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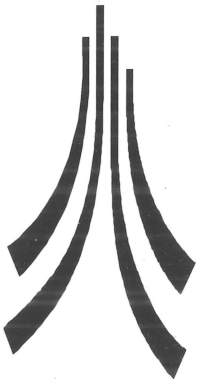

September 1995

KIRKBY STEPHEN BYPASS

Cumbria

Archaeological Evaluation

Commissioned and funded by:

Cumbria County Council

Kirkby Stephen Bypass
Cumbria

Archaeological Evaluation

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EXECUTIVE SUMMARY

In June 1993, at the request of Cumbria County Council, Lancaster University Archaeological Unit (LUAU) produced a Phase 1 Archaeological Assessment of three proposed alternative routes of the A685 Kirkby Stephen Bypass. In March, 1995 LUAU was commissioned to prepare a project design for evaluation works, on the line of the Outer Western Route B. This design was amended in July 1995. This report presents the results of this evaluation work, namely landscape survey, geophysical survey, and limited trial trenching.

Kirkby Stephen is situated on a low ridge above the River Eden. Many examples of prehistoric settlements and field systems have been identified on the limestone uplands surrounding the town. Local place-names provide evidence of both Anglian and Norse settlement in the area, and, after some decline in settlement in the medieval period, perhaps connected with both Scottish raiding and the Black Death, the area appears to have had a peaceful return to prosperity, as the town became both a market centre, and a staging post on the route between Kendal and the North East (Lambert 1993a).

In the evaluation phase of work a number of sites were selected for detailed survey in order to create a permanent record of features that will be adversely affected by the road construction. The topographic survey was undertaken within a larger corridor than that for the actual road, in order to place the sites within their wider context. The selected sites were mapped at a scale of 1:500 (by hachure), and full contour surveys were undertaken where appropriate. The instrument survey was accompanied by a written description of the surveyed features and a photographic record. This work proved invaluable in recording the considerable number of upstanding earthworks along the proposed route of the bypass. Forty-six sites were recorded, the majority of which were hollow ways. Other sites included quarries, possible structural platforms, and a series of field systems. The site types divided into two groups, on the whole corresponding with upland and lowland areas. Of the upland sites, it is suggested several of the hollow ways in fact represent a single continuous route from the far south of the site, over Wiseber Hill, and down to Greenriggs Farm. The lowland field systems at the northern end of the route can be divided into wide and narrow ridge and furrow, in general the wider field systems more likely to be attributed to the medieval period.

The area of the geophysical survey lay at the northern end of the proposed road route, in an area where surface indications of settlement (other than cultivation) were unlikely to survive, because of subsequent ploughing activity. This work located both ridge and furrow, faintly visible on the surface, and below ground abnormalities, including two possible archaeological features, although upon excavation these were found to be of natural origin.

Thirty greenfield trenches were excavated in order to establish the presence or absence of any previously unsuspected archaeological deposits, and, if established, to define their character, date, and state of survival. In addition four deliberately targeted trenches were located in order to examine earthwork features and/or areas of suspected archaeology. All trenches were 30m long, unless otherwise stated, and

the majority were aligned approximately north south parallel to the road corridor. Topsoil removal was undertaken using a mechanical excavator. All other excavation was by hand. In general, the trial trenching found very similar stratigraphy throughout the area. The natural subsoil was very hard orange brown sandy clay with occasional patches of river gravel and sporadic outcrops of limestone. In some cases the natural material lay directly below the topsoil, but more usually it was seen underlying a deposit of similar but looser orange brown sandy clay. Topsoil over the entire area comprised mid brown sandy clay. In general, nothing of archaeological significance was found in the greenfield trenches. However, in the great majority of cases where sites were observed as topographic anomalies, some stratigraphical variations were seen during the trial trenching. A number of hollow ways were examined, as were several 'platforms' (which are now thought to be associated with a 1930's golf course/practice range) and several linear features and field systems. Given that less that one fifth of the originally proposed trenches were excavated, and only five of the 24 sites designated as of archaeological importance (Lambert 1993b) were investigated, and that the three sites regarded as having high archaeological potential were not examined, the low incidence of archaeological features found during this period of evaluation was not unexpected, and is not necessarily indicative of the area as a whole. It is therefore anticipated that investigation of the sites for which it was not possible to gain assess would increase the frequency in which deposits of archaeological significance were found.

It is recommended that additional trial trenching would be required in order to evaluate fully the archaeological potential of the route prior to road construction. LUAU would welcome discussions to this end in the near future.

1. INTRODUCTION

1.1 Project background

In June 1993, at the request of Cumbria County Council, Lancaster University Archaeological Unit produced a Phase 1 Archaeological Assessment of the three alternative routes of the A685 Kirkby Stephen Bypass (Lambert 1993a). Following this, a further assessment report was commissioned on a revision to the Outer Western Route B. This was completed in August 1993 (Lambert 1993b).

In March 1995 LUAU was commissioned to prepare a project design for evaluation works on the line of the Outer Western Route B, the design was subsequently amended in July 1995. This report presents the results of this phase of evaluation work. Figure 1 shows the proposed road route at a scale of 1:50,000.

1.2 Archaeological background

Kirkby Stephen is situated on a low ridge above the River Eden. To the east limestone hills rise beyond Nateby to the watershed with Swaledale, and to the north-west of the town is a broad valley. Medieval fields lie immediately west of Kirkby Stephen, while to the south are the intakes which mark the transition between the enclosed former arable fields and the upland commons.

The history and archaeology of the Kirkby Stephen area are only described in brief in this document (for further discussion see Lambert 1993 a and b).

Many examples of prehistoric settlements and field systems have been identified on the limestone uplands surrounding Kirkby Stephen. In contrast, arable farming in the valleys has probably destroyed an equivalent landscape of Iron Age and earlier settlement. The earliest activity in the area was perhaps the establishment of a prehistoric trade route, first used in the Neolithic period to transport stone axes from Langdale to the east of England.

The Romans appear to have had little impact on Kirkby Stephen despite activity on Stainmore. Road alignments have been suggested in the area, perhaps joining the forts at Brough-under-Stainmore and Brough-by-Bainbridge, although this is uncorroborated by excavation evidence.

Local place-names provide evidence of both Anglian and Norse settlement in the area. Fragments of Anglian crosses have been found in Kirkby Stephen's churchyard, and there are numerous place-names deriving from Old English, e.g. Winton (*winn-tun*, the 'grazing farm'). The Vikings christened Kirkby Stephen, the 'settlement with a church', and carved stones indicate its continuing use by the Norse settlers.

There is no clear indication when Kirkby Stephen became a town, but during the medieval period, the settlement must have been under constant threat from the Scots, the defensive nature of its street plan bearing witness to this, as does the construction, in the fourteenth century, of Hartley Castle and Wharton Hall, both of

which have been subsequently destroyed.

After some decline in settlement in the medieval period, perhaps connected with both Scottish raiding and the Black Death, the area appears to have had a peaceful return to prosperity, as the town became a market centre, and later a staging post on the route between Kendal and Newcastle.

The initial archaeological assessment of the three proposed routes for the Kirkby Stephen Bypass identified 176 sites of archaeological interest (Lambert 1993a). The subsequent work on the Outer Western Route B (Lambert 1993b), identified it as affecting 24 sites of archaeological importance, including 12 previously unrecorded sites. Three sites along this route were identified as having high archaeological potential. Two are field systems, at Eskew Lane (Site 129), and Stobars Lane (Site 184), while the third is an ancient route way, Greensike Lane (Site 186).

1.3 Project rationale

Although construction of the Kirkby Stephen Bypass is not scheduled for the immediate future, geological test-pitting and augering was to be undertaken on the proposed line during the summer months of 1995. In order to simplify access arrangements for the archaeological evaluation, it was intended that the geological works should be carried out simultaneously, but only where the consent of landowners and tenants could be gained. This proposal was initiated by the County Archaeological Curator, Mike Daniells, and represented the maximum level of archaeological works which could be executed, given the constraints of access and funding which pertained at that time. These were landscape survey on all sites recommended in the initial assessment, limited geophysical survey, and limited trial trenching.

1.4 Health and safety

Both Lancaster University and LUAU maintain Safety Policies, the latter based on the SCAUM (Standing Conference of Unit Managers) Health and Safety Manual (1991).

In keeping with current Health and Safety at Work Regulations, prior to commencing on-site work a risk assessment for each activity was completed. A copy of these risk assessments together with the LUAU safety manual was submitted to the client.

Before excavation commenced, information (supplied by Cumbria County Council) from the proper statutory bodies was consulted to obtain the location of all underground and overhead services. The position of all trenches was also scanned for underground cables using a U-scan cable detection device.

2. METHODOLOGY

2.1 Landscape survey

Although access had already been established, all landowners/occupiers were contacted prior to work on their land.

The initial assessment work (Lambert 1993 a and b) had provided a rapid survey, at a scale of 1:2500, of the sites affected by the route. In the evaluation phase of work a number of these sites were selected for detailed survey in order to create a permanent record of features that would be adversely affected by the road construction. The survey was undertaken within a larger corridor than that for the actual road, in order to place the sites within their wider topographical environs.

All sites were surveyed at a scale of 1:500 at a basic LUAU Level II, which involves the generation of complete hachured interpretive drawings of the earthworks. Where appropriate, some sites (e.g. 93, 216 & 231) were enhanced by the addition of height attributed detail points across the area (at 5m separation) over the extent of the site to enable the generation of fully surface modelled, contour surveys were undertaken. This is defined as an LUAU Level III survey and acts as a mitigation record of the site. The instrument survey was accompanied by a written description of the surveyed features and a photographic record. The descriptions have been included, in full, in the landscape gazetteer (Section 8), and LUAU survey levels are described in Appendix 1.

In addition to the topographic survey, the precise location of the evaluation trenches was recorded by instrument survey, during the trial trenching.

Survey stations were established using permanent ground markers (established by Cumbria Highways) by means of closed traverse. The survey was conducted using a Carl Zeiss ELTA 4 total station and a Husky Rec 500 datalogger, with Microsurveyor software. All archaeological features were drawn up and checked in the field.

The digital survey data was transferred to a CAD system. Contour details were generated using a DGM3 software. All survey drafting was undertaken within the CAD system (FastCAD). The data was edited and annotated for presentation, and the survey plans were produced using a Hewlett Packard Draftmaster AO pen plotter.

Digital survey data was provided by Cumbria County Highways and Transportation, which was output into the CAD system, allowing the superimposition of selected topographical survey data onto the overall road survey.

2.2 Geophysical survey

The area for which geophysical survey had been selected as an appropriate technique lay at the northern end of the proposed road route, in the region of the roundabout at the B6259. The survey was undertaken by Geophysical Surveys of

Bradford. The area was sub-divided by a hedge, and was surveyed as two blocks. The location of these areas, A and B, is shown in Figure 2 at a scale of 1:2500. The survey grid was established by Geophysical Surveys of Bradford, and tied in by staff of LUAU. Conditions were suitable for survey with the ground being gently undulating and under pasture.

A Fluxgate Gradiometer (Geoscan FM36) was used during the survey. This instrument comprises two fluxgates mounted vertically apart, at a distance of 500mm. The gradiometer is carried by hand, with the bottom sensor approximately 0.10m to 0.30m from the ground surface. At each survey station, the difference in the magnetic field between the two fluxgates is conventionally measured in nanoTesla (nT) or gamma. The fluxgate gradiometer suppresses any diurnal or regional effects. Generally features up to one metre deep may be detected by this method.

A summary greyscale image and an interpretation diagram are provided in Figures 3 and 5 at a scale of 1:1250. The greyscale format divides a given range of readings into a set number of classes. These have a pre-defined arrangement of dots or shade of grey, the intensity increasing with value. This gives an appearance of a toned or grey scale. Figure 4 displays the unprocessed data as a dot density plot, showing the responses from the ridge and furrow. Dot density displays use minimum and maximum cut-off levels, any reading below the minimum appears as white, and above the maximum as black. Any reading that lies between these two levels will have a specified number of dots depending on the relative position between the levels.

2.3 Field evaluation

The purpose of the trial trenching was two fold. Thirty greenfield trenches were excavated (in areas designated as accessible), in order to establish the presence or absence of any previously unsuspected archaeological deposits, and, if established, to define their character, date, and state of survival. In addition four deliberately targeted trenches were located in order to examine earthwork features and/or areas of suspected archaeology (identified during the assessment phase of the project), in order to assess their nature, extent, and chronology. The objectives of such a study would be to detect any below ground archaeological features, particularly prehistoric activity, and to identify their character and state of preservation. Prehistoric sites often contain no upstanding archaeological features, and are therefore not detectable during field inspection in non-arable areas.

All landowners and/or occupiers were contacted prior to trenching work, and should be thanked for their co-operation. Condition surveys noting the ground cover, and the 'state of repair' of gates, field boundaries, tracks, and other structures were completed prior to excavation. A photographic record was taken both prior to excavation and after re-instatement. Wherever possible access to the site of the trenches was either around the edge of fields, or confined to previous vehicle tracks to minimise damage.

Grid-pegs to show the location of all trenches were laid-out by LUAU surveyors during the Field Survey.

All trenches were 30m long, unless otherwise stated (see Appendix 2), and 1.52m wide. The majority were aligned approximately north south parallel to the road corridor. Variation to both the length and alignment of trenches was to section either known or suspected archaeological features.

Topsoil removal was undertaken using a mechanical wheeled excavator fitted with a toothless ditching bucket. All other excavation was undertaken by hand, in an archaeologically controlled and stratigraphic manner. All trenches were backfilled using the excavated material concluding with the replacement of the topsoil and turf.

In line with current guidelines no significant archaeological deposits were entirely removed or underwent particularly intrusive inspection.

The recording methods employed by LUAU accord with those recommended by English Heritage's Central Archaeology Service (CAS). Recording was in the form of *pro forma* trench sheets, and where necessary individual context sheets. Accurate scale drawings (plans at 1:20 and sections at both 1:10 and 1:20) were made where appropriate, and photographs (black and white prints and colour transparencies) were taken as necessary. On-site assessment of the deposits suggested it was not necessary to take environmental samples. All finds were handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

3. LANDSCAPE SURVEY RESULTS

The topographic survey of these field systems has enabled the earthworks to be typologically studied and phased through non intrusive methods. The level 2 survey provided a basic interpretative record for evaluation purposes, which in some small sites was sufficiently detailed to act as mitigation. The Level 3 contour survey of specific sites provided a detailed, relatively objective mitigation record of the more significant sites. These fully modelled surveys were able to emphasise features which would have otherwise been difficult to discern. The Level 3 survey of the field system at site 231 and 237 shows clearly, eroded lynchets which would were difficult to recognise by visual observation alone.

The landscape survey recorded a total of 46 archaeological sites. Many of these were hollow ways of indeterminate date. In the central and northern sections of the proposed bypass were a series of very significant strip lynchet systems. There were also three quarries and evidence of other smaller scale limestone extraction. Other sites included three possible structural platforms and a number of cattle troughs.

No prehistoric sites were identified within the survey area despite the presence of a number of pre-Roman features in the vicinity (the tumulus on Wiseber Hill, and settlements to the north-west of the survey area). The paucity of prehistoric remains may reflect subsequent agricultural disturbance, or that they have not survived as surface evidence.

3.1 Southern Upland Section

The sites were generally topographically specific, with the majority of evidence for sites being confined to the lower ground and valley sides at the north end of the study area. There was little convincing evidence of arable activity on the upland stretch of the road route, the features in this area were mainly hollow ways and field boundaries. The main surviving area of hollow way comprised sites 214, 215 and 216, where there was the confluence of three alignments of the same route, with a further complex of hollow ways occurring at site 93 in the south. It is quite possible that these trackways represent the precursor to the modern road into Kirkby Stephen from the markets of Sedburgh and Kendal in the south. Long used and informal routeways have existed for many years over the Cumbrian fells. Chosen chiefly for their direct route and ease of passage, these routeways became well established. As they were unpaved the hollow ways routes would have become impassable, with mud and running water at various stages, and so alternative lines will have been adopted. The complexity at these sites suggest that the route was in use for a considerable period and may be an indication that this was the line of a major communication route.

It is possible several of the hollow ways represent a single continuous route from the far south of the area, over Wiseber Hill, and down to Greenriggs Farm, effectively avoiding a steep incline (and mirroring the proposed road route). This can be tentatively traced, although non continuously, through sites 203, 212, 213, and 214, 215, 216, 218, up to the present Intake Lane. Trackway 216 was long

established prior to the enclosure of the area, as the track does not respect the current gate way into Intake Lane. The tentative route then continues northwards as hollow ways 220 and 224 , which although individual tracks share the same alignment. Hollow way 224 is defined further north by the large field boundary 228, until it is truncated by the railway. The well defined field system 231 is bounded on its eastern side by a mature tree lined, stone revetted, green lane. This lane then continues, out of the survey area, to the south and east of field systems 232 and 233, where it joins another green lane, formerly known as Stobars Lane and enters Kirkby Stephen from the west opposite the Church.

Other predominant features in the south of the survey area were a number of quarries, although none of these appear to have been extensively exploited, and some of the smaller sites, (e.g. 207) appear to have been speculative excavations, or low scale extraction, possibly for the repair or construction of walls or field barns. There were limestone outcrops in the southern area of the route, a large quarry to the north-west of site 200, and a number of lime kilns situated at the foot of Intake Lane, indicating low level, agricultural lime working.

3.2 Northern Lowland Section

The northern part of the road route saw the topography change from exposed, open moor, and rough grassland, to sheltered valley and flood plain. The nature of the archaeological landscape changed with the topography to one predominated by an arable economy. The field systems appeared to date back to the medieval period. The complex site 231 comprises a well-preserved strip lynchet field with up to 12 well defined, and prominent lynchets. The lynchets have a slightly irregular separation and are orientated down-slope. There individual profiles are typical in that they have a gentle sloped, positive lynchetted edge on the southern side and a sharp, negative profiled northern side. The western, downslope, field bank was well defined, measuring approximately 2m in width, with a small ditch on either side. The eastern bank was also quite prominent. It measured 1m wide, and stood to approximately 0.20m in height; it coincided with the line of a former trackway to the east. Beyond the eastern bank the natural slope of the hill had been terraced to meet the well established, tree lined field boundary. These arable earthworks are a typical feature of an open field agricultural system and as such are more likely to reflect medieval rather than post-medieval cultivation.

