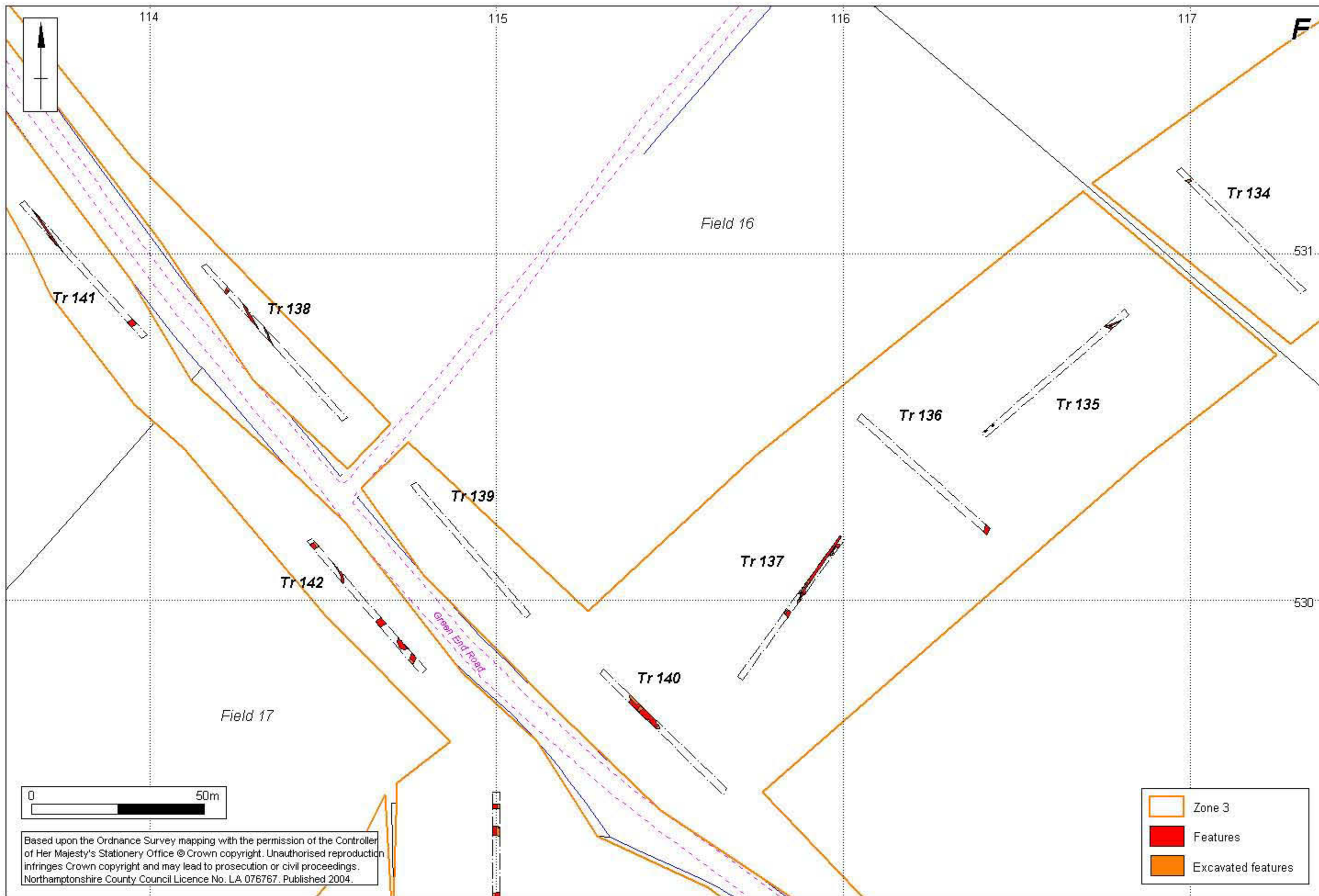
Fig. 6



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Scale 1:1000