The occurrence of large lynchets in such an alignment (i.e. downslope), is not typical as most often lynchets are formed in horizontal terraces across the slope. The distinctive 'wave' pattern of each lynchet, with the long, gradual, slope of the southern side being produced through the continuous upcast of plough action. This phenomena was probably the result of the field being ploughed in one direction (south to north), as the gradient of the slope would have been too great for an animal pulled plough. If the field had been ploughed in both directions, the profile of the field would have been regular ridge and furrow earthworks, due to the upcasting of earth from both directions. It can be further assumed that the field system was of medieval origin as the distance between each ridge, although not uniform was

consistently over 10m, thus suggesting that the animals used for ploughing were oxen, a medieval technique, rather than with horses, which were smaller and more maneuverable and only used in the post-medieval period.

The trough, site 234, immediately to the north of field system 231, was situated in a natural hollow and possibly exploited a spring, which may, at one point have formed a small stream. This stream bed can be seen running down to the west, effectively serving as a former field boundary.

Site 237 reflects a further strip lynchet field, where again the lynchets are orientated down-slope. The separation between the lynchets is however slightly narrower, being only about 10m. The profile is not as distinct as those of site 231, which may reflect degradation of the earthworks by subsequent ploughing, particularly at the crown of the hill. Significantly two of the lynchets could not be identified by visual observation because of vegetation obscuration, but were mapped by the full contour system.

The ridge and furrow earthworks of site 245, although much degraded, were situated on the flat, alluvial, flood plain of the river Eden, and measured approximately 9m wide (crown to crown) and were also a possible product of medieval ox ploughing. The ridge and furrow systems to the immediate north of 231 are generally smaller; that of site 232 measured *c* 3m (crown to crown), and that of site 233 measured *c* 5m. Typologically this indicates horse ploughing, and is more typical of post-medieval agriculture. It is however interesting that the field systems occurred so close together, suggesting that site 231 may have been fallow, and hence unploughed during the post-medieval cultivation period.

These relict cultivated landscapes demonstrate that the area has subsequently been subject to pastoral farming practices, and as such reflect they a very significant survival of medieval farming practices.

The survey has identified a significant medieval and post-medieval pastoral and arable farming landscape. Some elements, particularly the lynchet complex of site 231, provide evidence of the intensity of the medieval cultivation in this area, which was probably severely restricted as a result of the change to non-labour intensive pastoralism, following the black death. The subsequent, non intrusive pastoralism has enabled the preservation of these landscapes which are now a valuable record of medieval farming practices in this region.

4. GEOPHYSICAL SURVEY RESULTS

The area of geophysical survey lay at the northern end of the road corridor (Fig 2), where it was thought both prehistoric, Roman, and/or Medieval features may survive, being disguised by hill wash and/or material deposited on the flood plain of the river Eden. Assessment site 140, described as 'relic, parallel field boundaries, oriented east west, the low banks, some with ditches, some with lynchet formation to the west, are parallel to the existing field boundaries, but probably represent the strip fields of an earlier field system' (Lambert 1993b), lay in this area. Figure 5 shows a summary interpretation of the geophysical survey results.

4.1 Area A

A clear trend, aligned approximately east west, was apparent in the raw data, (Figs 3 and 4), and represents ridge and furrow just visible on the surface. Attempts were made to remove the responses from the ridge and furrow with the aim of highlighting any other anomalies of archaeological interest.

A drain visible on the surface produced a clear anomaly in the data and is indicated on the interpretation plan (Fig 5).

A curving ditch type anomaly was visible along the eastern edge of the survey area, and it was thought this may be of archaeological interest. Although trial trenching (Trench 34, Section 9) found possible traces of what was thought to be an old water course associated with the river Eden, no features of archaeological interest were found in the area.

Several isolated ferrous responses were apparent in the data. These are most likely to be due to modern ferrous debris in the topsoil. In the north of the survey area, there was a larger area of modern ferrous disturbance, also found on excavation (Trench 31, Section 9) to be due to modern debris in the topsoil.

4.2 Area B

There was a noticeable increase in the number of isolated ferrous responses in this area (Figs 3, 4, and 5), and the east west trend in the data was more marked, although this was not particularly apparent on the surface.

There was the suggestion of a ditch-type feature on a slightly different alignment along the eastern limit of the survey. It was thought that this may have been archaeologically significant, although the lack of any associated anomalies made this interpretation tentative. Trial trenching (Trench 33, Section 9) found no trace of any archaeological features in this area.

5. FIELD EVALUATION RESULTS

Due to problems with access arrangements, only 34 trial trenches were excavated during this phase of archaeological evaluation. The original brief supplied by the County Archaeologist, Mike Daniells, stated that trenches should be excavated in a 30m grid pattern along the entire length of the road corridor, a pattern implying *c* 200 trenches being therefore necessary to cover the area adequately. Of the excavated trenches, only five were targeted on archaeological sites identified during the assessment phase of work (Lambert 1993 a and b), and the three sites designated as having high archaeological potential (Assessment sites 129 (Eskew Lane), 184 (Stobars Lane), and 186 (Greensike Lane) could not be examined.

In general very similar stratigraphy was found throughout the area. The natural subsoil was on average between 0.30m and 0.40m below the present ground surface. This consisted of very hard orange brown sandy clay usually containing between 5% and 15% sub angular stones, although stone-free material was found at the northern end of the road corridor. Occasional patches of river gravel were found within this material, as were sporadic outcrops of limestone. This natural clay often lay above a hard reddish orange stone-free clay, although investigation was not always to this depth. In some cases the natural material lay directly below the topsoil, but more usually it was seen underlying a deposit of similar but looser orange brown sandy clay. Topsoil over the entire area comprised mid brown (and at the northern end of the corridor mid to light brown) sandy clay. All trenches were excavated in areas of turf, for the most part rough scrub, although Trenches 17, 18, and 19 were excavated in a meadow, and Trenches 30 to 34 lay in better quality grassland.

Seventeen trenches (2, 3, 5, 6, 8, 9, 10, 11, 13, 14, 15, 17, 18, 19, 22, 26, and 27) were genuine greenfield trenches excavated in areas where no obvious archaeological or topographical anomalies were visible on the surface. Nothing of archaeological significance was found in these trenches.

Four trenches (4, 7, 24, and 28) were excavated in order to assess areas of amorphous topographical anomalies, although only three of these contained anything other than the usual stratigraphy. Trench 4 contained a natural spread of sub angular gravel in a grey sandy clay matrix, which coincided with a hollow in the topography; and Trenches 24 and 28 contained linear features, probably naturally formed and perhaps eroded by water.

Three trenches (1, 12, and 16) were excavated to examine hollow ways. Those in Trenches 1 and 16 showed an increase of stone content in the base of the hollow way, perhaps due to either hill wash or deliberate deposition although this layer did not constitute a metalled surface. In contrast, the hollow way examined in Trench 12 showed no increase in stone content.

Trench 29 was positioned in order to examine a linear feature, part of Assessment site 113. This comprised a banked feature, with the presumed position of a

boundary clearly visible on the highest part of the rise, the stratigraphy to the north and south of this point being notably different. To the north, a layer of small (0.05m diameter) limestone fragments separated the topsoil from the loose sandy clay subsoil, while to the south this layer was absent, and the transition between topsoil and subsoil became considerably more nebulous than in other areas. The boundary appears to have been positioned on a natural ridge, as the underlying limestone dropped *c* 0.20m to the south of the feature, although the southern end of the trench showed a gradual rise.

Four trenches (20, 21, 23, and 25) were excavated in the area of what was later found to be a 1930's golf course/practice range. These trenches were positioned in order to cross fairly obvious 'platforms'. Trench 20, excavated across the largest of the platforms, contained two parallel linear features consisting of loosely packed, angular lumps of limestone set in narrow foundation trenches. The northern-most of the two was associated with a stone lined culvert and ceramic drain. Trenches 21, 23, and 25 were all positioned to cut similar, but smaller platforms, and Trench 21 also cut a hollow way. Although Trenches 21 and 25 contained no indication of any platform construction, Trench 23 contained a layer, *c* 3.5m wide and 0.12m deep, of flat, but unworked limestone fragments below the topsoil. These were not bonded, and gave no indication they were the base of anything structural. Conversation with a local farmer (A. Halliday pers. comm.) identified the area as the site of a pre-World War II golf course/practice range dated *c* 1930, and it is thought the linear features found in Trench 20, perhaps represent the final remains of the club house, or possibly an associated structure, while the smaller platforms may be 'tees'.

Finally, five trenches (30, 31, 32, 33, and 34) were excavated at the northern end of the road corridor, in the area of geophysical survey, where a ridge and furrow field system could be seen on the surface (Assessment site 140), and where it was suspected possible prehistoric, Roman, and/or Medieval features may exist, perhaps associated with the crossing of the river Eden. Trenches 30, 33, and 34 were positioned in order to examine areas of possible archaeology shown by the geophysical survey. Examination of the area in Trench 30 found a slight rise and parch mark in the area identified, implying some disturbance, although it is suggested that this may have been modern as excavation failed to reveal any archaeological features. Both Trench 33 and Trench 34 were located in order to examine possible linear features. Nothing of archaeological interest was found in either trench, although it is suggested the area of Trench 34 was originally the site of an old watercourse leading to the adjacent river Eden. Trench 31 was positioned in order to examine a ferrous anomaly shown by the geophysical survey. This was probably the result of a large iron bar of modern origin discovered in the topsoil. Trench 32 was located in an area of no obvious archaeology, and revealed no features of archaeological interest.

Despite a policy of total collection very few finds were recovered. Most derive from topsoil and are manifestly recent in date. Only the fragmentary horseshoe from Trench 1 is of any archaeological significance and may provide a date for the continuing use of the hollow way, attesting to its existence by the late medieval or early post-medieval period (Fifteenth to eighteenth century).

6. DISCUSSION

The landscape survey proved invaluable in recording the considerable number of upstanding earthworks along the proposed route of the bypass. Forty-six sites were recorded, many of which were hollow ways. However they also included a very significant series of lynchetted open fields in the central and northern section of the proposed bypass. Other sites included quarries (for limestone extraction), possible structural platforms. The site types divided into two groups, on the whole corresponding with upland and lowland areas, the majority of cultivation sites/field systems being confined to the lower ground at the north end of the route. Of the upland sites, it is suggested several of the hollow ways in fact represent a single continuous route from the far south of the area, over Wiseber Hill, and down to Greenriggs Farm. The earlier cultivated features were possibly the lynchetted fields however, there were also a couple of fields containing very broad ridge and furrow (9m crown to crown), which similarly may reflect a fairly early date.

The geophysical survey was undertaken in an area where surface indications of settlement (other than cultivation) were unlikely to survive. It was successful in locating both ridge and furrow, faintly visible on the surface, and below ground abnormalities, including two possible archaeological features, although upon excavation these were found to be of natural origin.

Few features of archaeological importance were located during the trial trenching. However, given that less that one fifth of trenches originally recommended were excavated, and only five of the 24 sites designated as of archaeological importance (Lambert 1993b) were investigated, and that the three sites regarded as having high archaeological potential were not examined, the low incidence of archaeological features found during this period of evaluation was not unexpected, and is not necessarily indicative of the area as a whole. It should be stressed that in the great majority of cases where sites were visible topographically (whether or not they had been identified during the assessment stage of this project), some stratigraphical variations were seen during the trial trenching. It is therefore anticipated that investigation of the sites for which it was not possible to gain access would increase the frequency in which deposits of archaeological significance were found.

7. RECOMMENDATIONS

LUAU conducts evaluations in accordance with the Institute of Field Archaeologists' Code of Conduct and best practices, and also in the light of *The management of archaeological projects* (English Heritage 1991). Our concern must be to protect and preserve archaeological sites wherever possible, and only where this is not feasible are destructive techniques advocated. Our aim is to recommend the appropriate action which will achieve the recording objective, without any waste of resources. In this case, we consider that the recording strategies recommended are the minimum acceptable, and hence an alternative is likely to prove more costly; but alternatives have been suggested wherever possible.

7.1 Trial Trenching

The field survey work was completed to the original design, but the trial trenching undertaken represented only a fraction of that originally proposed. Trenching has evaluated the fields at the southern end of the route and also the northern most field. The central and northern sections of the route have not been adequately evaluated by trial trenching. It is therefore recommended that additional trial trenching would be required in order to evaluate fully the archaeological potential of the route prior to road construction. From the surface evidence, there are some areas in particular, that warrant further trial excavation. In the central section of the proposed route are a series of early lyncheted fields. The agricultural features themselves are unlikely to reveal much as a result of trial trenching; however their survival demonstrates that the area has not been subject to later disturbance or intensive modern cultivation and there is consequently the potential for evidence of pre-cultivation features.

TYPE IN SECTION FROM LAST PD/REPORT

7.2 Protection

Certain features can be protected during and after road construction, provided that contractors and farmers are aware of their existence and historical value. Those recommended for protection are features, which lie on the periphery of the construction corridor or are partially impacted by the corridor.

Sites 231 and 237 area field containing remarkable lynchet system. The corridor extends through the eastern section of site 231 and through the middle of site 237 and will result in significant destruction to the field system. The damage should be minimised by narrowing the corridor where possible.

Hollow way complex 215-9 will be affected by the corridor extending through the western half. Any narrowing of the corridor through this section will improve the survival of the complex.

7.3 Watching brief

All earthmoving operations in areas of archaeological potential should be monitored by an archaeologist conducting a watching brief. In the case of the Kirkby Stephen Bypass, investigations so far have demonstrated that the entire area to be affected by road construction has archaeological potential. Provision for an archaeological inspector to monitor the construction process is therefore considered essential.

LUAU has considerable experience of providing and managing archaeological inspectors conducting watching briefs of linear developments, and is able to supply the staff, and the necessary management infrastructure, if required.

If, during construction, areas of peat are traversed, provision should be made for a palaeoenvironmentalist to carry out an auger-core transect of the affected area. The peat deposits should be closely monitored, as they may preserve aspects of prehistoric human occupation.

8. LANDSCAPE SURVEY GAZETTEER

The surveyed sites were numbered in relation to those sites identified during the initial surveys, with additional components being numbered separately, starting at 200. The sites were numbered at the time they were recorded and therefore do not form a numerical progression through the survey area. The sites progress from south to north.

N/A = Not applicable

Site number **93**
Trench number N/A
Site type Hollow way
NGR NY 75873 06613
Figure No. 12, 23

Description
A series of shallow intersecting hollow ways. The two main features were aligned north south and run parallel to the present road, either side of a low flat mound *c* 25m long and 6m wide. These then split into a series of hollow ways, with two running in deep curving hollows, up to 2m, down the slope to the west. Two more continue parallel to the road until they are truncated by a small ditch for the present dry stone wall. They are probably associated with sites 203 and 204 in the field to the north.

Site number **103**
Trench number Trench 21
Site type Platform
NGR NY 76078 07444
Figure No. 14

Description
An irregular, sub rectangular platform, *c* 12m by 8m, on the northern side of the present barbed wire fence. The platform comprised an area of flat ground formed by a large bank on the north and east. The south and east sides merged in to the surrounding topography. There were the remains of a stone constructed wall in the north side of the platform, on either side of an entrance. There was a substantial amount of modern construction material in the vicinity and discussion with the farmer indicated that the structure was probably twentieth century in date.

Site number **110**
Trench number Trench 20
Site type Platform
NGR NY 76069 07517

Figure No. 15

Description
A large distinctive, square platform, 18m square, located on an east facing slope. The western and southern sides had been formed by cutting *c* 1m deep into the slope while the northern and eastern sides had been formed by banking. There were two possible entrances, one in the south east corner 3m wide, and one in the north west (2m wide). The remains of stone work could be seen in the north and east banks, and a modern ceramic drain pipe was noted in the eastern bank.

Site number **113**
Trench number Trench 24
Site type Platforms
NGR NY 76118 07552
Figure No. 15

Description
A pair of square, earth constructed platforms set on an east facing slope. Each platform was 2m square with banked, relatively steep sides, and stood to a height of between 0.10m and 0.15m. No construction material was visible.

Site number **200**
Trench number N/A
Site type Quarry
NGR NY 75858 06788
Figure No. 12
Description
A pair of localised quarry workings to the south of track 97, with outcropping stone fragments visible in the sides. The quarry bottom was no more than 1.80m below the surrounding ground surface. The northern hollow was possibly the result of a linear working, probably along an outcrop of limestone, whereas the southern quarry was more bowl shaped and may have been the result of surface excavation.

Site number **201**
Trench number N/A
Site type Hollow way
NGR NY 75937 06735
Figure No. 12

Description
An approximately north south aligned hollow way *c* 25m long. It was about 3m in width, with a maximum depth 0.20m. At its southern end, the hollow way opens out towards feature 202, an earth bank, which would suggest the bank was the earlier feature.

Site number **202**
Trench number N/A
Site type Bank
NGR NY 75922 06703
Figure No. 12

Description
A relatively wide linear bank, on an north-east to south-west axis. It had an uneven profile, being 0.50m high on the southern side, and 0.20m on the northern edge. The feature was interrupted by hollow way 201, before continuing to the north-east of the existing field boundary. This feature may represents an earlier field boundary.

Site number **203**
Trench number Trench 1
Site type Hollow way
NGR NY 75871 06715
Figure No. 12

Description
A discontinuous relict hollow way adjacent to the current north south field boundary. It was aligned on a north-east to south-west axis and was 4m wide. It was interrupted by the current trackway into the field and is perhaps the continuation of a trackway associated with field boundary 202 to the immediate north-east, and hollow way 201.

Site number **204**

Trench number N/A
Site type Lynchets
NGR NY 75871 06715
Figure No. 12

Description
A pair of lynchets 1m wide and aligned north south on a relatively steep slope. Both were difficult to make out due to the long grass.

Site number **205**
Trench number Trench 7
Site type Platform
NGR NY 75898 06846
Figure No. 13

Description
An irregular rectangular earth mound, which was broader at the northern end. It was

distinctive as an area of flat ground in a predominantly hummocky area; however the terrain made the full extent of the feature difficult to ascertain. It was more prominent in the west, where it appeared to be *c* 16m in length. The southern end was approximately 0.30m above the surrounding topography, whereas in the north in appeared to merge into the south facing slope. A 'construction' trench, created by the casting up of earth was more prominent in the west, where it was *c* 0.40m wide and 0.30m deep. There were no obvious signs of a structure on the platform.

Site number **206**
Trench number N/A
Site type Stone feature
NGR NY 75961 06854
Figure No. 13

Description
A stone revetted feature, 4m long and 0.75m wide, which was cut into a south facing slope. It comprised a dry stone constructed revetment wall, with no visible structure within the hollow it created. This may have been an old water trough.

Site number **207**
Trench number N/A
Site type Quarry
NGR NY 75956 06805 / 75870 06855 / 75884 06684
Figure No. 12, 13

Description
A series of small localised surface workings, no more than 1m in depth, and ranging in size from 1.5m to *c* 4m square. They probably represent the casual extraction of limestone.

Site number **208**
Trench number N/A
Site type Quarry
NGR NY 75837 06887
Figure No. 13

Description
A small sub-circular grass filled depression 10m in diameter and approximately 1m in depth. It was located to the immediate south of the present field wall and did not appear to continue on the other side. The feature coincides with a right turn in the original wall.

Site number **209**

Trench number	N/A
Site type	Hollow way
NGR	NY 75843 06883
Figure No.	13

Description
A short stretch of hollow way present on the southern side of the current field boundary wall. It was seen to continue under the wall for approximately 30m and therefore predates the present field boundary. It was *c* 3m in width and had a depth of 0.15m.

Site number	**210**
Trench number	N/A
Site type	Trough
NGR	NY 75983 06868
Figure No.	13

Description
A dry stone constructed trough, approximately 6m in diameter, and located in a hollow. The trough was constructed in two compartments, each 1m in length, with a front wall 0.15m in height and a back wall acting as a revetment for the hollow. There was a possible area of flagging at the front of the trough, which may be the result of the excavation of a spring.

Site number	**211**
Trench number	N/A
Site type	Hollow way/Field boundary
NGR	NY 75864 06986
Figure No.	13

Description
A system of hollow ways and lynchets on a west facing slope, associated with a pair of gateways in the southern boundary wall. The site comprised three components. The first, was a pair of lynchets to the east of the site, each lynchet being approximately 1m high and 25m long. The second element comprised a pair of banks, no more than 2m wide and *c* 0.50m high, which would have originally have been a single bank, possibly a field boundary. They were difficult to discern at their southern end and were obscured by the railway embankment in the north. The banks were interrupted by a probable gateway, 3m wide. The final element of the field system was a hollow way, aligned approximately north south, between the western lynchet and field boundary. It was visible for *c* 60m and measured 2m in width. There were further trackways and terraces associated with this system but these were not within the working corridor. The superimposition of field boundaries and hollow way would suggest that the hollow way was orientated through a now relict field system.

Site number	**212**
Trench number	Trench 12
Site type	Hollow way
NGR	NY 75970 07091
Figure No.	13

Description
A north-east south-west aligned hollow way, which is parallel to the existing field wall. It had a width across the base of 1.80m, with an uneven profile, being steeper and higher in the east, and gradually sloping to the west. The northern and southern ends of the feature were difficult to discern.

Site number	**213**
Trench number	N/A
Site type	Hollow way
NGR	NY 75987 07077
Figure No.	13

Description
A north-east south-west aligned hollow way, which altered course, to become north south aligned, half way along its observed length. It was shallower at its southern end (*c* 0.10m), with a maximum depth in the north of *c* 1m. It appears to merge with hollow way 212 in an area of flat ground to the north, and continues below the present boundary wall therefore predating it.

Site number	**214**
Trench number	N/A
Site type	Hollow way
NGR	NY 76033 07249
Figure No.	14

Description
A north south aligned hollow way, which is probably the continuation of 212/213. This feature was not very prominent, and was no more than 0.20m in depth. At its northern end it split into two (215 and 216), and was disturbed by quarry 217.

Site number	**215**
Trench number	N/A
Site type	Hollow way
NGR	NY 76038 07323
Figure No.	14

Description
A north-east south-west aligned hollow way. It was approximately 2m wide and

had an average depth of 0.40m below the surrounding topography. This feature continued through the marshy ground 217, and down the north facing slope to Intake Lane, and was separated from hollow way 216 by a broad low bank. The hollow way ends close to the modern gateway from Intake Lane.

Site number **216**
Trench number N/A
Site type Hollow way
NGR NY 76089 07364
Figure No. 14, 24, 28

Description
A north-east south-west aligned hollow way, parallel and to the east of 215. It was narrow but well defined, with a base width of 2m and an average depth of 0.40m, although in parts was approximately 1m deep. It extended to the bottom of the field and joined Intake Lane to the east of the present gateway. It is joined by another hollow way to the east which lay outside the survey area.

Site number **217**
Trench number N/A
Site type Hollow way
NGR NY 76019 07282
Figure No. 14

Description
A hollow approximately 50m square which disturbs the western hollow way 214. It was filled with marsh grass and appeared to hold water. It was present on both sides of the current boundary wall and therefore predates it. It would appear to be a related section of the 215 hollow way.

Site number **218**
Trench number N/A
Site type Hollow way
NGR NY 76108 07406
Figure No. 14

Description
A north-west south-east aligned hollow way which was present to the immediate south of Intake Lane. It was defined by a natural rise in the topography on the western side and a low bank to the east which separated it from hollow way 215. It was approximately 2m wide and *c* 0.20m deep and led to stone feature 219.

Site number **219**
Trench number N/A
Site type Stone feature

NGR NY 76100 07421
Figure No. 14

Description
A feature constructed from tabular stones. It measured 2.50m on its east west axis and was approximately 0.20m wide. It was of dry stone construction and would not have held water. This may have been a feed holder.

Site number **220**
Trench number N/A
Site type Hollow way
NGR NY 76150 07508
Figure No. 15

Description
A north-west south-east hollow way, formed on an east facing slope. It measured 2m across its base and was 0.25m deep. It was most clearly visible at the bottom of the slope. The west side gradually sloped at an angle of *c* 30 degrees over a distance of 4m. The eastern side was difficult to discern at the northern end, but at the southern end had eroded a large bank, which separated it from hollow way 221 to the north.

Site number **221**
Trench number N/A
Site type Hollow way
NGR NY 76150 07541
Figure No. 15

Description
A north-west south-east aligned hollow way to the north-east of hollow way 220. It was easier to define than 220, as it was marked by a large bank to east and a small bank to the west. It measured approximately 2.50m across the base and was *c* 0.35m deep. At the base of the slope both 220 and 221 merged with another hollow way parallel with the current field boundary; this final element lay outside the survey area.

Site number **222**
Trench number Trench 25
Site type Banks
NGR NY 76063 07684
Figure No. 15

Description
An extensive area of banks and hollows of differing lengths and depths. Two hollow

ways (223 and 224) were discernible within the complex, although others may have originally existed. The complex was largely made up of banks, although there were no obvious indications of upcasting. The banks form a radial pattern over the hill side, suggesting they may have been caused by water drainage, possibly over poor soil, although these may have been enhanced by extractive quarrying, further supported by the presence of areas of marsh grass within the troughs, implying a permanent waterlogged state.

Site number **223**
Trench number N/A
Site type Hollow way
NGR NY 76151 07609
Figure No. 15

Description
An indistinct north-east south-west aligned hollow way, *c* 2m wide and no more than 0.20m deep, in an area of banks and hollows. It appears to carry on through hollow way 224, to join with a hollow way which runs parallel with the existing field boundary.

Site number **224**
Trench number N/A
Site type Hollow way
NGR NY 76090 07663
Figure No. 15, 16

Description
An area of level ground at the base of bank complex 222. It lay on an approximate north south axis, and was 2m wide. It was very indistinct and may be a natural feature.

Site number **225**
Trench number N/A
Site type Hollow way
NGR NY 76090 07663
Figure No. 15

Description
A north south aligned hollow way, which turns north-east south-west at its northern end. It was 2.50m wide and up to 0.40m in deep. It was very distinct and under continual use, by both vehicles (demonstrated by tyre tracks) and pedestrian traffic.

Site number **226**
Trench number Trench 29
Site type Field boundary

NGR NY 76117 07708
Figure No. 15

Description
An east west aligned relict field boundary. It measured 3.50m wide and was up to 0.60m high. It was punctuated by three entrances or gaps caused by subsequent disturbance, the eastern entrance adjacent to the present stone wall, corresponded to the eastern most hollow way. The central entrance was much narrower at *c* 1.50m wide, and the western entrance was the largest (4m wide). The bank continued west, up slope, across a stream bed, and contained fragments of stone construction material.

Site number **227**
Trench number N/A
Site type Quarries
NGR NY 76157 07747
Figure No. 15, 25

Description
A pair of semi circular quarries located immediately to the east of a stream bed , in a hollow, each approximately 15m in diameter, although no more than 1.50m in depth. There is very little visible upcast and there are no signs of ramps or visible working faces. These depressions incorporate limestone outcrops visible in the sides. The small size of these features indicates localised workings.

Site number **228**
Trench number N/A
Site type Bank/Field boundary
NGR NY 76152 07692 - 76241 07986
Figure No. 15, 16, 17

Description
A large earthen bank, topped with mature ash and hawthorn hedge, aligned north, north-east south, south-west. Only the east side was surveyed. The western side was defined by the current field wall and therefore obviously predates it. In places the eastern side of the bank was 1m high while the western side rose to a height of 1.50m. There was a possible return, represented by a small hummock half way along its length, although this appears to have been ploughed out. The bank continues both north and south of the present field wall. At its northern end it appears to respect an old stream course as it terminates where it reaches the stream and restarts to the north.

Site number **229**
Trench number N/A

Site type	Lynchet
NGR	NY 76297 08009
Figure No.	16, 17

Description
A broad lynchet, aligned roughly north south, approximately 1.50m above the ground to the south-east, and immediately east of the disused railway. It underlies the present field boundary but does not share its alignment. This feature was associated with other similar features to the south-east which lay outside the survey area.

Site number	**230**
Trench number	N/A
Site type	Lynchet
NGR	NY 76295 08157
Figure No.	16, 17

Description
A 1m high, north south aligned lynchet below the present dry stone wall. It continues for the length of the wall.

Site number	**231**
Trench number	N/A
Site type	Cultivation lynchets
NGR	NY 76412 08372
Figure No.	18, 26

Description
A complex field system, comprising a main field of well defined lynchets. The lynchets were irregular in separation and profile, and stood to a height of approximately 0.10m. The western, downslope, bank was well defined, measuring approximately 2m in width, with a small ditch on either side. The southern, east west aligned bank was very similar and had tree stumps set within it. The eastern bank was also quite prominent. It measured 1m wide, and stood to approximately 0.20m. It defined a former trackway to the east, the eastern, hedge/tree boundary. To the south of the main field was an area of less well defined lynchets approximately 0.05m high. To the north-east lay a series of small linear earthworks of no determined purpose. Each measured approximately 5m long, was *c* 0.15m in height, and was aligned north-east south-west. These features may represent localised soil dumping.

Site number	**232**
Trench number	N/A
Site type	Ridge and furrow
NGR	NY 76478 08501
Figure No.	18

Description
A system of ridge and furrow earthworks on an east west axis. They measured approximately 3m from crown to crown and were very poorly defined, being only 0.05m to 0.07m high.

Site number	**233**
Trench number	N/A
Site type	Ridge and furrow
NGR	NY 76547 08497
Figure No.	18

Description
A system of north south aligned ridge and furrow earthworks, of a more prominent nature than 232 to the immediate west, from which they were separated by a north south aligned bank with shallow ditches on either side. The banks were approximately 0.20m high and *c* 1m wide, the system measuring *c* 5m from crown to crown. The bank would appear to reflect the line of a former headland.

Site number	**234**
Trench number	N/A
Site type	Trough
NGR	NY 76450 08430
Figure No.	18

Description
A stone constructed trough set within a hollow in a west facing slope. The trough measured 2m in length, was approximately 0.75m wide. It was obviously situated to exploit a natural spring.

Site number	**235**
Trench number	N/A
Site type	Field boundary
NGR	NY 76405 08183
Figure No.	17

Description
A relict field boundary aligned on an east west axis with mature ash and hawthorn along its length. It is non continuous to the west and does not join the hedge which defines the eastern extent of field system 231. It was slightly ditched to the north and had a maximum height of 0.40m. It was punctuated by a modern tractor tracks. It is immediately adjacent to the modern hedge boundary which was evidently its successor.

Site number **236**
Trench number N/A
Site type Field boundary
NGR NY 76426 08265
Figure No. 18

Description
A broad bank, aligned approximately east west, and parallel with 235 to the south. It measured *c* 8m wide, and was up to 0.40m high, although in very poor condition. This feature probably represents an old field boundary.

Site number **237**
Trench number N/A
Site type Cultivation lynchets
NGR NY 76564 08661
Figure No. 19, 27

Description
A cultivated field, on a north facing slope, containing a series of east west lynchets. The lynchets were approximately 10m apart, and *c* 0.30m high. The site was subject to a full Level III survey which showed lynchets not visible to the naked eye. The lynchets pre-date the present field system and are very clearly defined. They reflect a remarkable survival of an early cultivation upland open field. The surrounding bank, was approximately 0.30m high, with a higher (0.50m) section in the south-west corner, was respected by the modern fence which followed its course.

Site number **238**
Trench number N/A
Site type Hollow way
NGR NY 76661 08831
Figure No. 19

Description
A faint depression, aligned east west across a west facing slope. At the eastern end it bends to the north, indicating that it may have been a continuation of the track running in a north to south direction through Stobars Plantation. This feature is now badly eroded by ploughing.

Site number **239**
Trench number N/A
Site type Platform
NGR NY 76773 09106
Figure No. 20

Description

A triangular shaped terrace in the far north-western corner of the field. It measured approximately 20m along its east west axis and 5m on its north south axis. It is possibly a platform for a structure, although there was no evidence of construction material.

Site number **240**
Trench number N/A
Site type Bank
NGR NY 76997 09277
Figure No. 21

Description
An east west aligned bank, approximately 5m wide across its top. It was non continuous and was only present in the south-east corner of the field. The precise purpose of this feature was unknown.

Site number **241**
Trench number N/A
Site type Lynchet
NGR NY 77014 09352
Figure No. 21

Description
A north-west to south-east aligned lynchet, *c* 0.40m high, and dividing the field approximately across its centre. The lynchet at its north-western end returned at right angles to the south-west.

Site number **242**
Trench number N/A
Site type Field boundary
NGR NY 77053 09294
Figure No. 21

Description
A north south aligned field boundary which pre-dates the present barbed wire fence. The ditch section was approximately 1m wide and 0.60m deep. This changing to become a steep bank half way along the field length, where it was approximately 1m above the ground level of the western side of the field. At this point the bank contained mature ash trees.

Site number **243**
Trench number N/A
Site type Field drain

NGR NY 77286 09447
Figure No. 22

Description
An east west aligned ditch/drain located almost centrally within the field. It was 1.50m wide and *c* 0.45m deep, and turned a right angle at its western end. Both ends were culverted using a dry stone technique, the eastern end lying under the modern road, the west end under Middlegate Lane.

Site number **244**
Trench number N/A
Site type Field boundary
NGR NY 77292 09434
Figure No. 22

Description
An extant field boundary on an east west alignment currently occupied by a hedge and ash trees. The bank, approximately 0.20m high and *c* 1m wide, had a ditch on the southern side, approximately 2m wide, although it was difficult to discern due the sloping nature of the ground. The boundary at the west end was surmounted by a dilapidated dry stone wall, and was punctuated by two probable gateways, both 3m wide.

Site number **245**
Trench number Trench 34
Site type Field system
NGR NY 77269 09516
Figure No. 22

Description
A very degraded field system of broad ridge and furrow earthworks, *c* 9m in width, from crown to crown, and up to only 0.05m high. Exact positioning of the earthworks was very difficult but they were more prominent to the eastern side of the field.

Site number **246**
Trench number Trench 16
Site type Hollow way
NGR NY 75945 07243
Figure No. 14

Description
A poorly defined hollow way, the northern side of which was approximately 0.15m below the general topography of the area. It was seen to coincide with a second hollow way emerging in the south-west corner of 217.

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9. FIELD EVALUATION TRENCH DESCRIPTIONS

Trench **1**
Greenfield
Survey site 203
NGR NY 75898 06661
Alignment NW-SE

Trench description
Trench 1 was positioned in order to section a hollow way *c* 20m from its southern end. The natural subsoil between 0.25m and 0.30m below the present ground surface, comprised very hard orange brown sandy clay containing between 5% and 10% sub angular stones. This lay below looser orange brown sandy clay with a stone content of between 15% and 20%, in turn below mid brown sandy clay topsoil and turf. In the area of the hollow way the trench was excavated to its maximum depth of 0.42m, where the concentration of stones became considerably more dense (*c* 50%), the increase in frequency perhaps due to either hill wash or deliberate deposition, although this layer did not constitute a metalled surface. The increase in depth is presumably due to use by both animals and humans.

Finds catalogue
1 iron horse shoe. Straight edged, one nail *in situ.* Very worn and damaged. Poor, incomplete. Possibly later medieval or early post-medieval. Found in topsoil in area of hollow way.

Trench **2**
Greenfield
Survey site N/A
NGR NY 75901 06737
Alignment N-S

Trench description
Trench 2 was positioned in an area of no obvious archaeological features, and excavated to a maximum depth of 0.35m. It revealed broadly the same stratigraphy as Trench 1, very hard sandy clay subsoil, below slightly looser sandy clay, topsoil, and turf. Approximately 8m from the southern end of the trench an area of burnt or oxidised material was found within the topsoil. This coincided with a nettle patch seen on the surface and contained modern pottery.

Trench **3**
Greenfield
Survey site N/A
NGR NY 75913 06827
Alignment N-S

Trench description
Trench 3 was very similar to Trench 2. It was positioned in an area of no obvious archaeology and contained almost identical stratigraphy to that seen previously, although at the southern end, where it was excavated to its maximum depth of 0.40m, the hard orange brown sandy clay subsoil graded to a more reddish orange clay. This subsoil was again below looser orange brown sandy clay, mid brown sandy clay topsoil, and turf. Occasional large stones were seen in the topsoil.