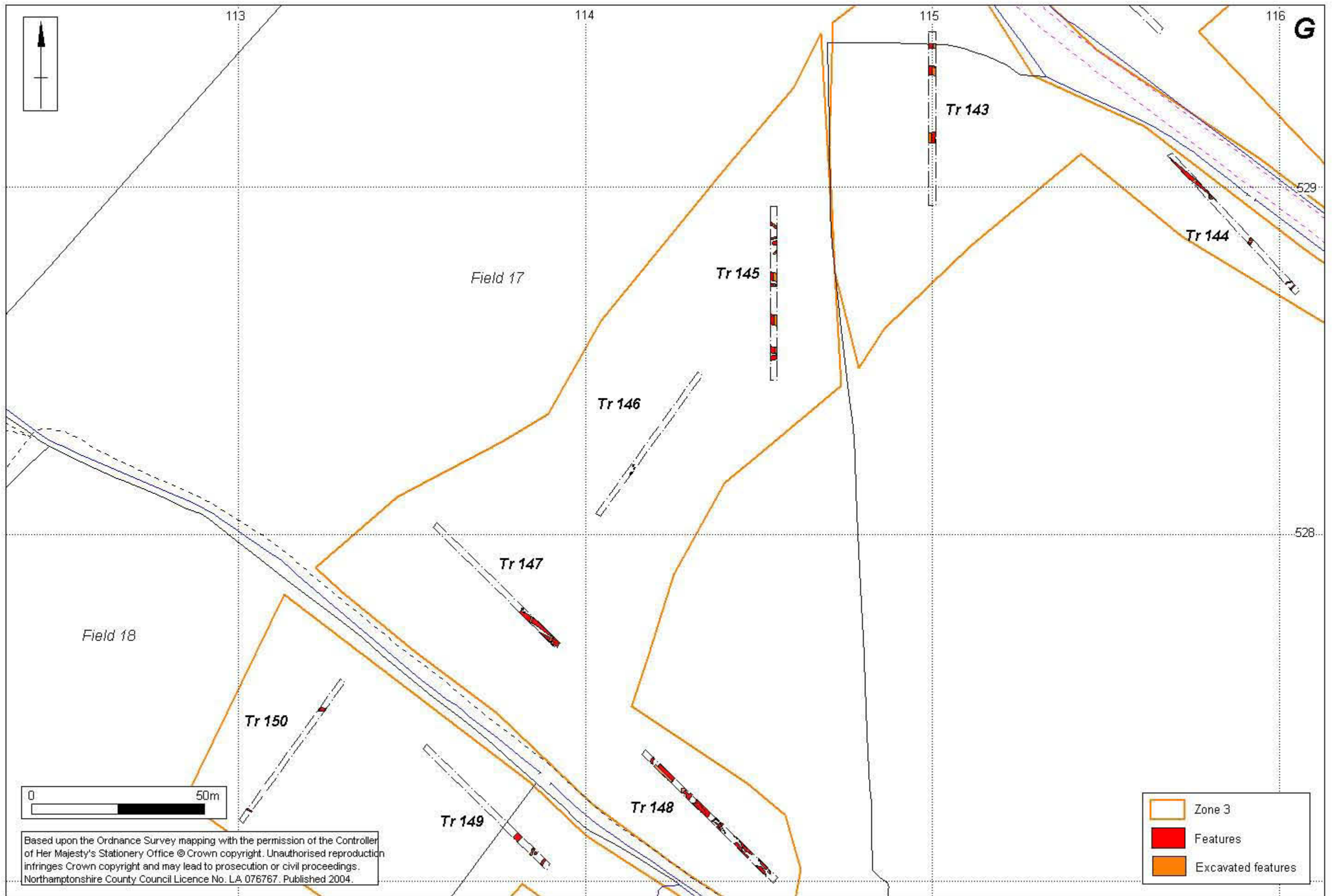
Fig. 7



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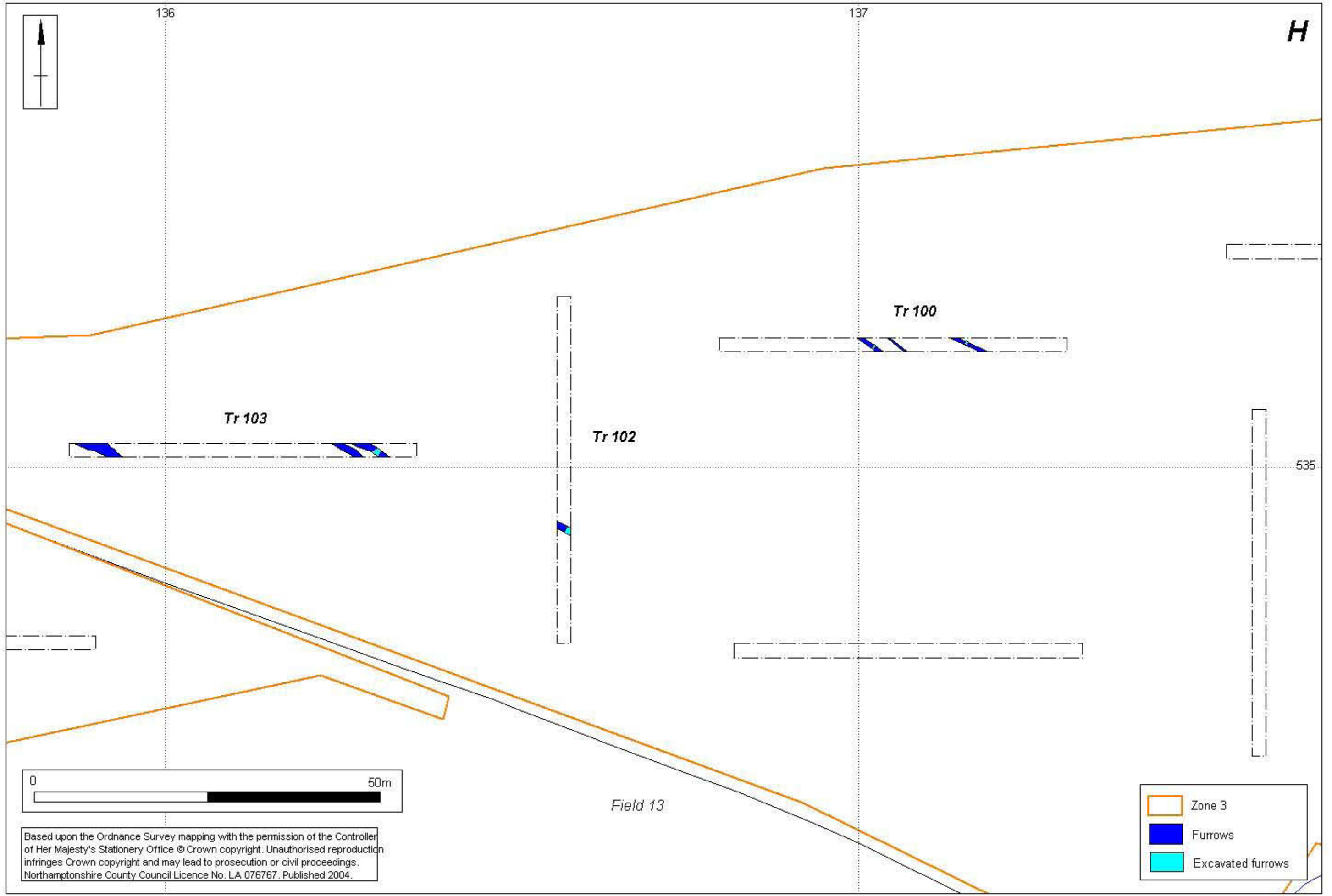
Scale 1:1000

Fig. 8



Scale 1:1000

Fig. 9



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Scale 1:500

Fig. 10