Finds catalogue
2 fragments hand-painted blue and white ware (same vessel). C19-early C20. 2 fragments black-glazed wares. C19-early C20. Both found in topsoil

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Trench **4**
Greenfield
Survey site N/A
NGR NY 75913 06827
Alignment N-S

Trench description
Trench 4 was excavated to a maximum depth of 0.45m, through an area of uneven ground, although no discernible pattern could be seen. This trench again revealed the same sequence of deposits previously described, orange/red brown sandy clay/clay subsoil, below looser sandy clay, topsoil, and turf. At about 12m from the southern end of the trench a natural spread of sub-angular gravel in a grey sandy clay matrix was observed above the subsoil. Examination showed this coincided with a hollow in the topography. A stone field drain was also found in this trench.

Trench **5**
Greenfield
Survey site N/A
NGR NY 75935 06876
Alignment N-S

Trench description
Trench 5, excavated to a depth of 0.35m, was positioned in an area of no obvious archaeology. Once again it contained hard orange brown sandy clay subsoil, containing *c* 15% sub angular stones. With depth this graded to a more reddish orange clay. The natural material again lay below loose orange brown sandy clay, topsoil, and turf.

Trench **6**
Greenfield
Survey site N/A
NGR NY 75906 06892
Alignment N-S

Trench description
Trench 6, excavated to a depth of 0.35m, was positioned in an area of no obvious archaeology, adjacent to a stone wall. Once again it contained hard orange brown sandy clay subsoil with a 10% to 15% sub angular stone content, below looser orange brown sandy clay, topsoil, and turf.

Trench **7**
Greenfield
Survey site 205
NGR NY 75894 06857
Alignment N-S

Trench description
Trench 7 was positioned in order to investigate a sight 'platform' identified during the landscape survey. The stratigraphy was, however, the same as that recorded in other trenches in the area, very hard sandy clay *c* 0.35m below the ground surface, below similar, looser material, topsoil, and turf. The single sherd of pottery recovered from the trench was found in the area of the platform. A modern water pipe trench cut the subsoil *c* 12m from the northern end of the trench.

Finds catalogue
1 fragment of pottery in fine oxidised fabric, much eroded. Possibly medieval, probably later. Found in the topsoil on the platform.

Trench **8**
Greenfield
Survey site N/A
NGR NY 75897 06799
Alignment N-S

Trench description
Trench 8, excavated to a depth of 0.33m, was positioned in an area of no obvious archaeology. It contained the usual stratigraphic sequence of hard orange brown sandy clay subsoil, below looser orange brown sandy clay, topsoil, and turf.

Trench **9**
Greenfield
Survey site N/A
NGR NY 75913 06704
Alignment N-S

Trench description
Trench 9, excavated to a depth of 0.31m, was positioned in an area of no obvious archaeology. It contained the usual stratigraphic sequence of hard orange brown

sandy clay subsoil, below looser orange brown sandy clay, topsoil, and turf.

Trench **10**
Greenfield
Survey site N/A
NGR 75927 06931
Alignment N-S

Trench description
Trench 10, situated in the corner of a field clipped by the road corridor measured 23m and was excavated to a depth of 0.37m. It was positioned in an area of no obvious archaeology. It contained the usual stratigraphic sequence of hard orange brown sandy clay subsoil, below looser orange brown sandy clay, topsoil, and turf.

Trench **11**
Greenfield
Survey site N/A
NGR 75939 07041
Alignment NE-SW

Trench description
Trench 11, excavated to a depth of 0.32m, was positioned in an area of no obvious archaeology. It contained hard orange brown sandy clay subsoil containing *c* 10% sub angular stones, below looser orange brown sandy clay, mid brown sandy clay topsoil, and turf.

Trench **12**
Greenfield
Survey site 212
NGR NY 75963 07088
Alignment NW-SE

Trench description
Trench 12 although positioned in order to investigate a hollow way was only dug to a maximum depth of 0.25m. This trench, as with others in the area revealed orange brown sandy clay natural subsoil containing angular stones, below similar but looser material, mid brown topsoil (thinner in the area of the hollow way) and turf. In contrast to the similar feature investigated in Trench 1, no increase in stone content was seen in the area of the hollow way.

Finds catalogue
3 animal bones (2 rib, one femur, probably pig). Good, almost complete. Undated, probably modern. Found in topsoil.

Trench **13**

Greenfield
Survey site N/A
NGR NY 75991 07131
Alignment N-S

Trench description
Trench 13, excavated to a depth of 0.42m, was positioned in an area of no obvious archaeology. It contained the same general stratigraphic sequence as seen in other trenches in the area, hard orange brown sandy clay subsoil, although as in Trenches 3, 4, and 5, this graded to a darker reddish orange clay, below looser orange brown sandy clay, topsoil, and turf.

Trench **14**
Greenfield
Survey site N/A
NGR NY 76010 07190
Alignment N-S

Trench description
Trench 14, excavated to a depth of 0.45m, was positioned in an area of no obvious archaeology. It contained the same general stratigraphic sequence as seen in other trenches in the area, hard orange brown sandy clay subsoil, below looser orange brown sandy clay, topsoil, and turf. Two very slight dips in the subsoil were noted, although these were not archaeological features.

Trench **15**
Greenfield
Survey site N/A
NGR NY 76002 07244
Alignment N-S

Trench description
Trench 15, was excavated to a maximum depth of 0.30m. It was positioned in an area of no obvious archaeology. The trench revealed the same general stratigraphic sequence as seen in the area in general, hard orange brown sandy clay subsoil grading to a darker reddish orange clay, below loose orange brown sandy clay, topsoil, and turf.

Trench **16**
Greenfield
Survey site 246
NGR NY 75985 07275
Alignment N-S

Trench description
Trench 16 was positioned in an area of no obvious archaeology, although a hollow identified during the landscape survey lay just to the west. It was excavated to a maximum depth of 0.36m. The southern area of the trench revealed the same general stratigraphic sequence as seen before, orange brown sandy clay subsoil, below looser orange brown sandy clay, topsoil, and turf. As in Trench 1, in the area of the hollow way, (towards the northern end of the trench), the subsoil was slightly browner and contained *c* 80% stony, angular gravel.

Trench **17**
Greenfield
Survey site N/A
NGR NY 75994 07355
Alignment N-S

Trench description
Trench 17 was positioned in an area of no obvious archaeology. It contained a slightly different stratigraphic sequence to that seen elsewhere in the area. A layer of fairly compacted, loose, angular sandstone fragments up to 0.08m across lay 0.47m below the modern ground surface. This lay below *c* 0.10m of the reddish orange sandy clay subsoil seen elsewhere in the area, which again lay below looser orange brown sandy clay, topsoil, and turf. Although slightly different, the stratigraphy was still thought to be of natural origin.

Trench **18**
Greenfield
Survey site N/A
NGR NY 76027 07394
Alignment NE-SW

Trench description
Trench 18 was excavated to a maximum depth of 0.43m, in an area of no obvious archaeological features. Although close to Trench 17, Trench 18 once again revealed the same stratigraphic sequence seen elsewhere in the area, hard orange brown sandy clay subsoil, below looser orange brown sandy clay, topsoil, and turf.

Finds catalogue
1 iron coach bolt with washer and nut, head absent. Good, incomplete. Recent. Found in topsoil.

Trench **19**
Greenfield
Survey site N/A
NGR NY 76034 07430
Alignment N-S

Trench description
Trench 19 was positioned in an area of no obvious archaeology. It contained a similar stratigraphic sequence to that seen elsewhere in the area, hard orange brown sandy clay subsoil, containing *c* 10% sub angular stones, some grit (*c* 15%), and a few larger stones, below similar, looser material, topsoil, and turf. The natural subsoil lay approximately 0.25m below the modern ground surface, the shallower deposits perhaps due to the proximity of the trench to the brow of the hill.

Trench	**20**
Targeted	
Site name	Kirkby Stephen Intake
Assessment site	110
Survey site	110
Site type	Platform
Description	Square, horizontal platform.
NGR	NY 76062 07566
Alignment	N-S

Trench description
Trench 20 was aligned approximately north south across Assessment site 110, a square, horizontal platform observed during the assessment stage of the project. The general stratigraphy seen in the trench was similar to that in other trenches in the area, hard orange brown sandy clay subsoil between 0.23m and 0.45m below the surface, below looser sandy clay, mid-brown sandy clay topsoil, and turf. Two linear features were revealed in this trench, both aligned east west. The first, and southernmost comprised a line of loosely packed (there were no indications of mortar), angular lumps of limestone between 0.08m and 0.20m in size. These were set in a narrow foundation trench 0.38m wide. No depth is known as this feature was not fully excavated. Examination of the ground surface in the dry weather revealed a parch mark apparently following the line of the feature. A second, similar feature was found *c* 14m to the north. Although this was less well preserved, a few stones still remained *in situ*, and a short section (0.70m) of a stone lined culvert and ceramic drain were seen protruding from the feature in a northerly direction. Conversation with a local farmer (A. Halliday pers. comm.) identified the area as the site of a pre-World War II golf course/practice range dated *c* 1930, and it is thought the linear features found in this trench represent the final remains of the club house, or possibly an associated structure. No other structural material and no finds were recovered from this trench.

Finds catalogue
Numerous seeds. Unidentified, ready germination suggests they are modern. Found in drain.

Trench	**21**
Targeted	

Site name	Kirkby Stephen Intake
Assessment site	103
Survey site	103
Site type	Platform
Description	Rectangular platform with associated construction debris.
NGR	NY 76084 07479
Alignment	N-S

Trench description

Trench 21 was located in order to investigate Assessment site 113, a rectangular platform, and a hollow way. Similar platforms were also examined in Trenches 23 and 25. The trench was excavated to a maximum depth of 0.30m, natural hard, orange brown sandy clay, containing *c* 10% sub angular stones, being revealed at a depth of *c* 0.25m. Through the hollow way the concentration of stones increased to between 45% and 55%, perhaps due to hill wash or possibly some deliberate deposition of stone in the hollow way, although this did not constitute a metalled surface. There was no indication of any platform construction, only a slight increase in the depth of topsoil and turf. It is suggested this small platform may be a 'tee' perhaps constructed *c* 1930 in association with the golf course/practice range (A. Halliday pers. comm.) known to have existed in the area.

Trench	**22**
Greenfield	
Survey site	N/A
NGR	NY 76070 07518
Alignment	N-S

Trench description

Trench 22 was positioned in an area of no obvious archaeology, and dug to a maximum depth of 0.22m, the shallower deposits perhaps due to the steepness of the hill slope in this area. It contained a similar stratigraphic sequence to that seen elsewhere, hard orange brown sandy clay subsoil, below similar but looser material, mid brown sandy clay topsoil, and turf.

Trench	**23**
Greenfield	
Survey site	N/A
NGR	NY 76090 07586
Alignment	N-S

Trench description

Trench 23 was positioned in order to examine a slight platform, and excavated to a maximum depth of 0.44m. Similar platforms were investigated in Trenches 21 and 25. The general stratigraphy found in the trench was similar to that seen elsewhere, although the natural contained slightly fewer inclusions (*c* 8%). In the area of the platform, in approximately the centre of the trench, a layer, *c* 3.5m wide

and 0.12m deep, of flat, but unworked limestone fragments was found below the topsoil. These were not bonded, and gave no indication they were the base of anything structural. It would appear they had been dumped to provide the base for the platform, which it is suggested may be a 'tee' perhaps constructed *c* 1930 in association with the golf course/practice range known to have existed in the area (A. Halliday pers. comm.).

Trench **24**
Greenfield
Survey site 113
NGR NY 76119 07543
Alignment N-S

Trench description
Trench 24 was positioned in order to examine two linear features, identified during the landscape survey. The up slope western end of the trench was excavated to 0.50m (the maximum trench depth). This area contained similar stratigraphy to that seen elsewhere, sandy clay subsoil containing 10% sub angular stones, below 0.14m of orange brown sandy clay, below 0.18m of mid brown sandy clay topsoil, and turf. In the westernmost of the two features the stone inclusion in the natural increased to *c* 30%, and both the topsoil and subsoil decreased in depth. Down slope, to the east, the second feature was less distinct after the removal of the turf and topsoil, although in this area a considerable change in natural was encountered, loose natural river gravel (*c* 80%) in an orange brown sandy clay matrix lying only 0.15m below the turf. It is suggested the hollows were naturally formed features, perhaps eroded by water.

Trench **25**
Greenfield
Survey site 222
NGR NY 76105 07625
Alignment E-W

Trench description
Trench 25 was positioned in order to examine a platform identified during the landscape survey. Similar platforms were investigated in Trenches 21 and 23. In general the trench was excavated to a depth of *c* 0.30m, the general stratigraphy being similar to that seen elsewhere in the area, although around the outer north and east edges of the platform the build-up above natural was deeper at 0.45m. This greater depth of material was presumably the result of deliberate landscaping to form the platform, although in contrast to the platform examined in Trench 23 this had not been achieved with the help of a stone layer. It is suggested the platform may be a 'tee' perhaps constructed *c* 1930 in association with the golf course/practice range known to exist in the area (A. Halliday pers. comm.).

Trench **26**
Greenfield
Survey site N/A
NGR NY 76031 07515
Alignment N-S

Trench description
Trench 26 was positioned in an area of no obvious archaeology, and dug to a maximum depth of 0.40m. It contained a similar stratigraphic sequence to that seen elsewhere, reddish orange clay below, hard orange brown sandy clay subsoil containing *c* 15% sub angular stones, below similar but looser sandy clay, mid brown sandy clay topsoil, and turf.

Trench **27**
Greenfield
Survey site N/A
NGR NY 76077 07634
Alignment N-S

Trench description
Trench 27 was located in an area of no obvious archaeology. It was excavated to a minimum depth of 0.10m in the north and a maximum of 0.27m in the south. The northern, downslope area of the trench revealed natural river gravels and pebbles (*c* 75%, and between 0.01m and 0.08m in diameter) in a greyish brown, loose sandy clay matrix, directly below the topsoil and turf. In addition to the material described above, the southern and deeper part of the trench contained a layer up to *c* 0.17m deep of the usual loose orange brown sandy clay situated between the river gravels and topsoil.

Trench **28**
Greenfield
Survey site N/A
NGR NY 76137 07666
Alignment N-S

Trench description
Trench 28 was located in order to cross a series of hollows and troughs similar to the linear features investigated in Trench 24. The trench was excavated to a maximum depth of 0.60m at its northern end where river gravels in a greyish brown sandy clay matrix were seen below *c* 0.30m of smooth, stone-free orange brown sandy clay, similar to that seen elsewhere in the area, although there was a marked lack of stone content. This material lay below the usual topsoil and turf. Approximately 5m from the northern end of the trench (up slope), the smooth, stone-free material faded out, leaving just river gravels below *c* 0.19m of topsoil. The topsoil gradually became thinner to the south (up slope), with a minimum depth at the southern end of only 0.10m.

Finds catalogue
1 iron horseshoe, small sized. Straight-edged, countersunk nails of late type, calkins. Good, almost complete, some nails missing. Post medieval, probably recent. Found in topsoil at the northern end of the trench.

Trench	**29**
Targeted	
Site name	Kirkby Stephen Intake
Assessment site	113
Survey site	226
Site type	Enclosure
Description	Two sub-rectangular, banked enclosures with associated earthworks.
NGR	NY 76136 07710
Alignment	N-S

Trench description
This trench was positioned in order to examine a linear feature, part of Assessment site 113. The trench cut the feature at right angles. The northernmost 6m of the trench was dug to the maximum depth of 0.53m below the present ground surface. In this area patches of compact, angular limestone fragments (*c* 90%), were interspersed with areas of smooth, stone-free, orange brown sandy clay. These patches were seen below about 0.30m of the usual loose, slightly stoney material, turf, and topsoil. Towards the centre of the trench, up slope, towards the linear feature, the patches of limestone became a definite layer below the sandy clay subsoil which at this point became nearer 0.20m deep. The linear feature comprised a banked feature, with the presumed position of a boundary clearly visible on the highest part of the rise, the stratigraphy to the north and south of this point being notable different. To the north, a layer of small (0.05m diameter) limestone fragments separated the topsoil from the loose sandy clay subsoil, while to the south this layer was absent, and the transition between topsoil and subsoil become considerably more nebulous than in other areas. The boundary appears to have been positioned on a natural ridge, as the underlying limestone dropped *c* 0.20m to the south of the feature, although the southern end of the trench showed a gradual rise. No indication of the river gravels seen only slightly to the south-east in Trench 28 were seen in this trench.

Finds catalogue
1 iron woodsman's or felling axe head. Small wrought axe head, blade width 92mm. Good, almost complete. Probably recent. Found in the sub soil directly south of the linear feature/field boundary.

Trench	**30**
Greenfield	

Survey site	N/A
NGR	NY 77326 09475
Alignment	E-W

Trench description
Trench 30 was positioned in order to cross an area of possible amorphous archaeology shown on the geophysical survey. Examination of the turf found a slight rise and parch mark in the area identified by the survey, implying some disturbance, although it is suggested that this may have been modern as excavation failed to reveal any archaeological features. Virtually stone-free, slightly gritty, orange brown sandy clay, natural subsoil was located *c* 0.35m below the ground surface. A sondage, 0.35m deep (i.e. to a depth of 0.70m), was excavated through this material at the northern end of the trench, but no change in make up was found. Between 0.15m and 0.18m of very similar, slightly looser material containing a few (< 2%) flecks of slag/coal lay above the subsoil. This lay below mid brown sandy clay topsoil and turf.

Trench	**31**
Greenfield	
Survey site	N/A
NGR	NY 77266 09429
Alignment	E-W

Trench description
Trench 31 was positioned in order to examine a ferrous anomaly shown on the geophysical survey. The stratigraphy in the majority of the trench was very similar to that seen in Trench 30 to the north, orange brown sandy clay subsoil, below similar material containing *c* 7% slag/coal flecks, below mid to light brown topsoil and turf. A large iron bar of modern origin found in the topsoil was probably responsible for the geophysical survey reading indicating a ferrous anomaly in the area. Approximately 10m from the northern end of the trench the subsoil contained a lens of material comprising *c* 75% sub angular stones (natural erratics).

Trench	**32**
Greenfield	
Survey site	N/A
NGR	NY 77219 09434
Alignment	E-W

Trench description
Trench 32, located in an area of no obvious archaeology, was excavated to a maximum depth of 0.50m, and revealed similar stratigraphy to Trenches 30 and 31. Virtually stone-free orange brown sandy gritty clay subsoil was seen *c* 0.35m below the ground surface. This lay below a similar deposit (0.15m deep) again including some slag/coal fragments, which was, in turn, sealed by topsoil and turf.

Trench	**33**
Greenfield	
Survey site	N/A
NGR	NY 77363 09405
Alignment	N-S

Trench description
Trench 33, excavated to 0.40m, was located in order to examine a possible archaeological feature located by the geophysical survey. The stratigraphy revealed was identical to that found in other trenches in the area; orange brown sandy clay subsoil (containing slightly more stones, 5%, than other trenches in the immediate vicinity), below similar material with some slag/coal inclusions, below topsoil, and turf. No indication of any below ground features were found in the trench.

Trench	**34**
Targeted	
Site name	Middlegate Lane
Assessment site	140
Survey site	245
Site type	Field system
Description	Relic, parallel field boundaries, oriented east west. The low banks, some with ditches, some with lynchet formation to the west, are parallel to the existing field boundaries, but probably represent the strip fields of an earlier field system. A broader bank, with ditches either side, is aligned east west, possibly a continuation of the similar feature in the field to the south (Site 177).
NGR	NY 77348 09518
Alignment	N-S

Trench description
Trench 34, dug to a maximum depth of 0.75m, was located in order to investigate both a field system found during the assessment stage of the project (Assessment site 140), and an area of strong geophysical anomaly, suggesting a curvilinear feature. The stratigraphy revealed was essentially the same as that found in other trenches in the area, natural subsoil comprising orange brown sandy clay. At approximately the mid point of the trench, and at the far southern end, were two gravel patches, the central one comprising *c* 80% gravel, 0.02m in diameter, the southern with slightly larger elements, at 0.04m diameter. This material was sealed by orange brown sandy clay with slag/coal inclusions, topsoil, and turf. The geophysics probably picked up the central gravel deposits, perhaps an old watercourse leading to the adjacent river Eden.

Finds catalogue
1 copper alloy object. Thin, oval? convex cap, possibly with remnant of iron rivet.

Poor, incomplete, fragmentary. Not dated. Found in topsoil.

10. BIBLIOGRAPHY

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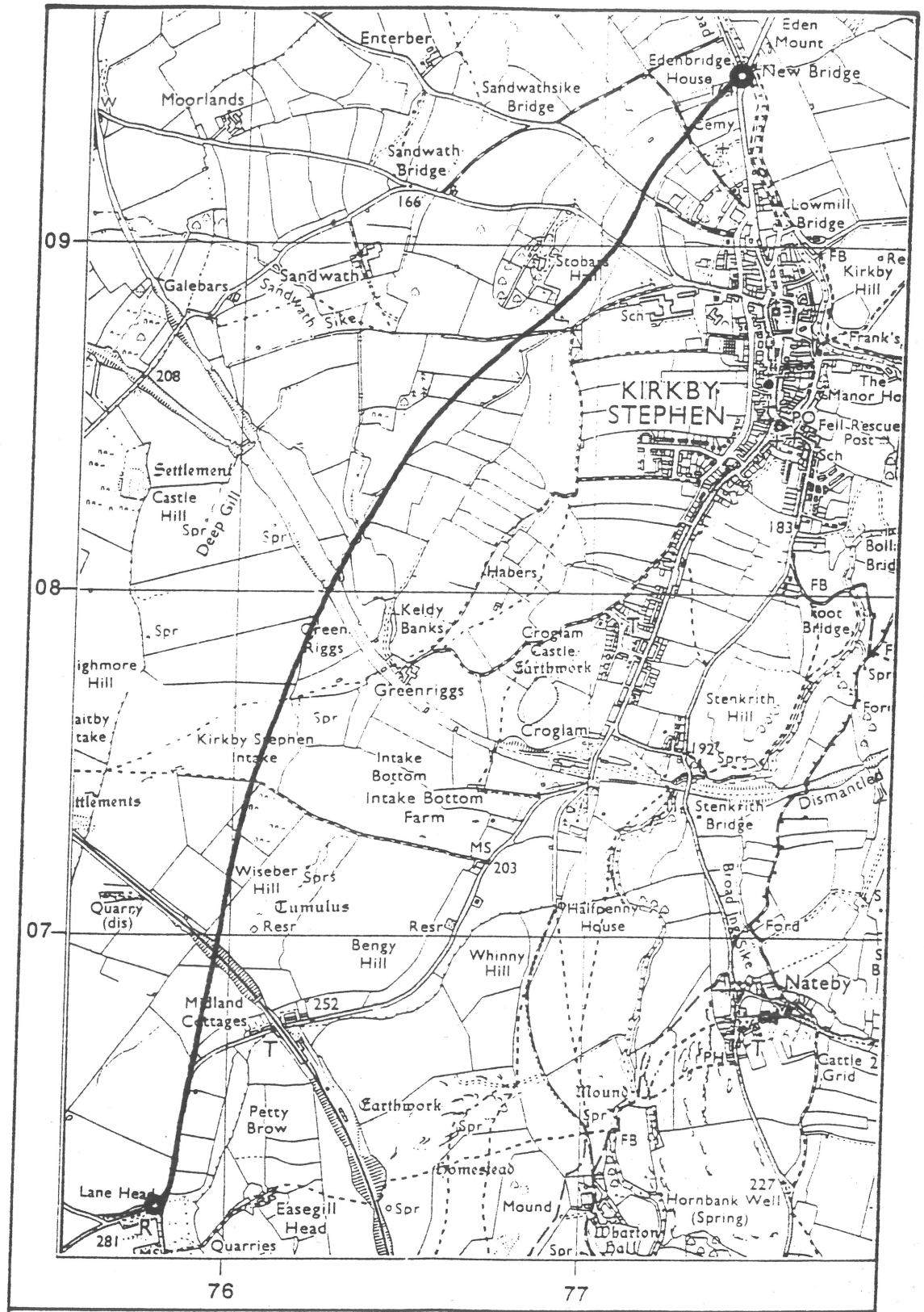


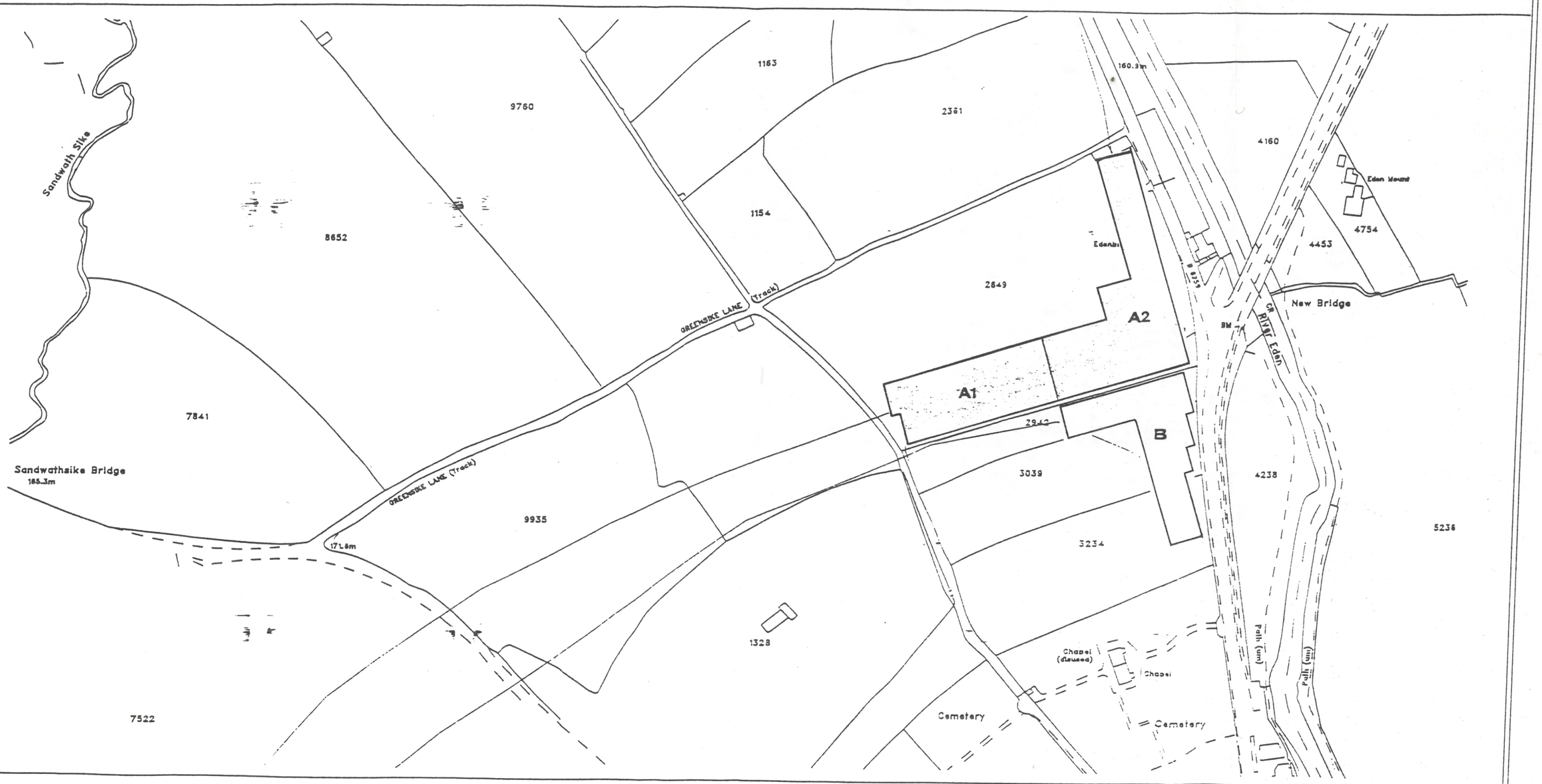
Based upon the Ordnance Survey with the permission of the Controller of HMSO

ROUTE LOCATION PLAN

FIGURE 1

KIRKBY STEPHEN BYPASS

Location of Survey Areas



Based on a plan supplied by
Lancaster University Archaeological Unit

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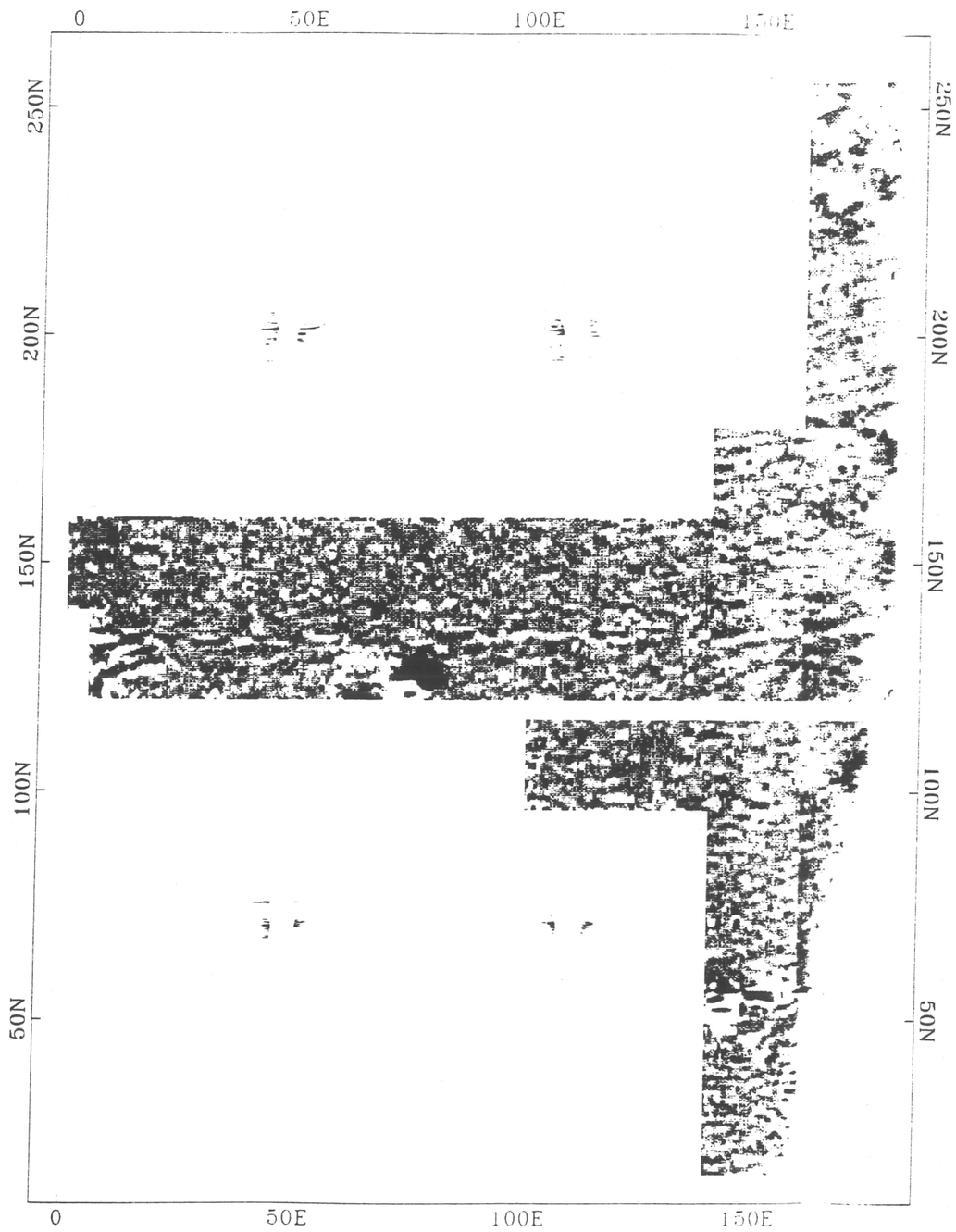
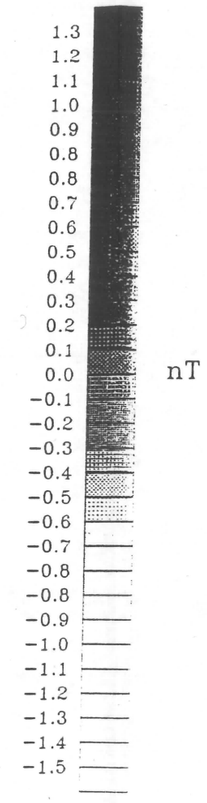
FIGURE 2





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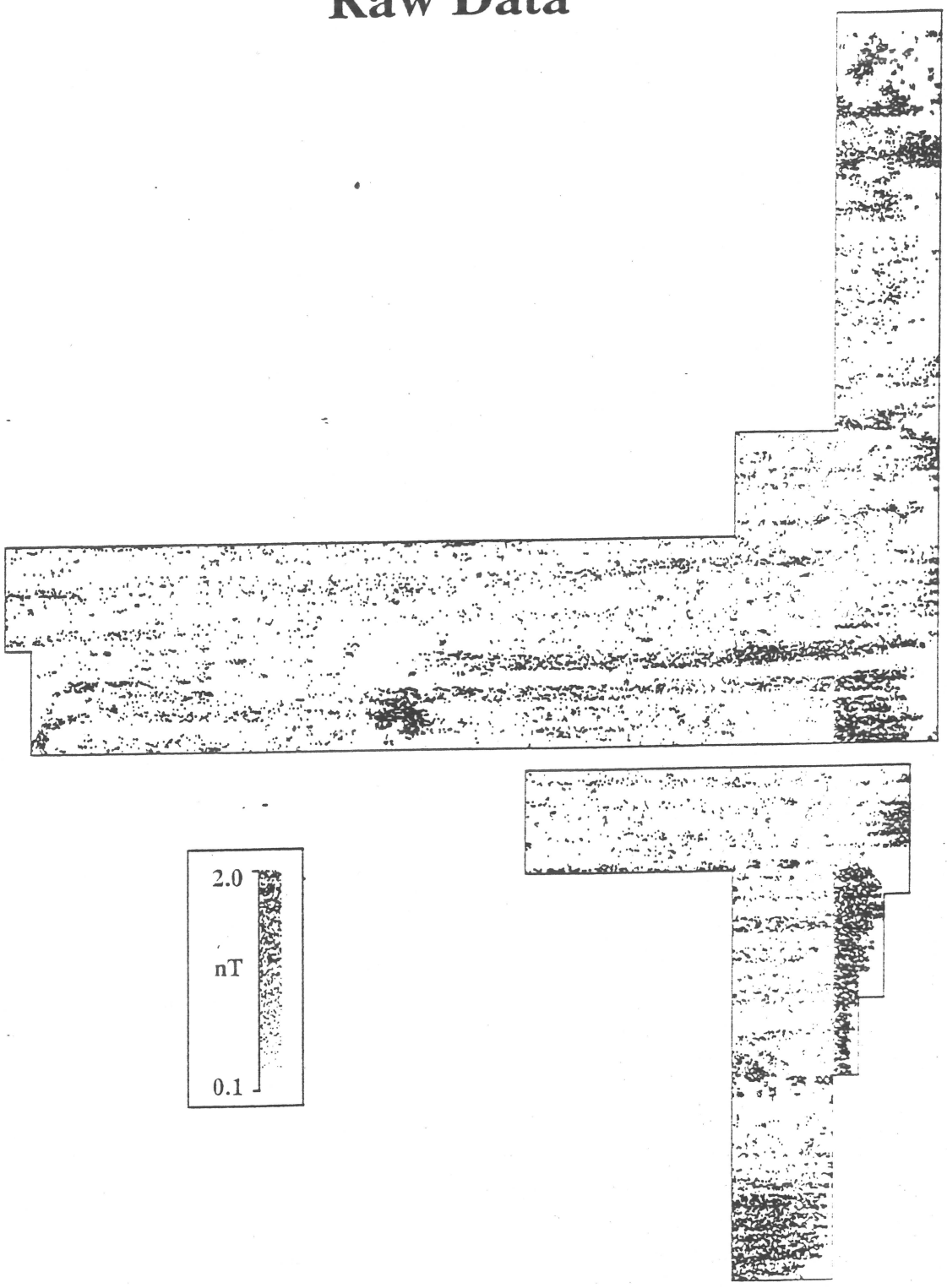
(metres)

KIRKBY STEPHEN BYPASS

Gradiometer Data

FIGURE 3

KIRKBY STEPHEN BYPASS
Raw Data



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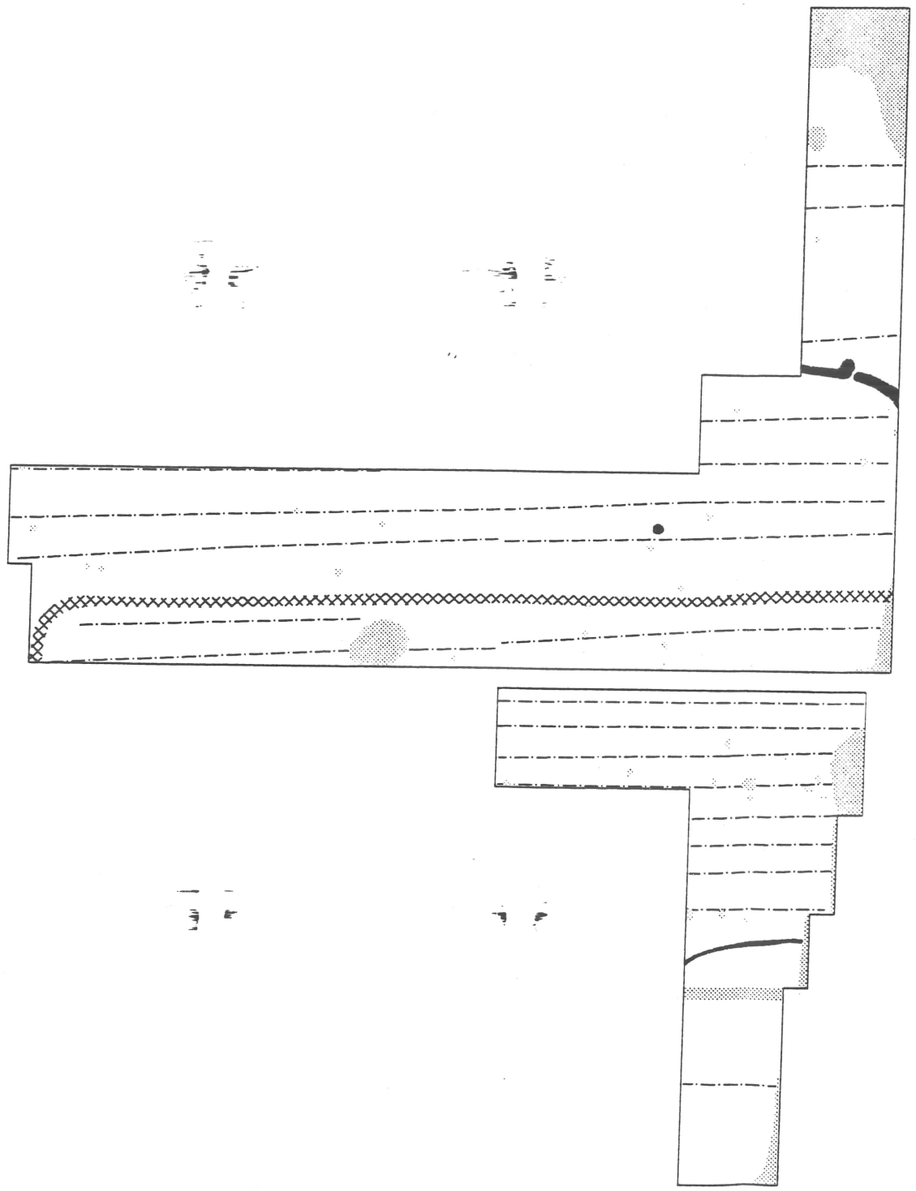


0 metres 50

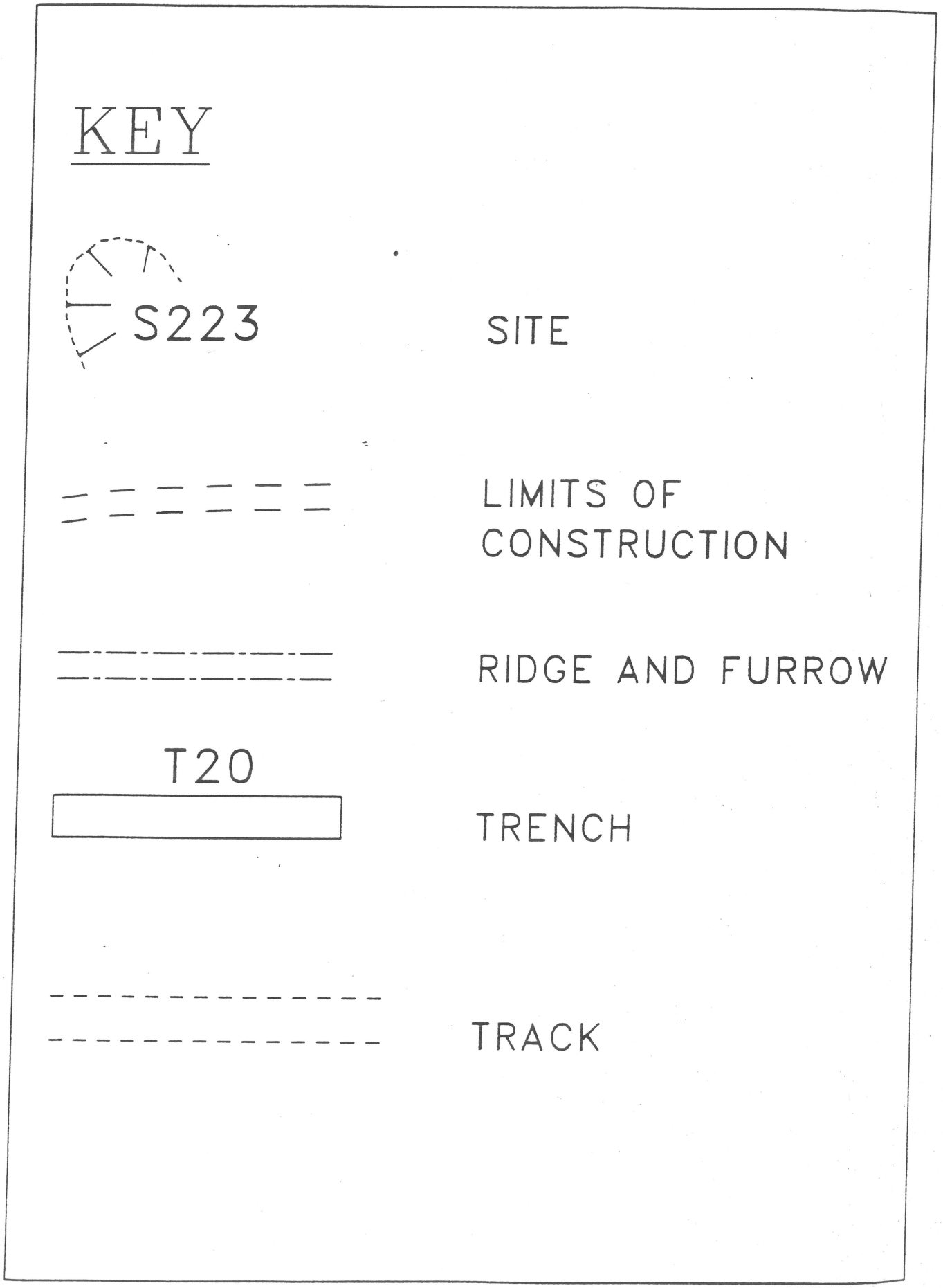
?Archaeology

Ridge and Furrow

Drain

Ferrous

GEOPHYSICAL SURVEYS OF BRADFORD	
PROJECT: KIRKBY STEPHEN BYPASS	
TITLE: Summary Interpretation	
	FIGURE 5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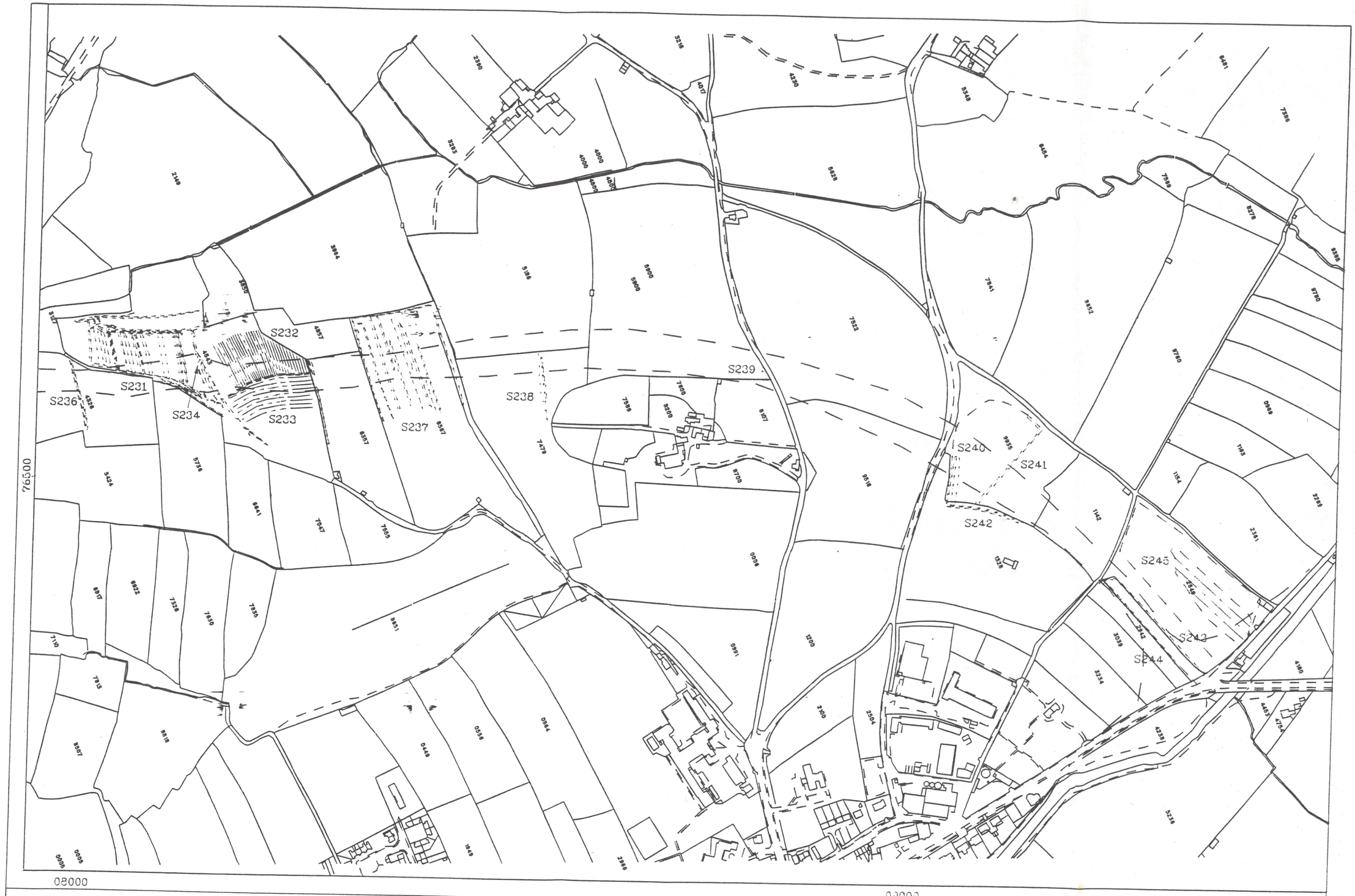
S223
SITE
LIMITS OF CONSTRUCTION
RIDGE AND FURROW
T20
TRENCH
TRACK

FIGURE 6



KIRKBY STEPHEN BYPASS

PLAN NAME

SITE LOCATION NORTH

100m

DRAWN BY DH CW MCK

DATE 09 95

SCALE 1:5000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 7

KIRKBY STEPHEN BYPASS

PLAN NAME

SITE LOCATION SOUTH

100m

DRAWN BY DH CW MCK

DATE 09·95

SCALE 1:5000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 8

KIRKBY STEPHEN BYPASS

PLAN NAME

TRENCH LOCATION NORTH

DRAWN BY DH,CW,MCK

DATE 09.95

SCALE 1:5000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 9

KIRKBY STEPHEN BYPASS

PLAN NAME

TRENCH LOCATION SOUTH

100m

DRAWN BY	DH CW MCK
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SCALE	1:5000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 10

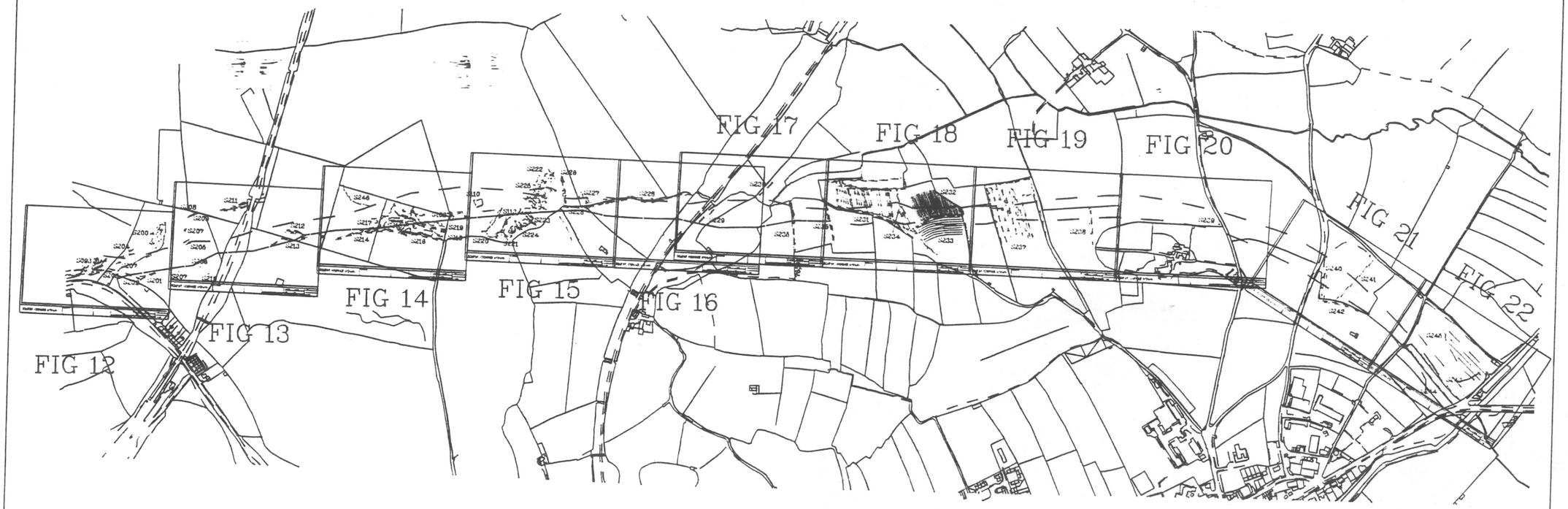

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FIGURE LOCATION PLAN

DRAWN BY DH SW MCK

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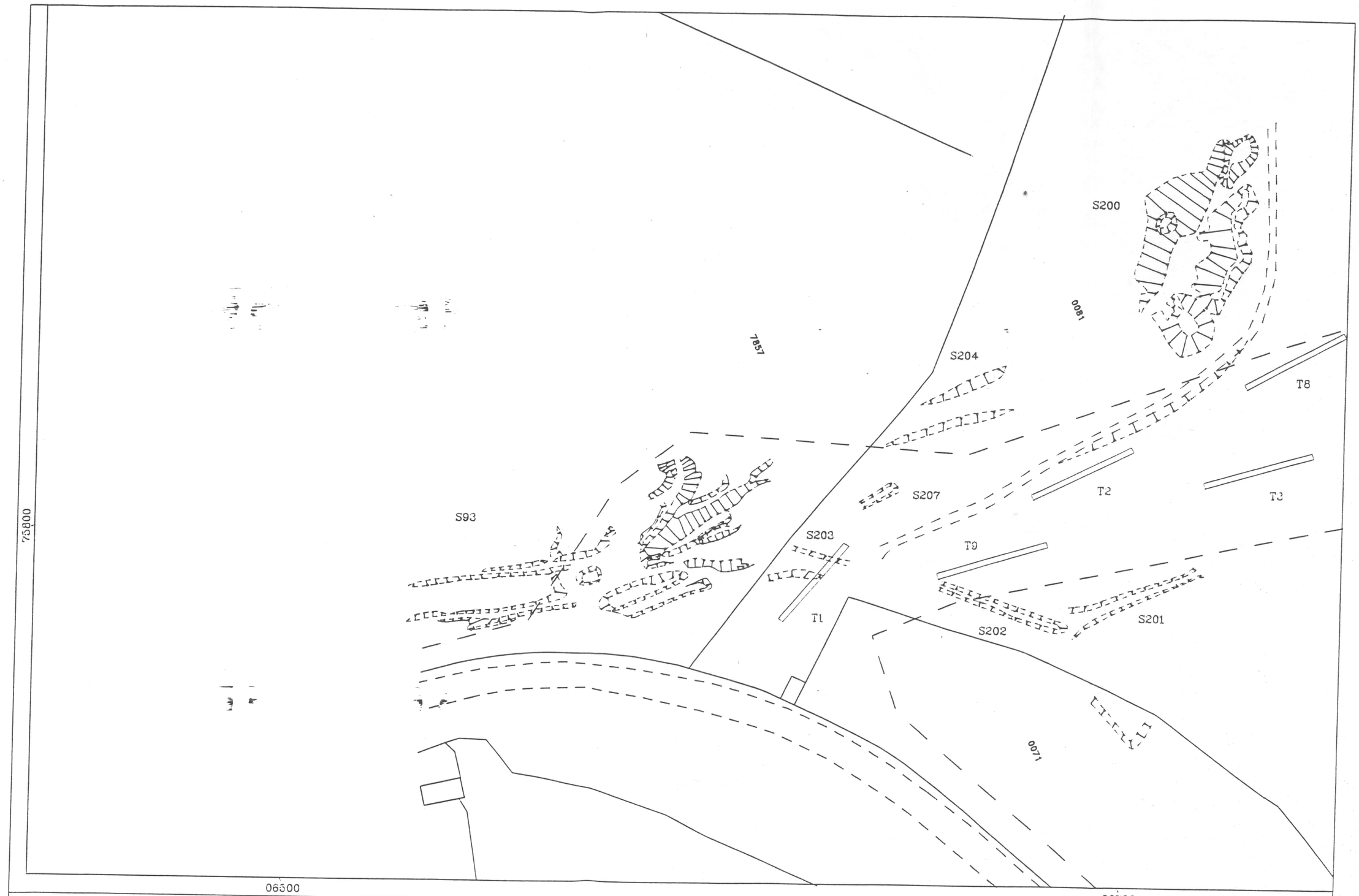
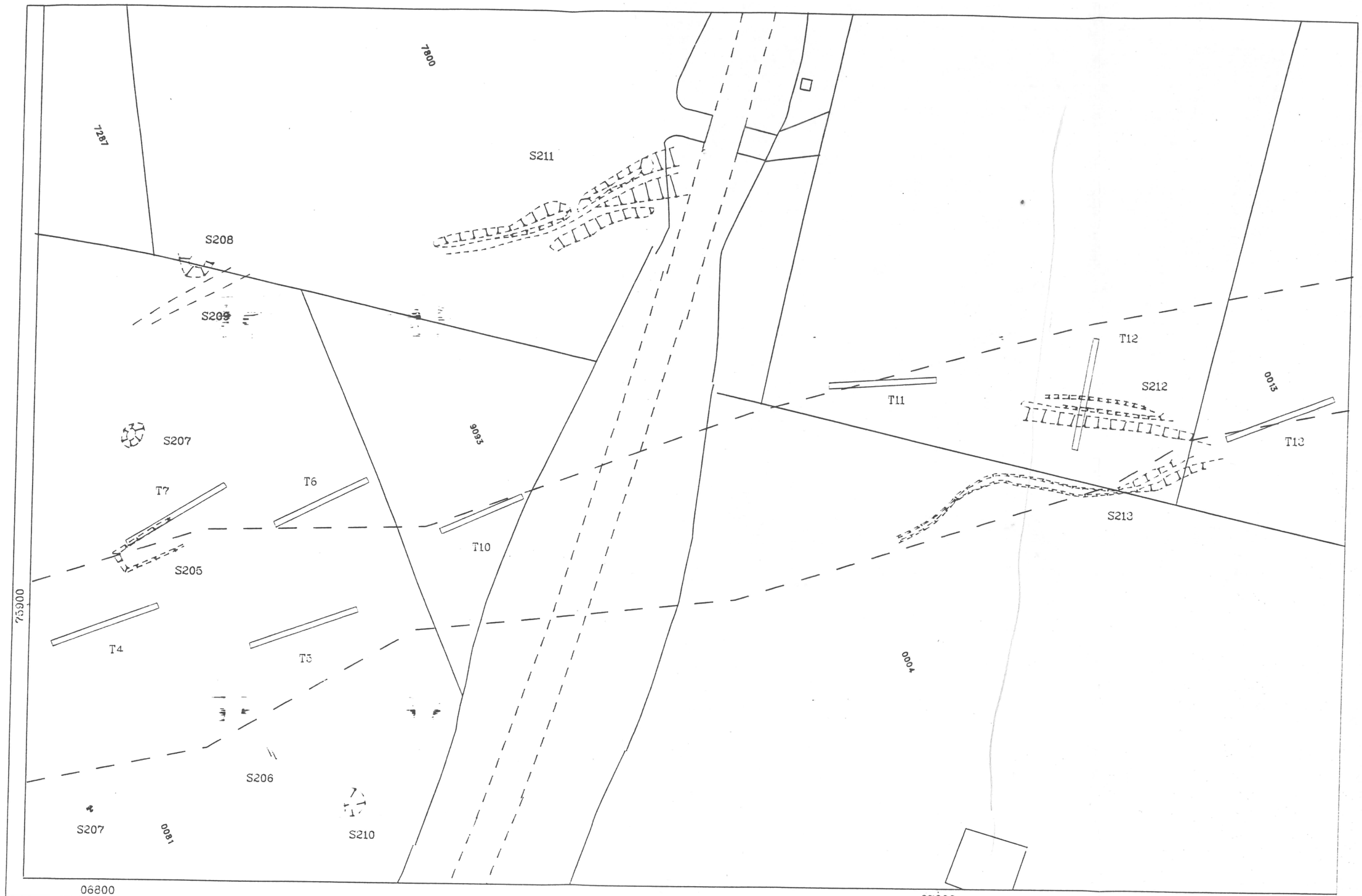
FIGURE 11



KIRKBY STEPHEN BYPASS	PLAN NAME SITES 93, 200, 201, 202, 203, 204, 207	Reproduced from, or based on, Ordnance Survey map material with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright, licence no. GA 075646 - Cumbria County Council. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.	20m	DRAWN BY DH.CW.MCK DATE 09.95	SCALE 1:1000
				LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT	FIGURE 12



KIRKBY STEPHEN BYPASS

PLAN NAME

SITES 205, 206, 207, 208, 209
210, 211, 212, 213

20m

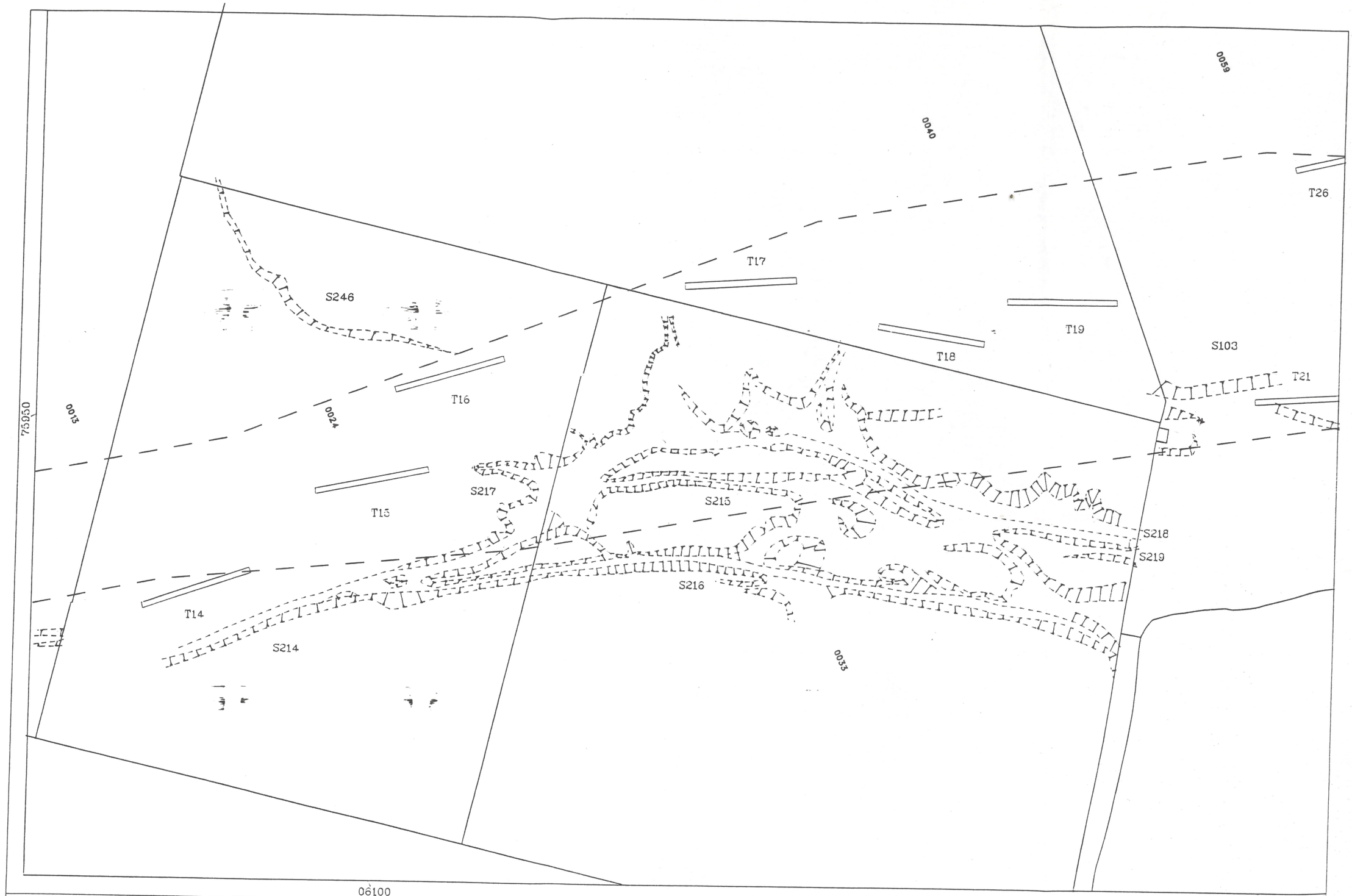
DRAWN BY DH CW MCK

DATE 09·96

SCALE 1:1000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 13



KIRKBY STEPHEN BYPASS

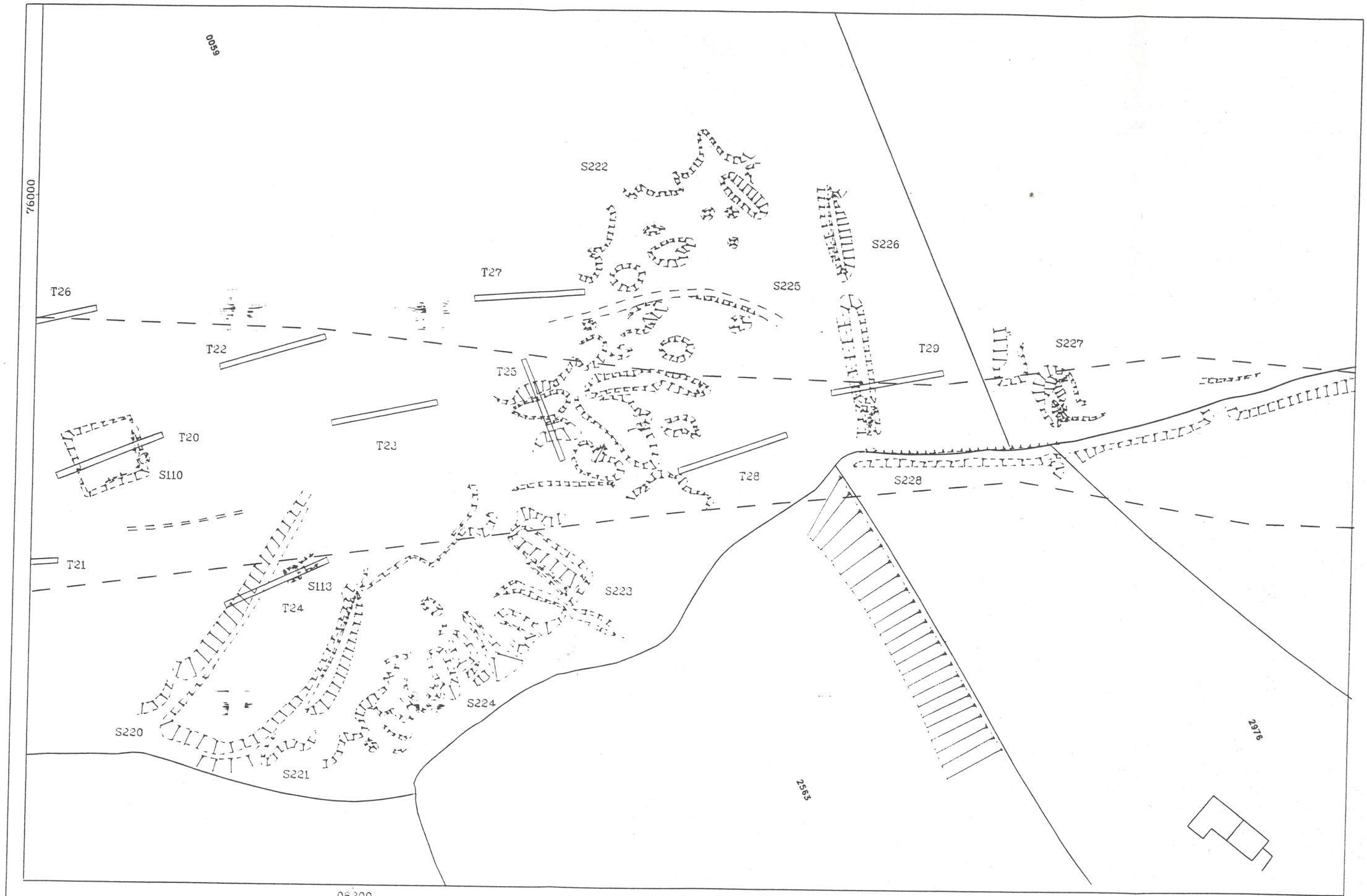
PLAN NAME
SITES 103, 214, 215, 216, 217, 218, 219, 246

20m

DRAWN BY DH CW MCK
DATE 09 95
SCALE 1:1000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 14



KIRKBY STEPHEN BYPASS

PLAN NAME

SITES 110, 113, 220, 221, 222 223, 224, 225, 226, 227, 228.

30m

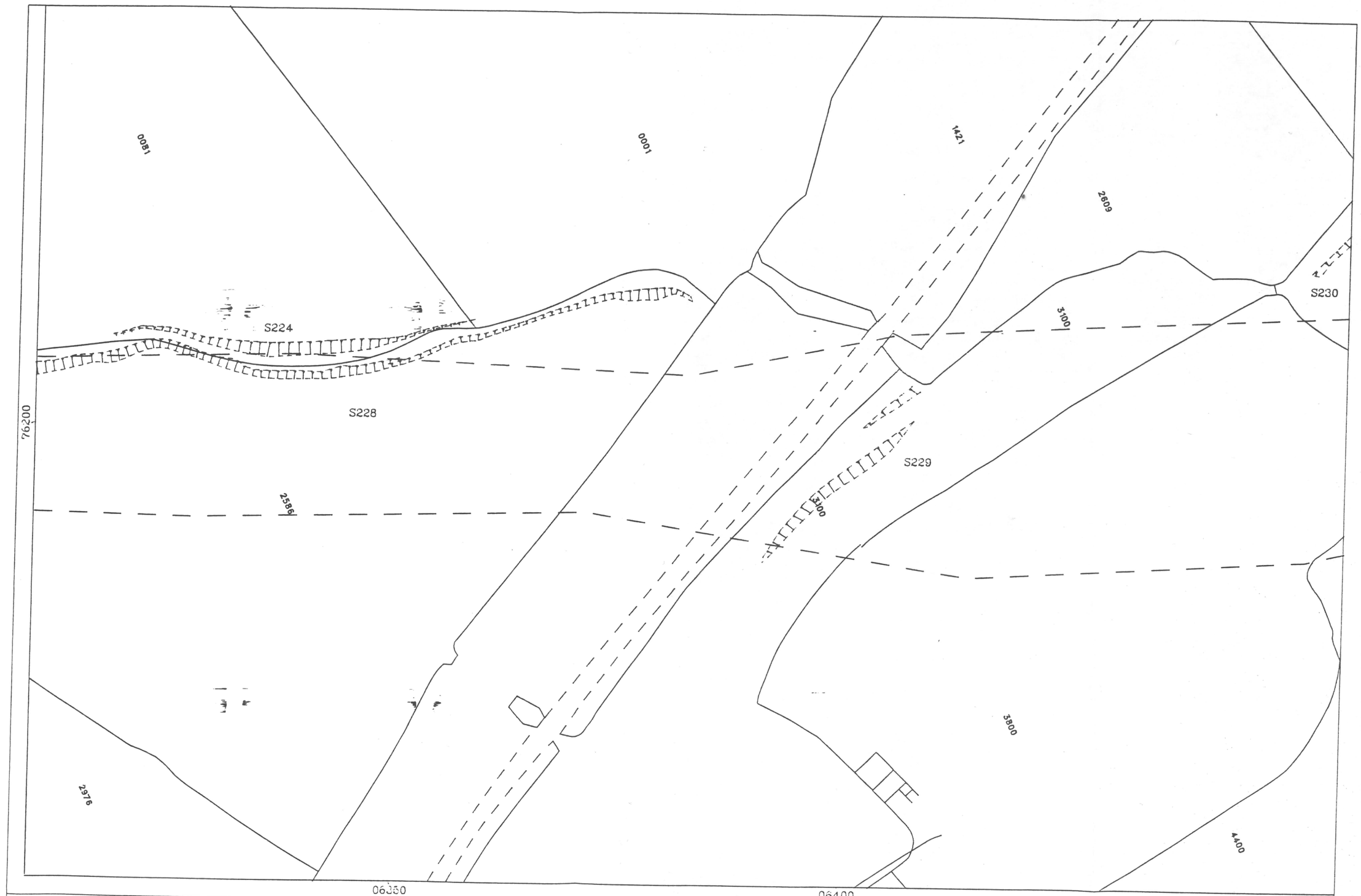
DRAWN BY DH.CW.MCK

DATE 09.95

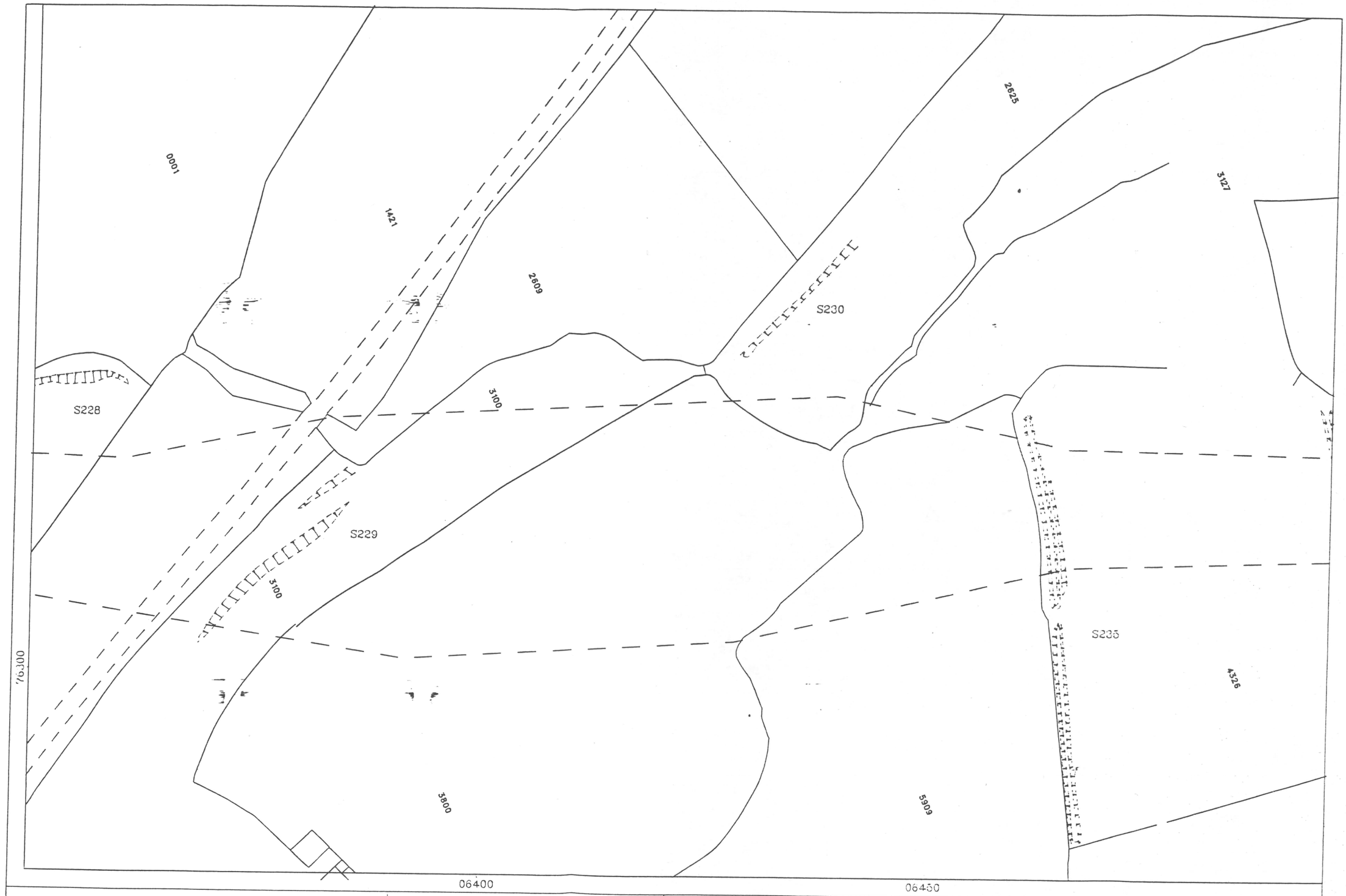
SCALE 1:1000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 15



KIRKBY STEPHEN BYPASS	PLAN NAME SITES 224, 228, 229, 230	Reproduced from, or based on, Ordnance Survey map material with the permission of the Controller of Her Majesty's Stationary Office, Crown Copyright. Licence LA 076846 - Cumbria County Council. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.	20m	DRAWN BY DH CW MCK DATE 09·95	SCALE 1:1000
				LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT	FIGURE 16



KIRKBY STEPHEN BYPASS

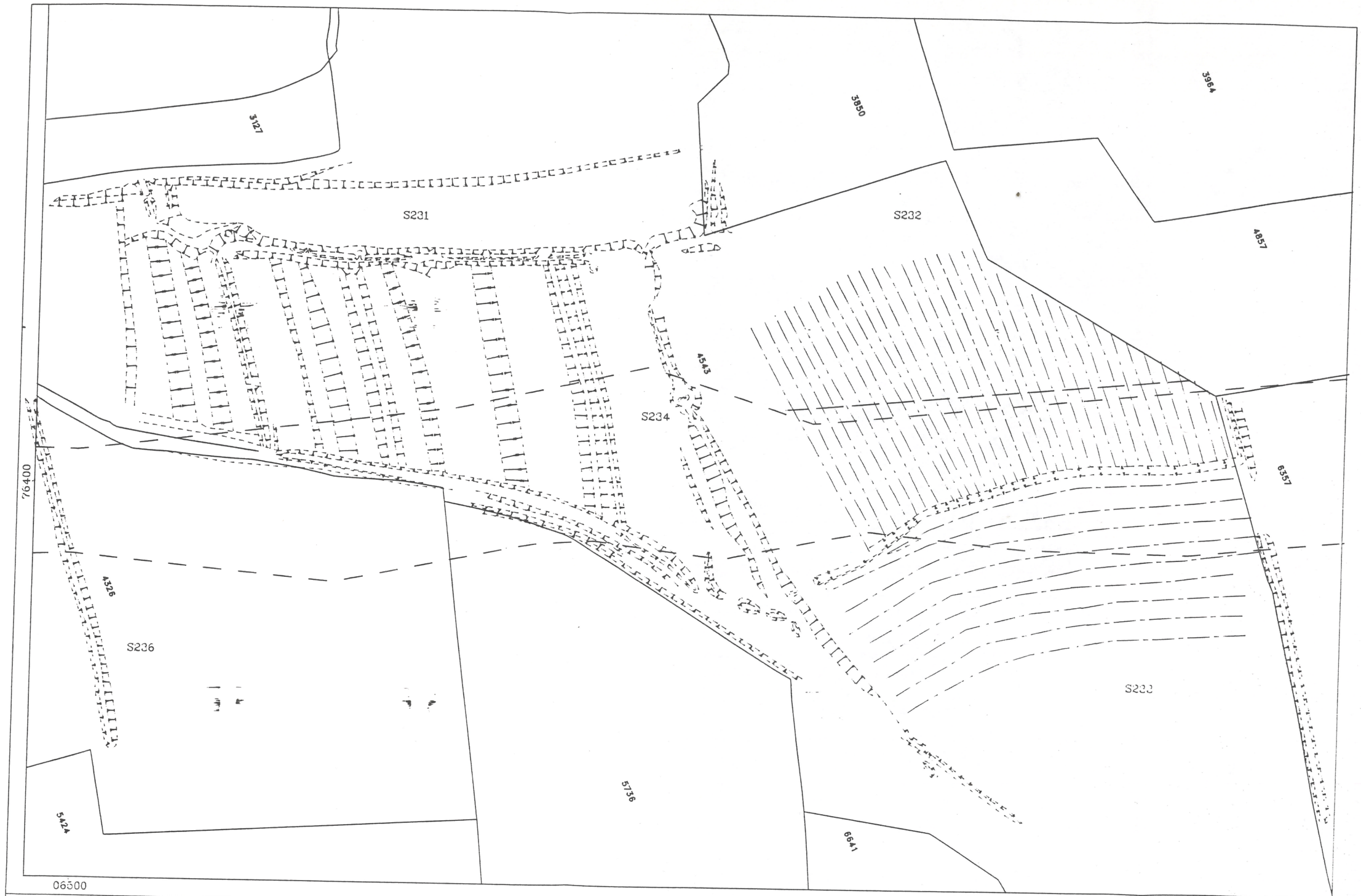
PLAN NAME
SITES 228, 229, 230, 235

20m

DRAWN BY DH CW MCK
DATE 09 95
SCALE 1:1000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 17



KIRKBY STEPHEN BYPASS

PLAN NAME

SITES 231, 232, 233
234, 236

20m

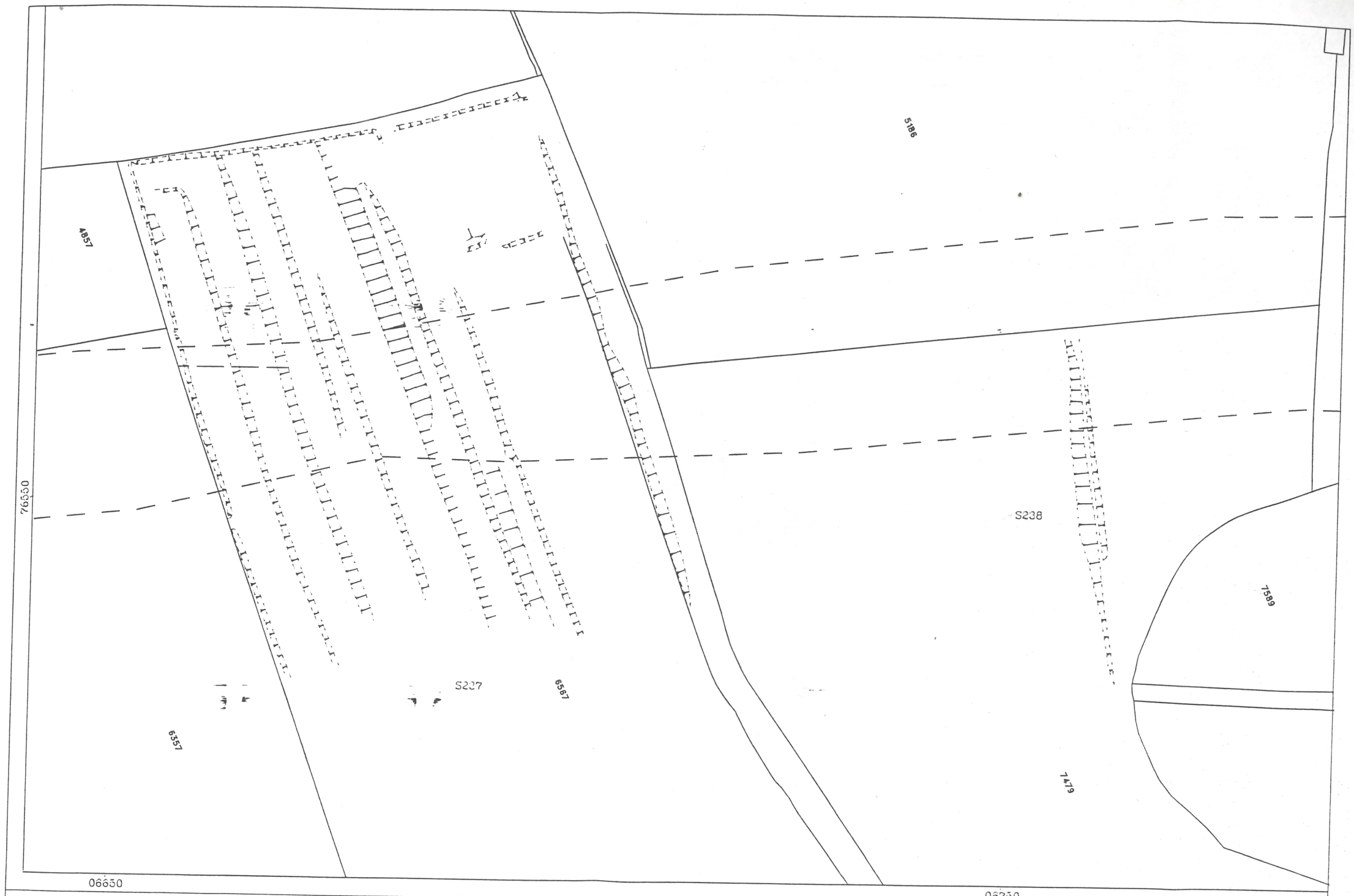
DRAWN BY DH.CW.MCK

DATE 09.95

SCALE 1:1000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 18



KIRKBY STEPHEN BYPASS

PLAN NAME
SITES 237, 238

20m

DRAWN BY DH CW MCK
DATE 09·95

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

SCALE 1:1000

FIGURE 19

KIRKBY STEPHEN BYPASS

PLAN NAME

SITE 239

20m

DRAWN BY DH CW MCK

DATE 09 95

SCALE 1:1000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 20

KIRKBY STEPHEN BYPASS

PLAN NAME
SITES 240, 241, 242

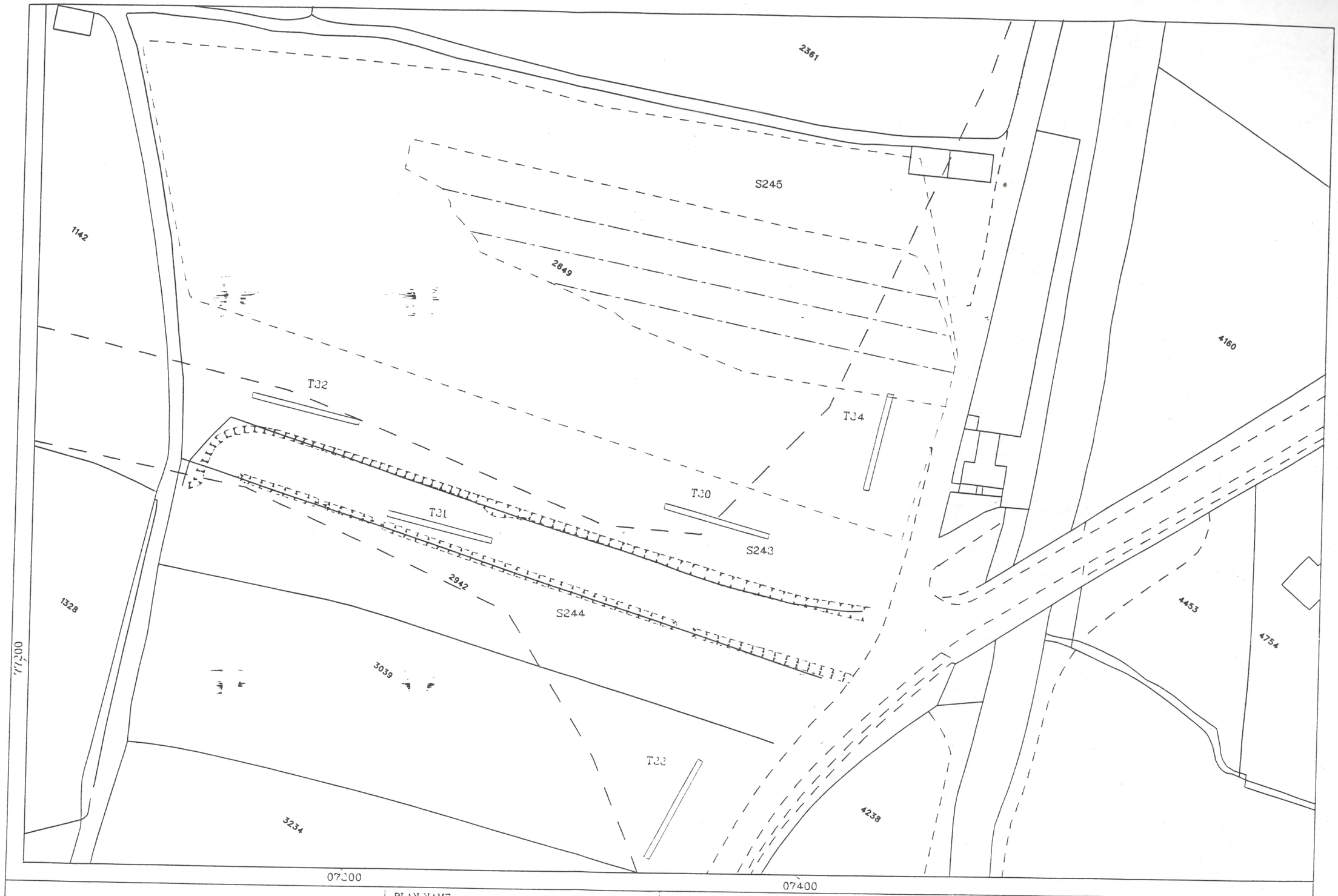
20m

DRAWN BY DH CW MCK
DATE 09.95

SCALE 1:1000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 21



KIRKBY STEPHEN BYPASS

PLAN NAME

SITES 243, 244, 245

20m

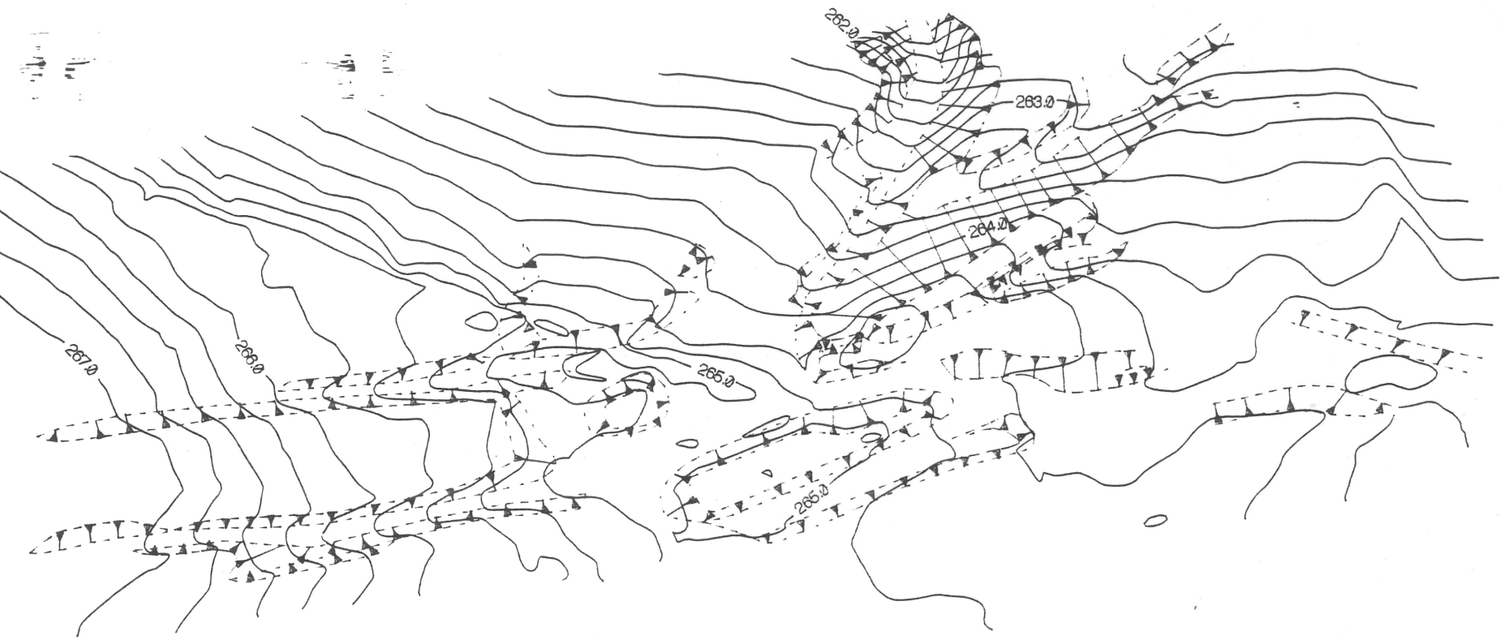
DRAWN BY DH CW MCK

DATE 09 95

SCALE 1:1000

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 22



KIRKBY STEPHEN BYPASS

PLAN NAME

SITE 93

10m

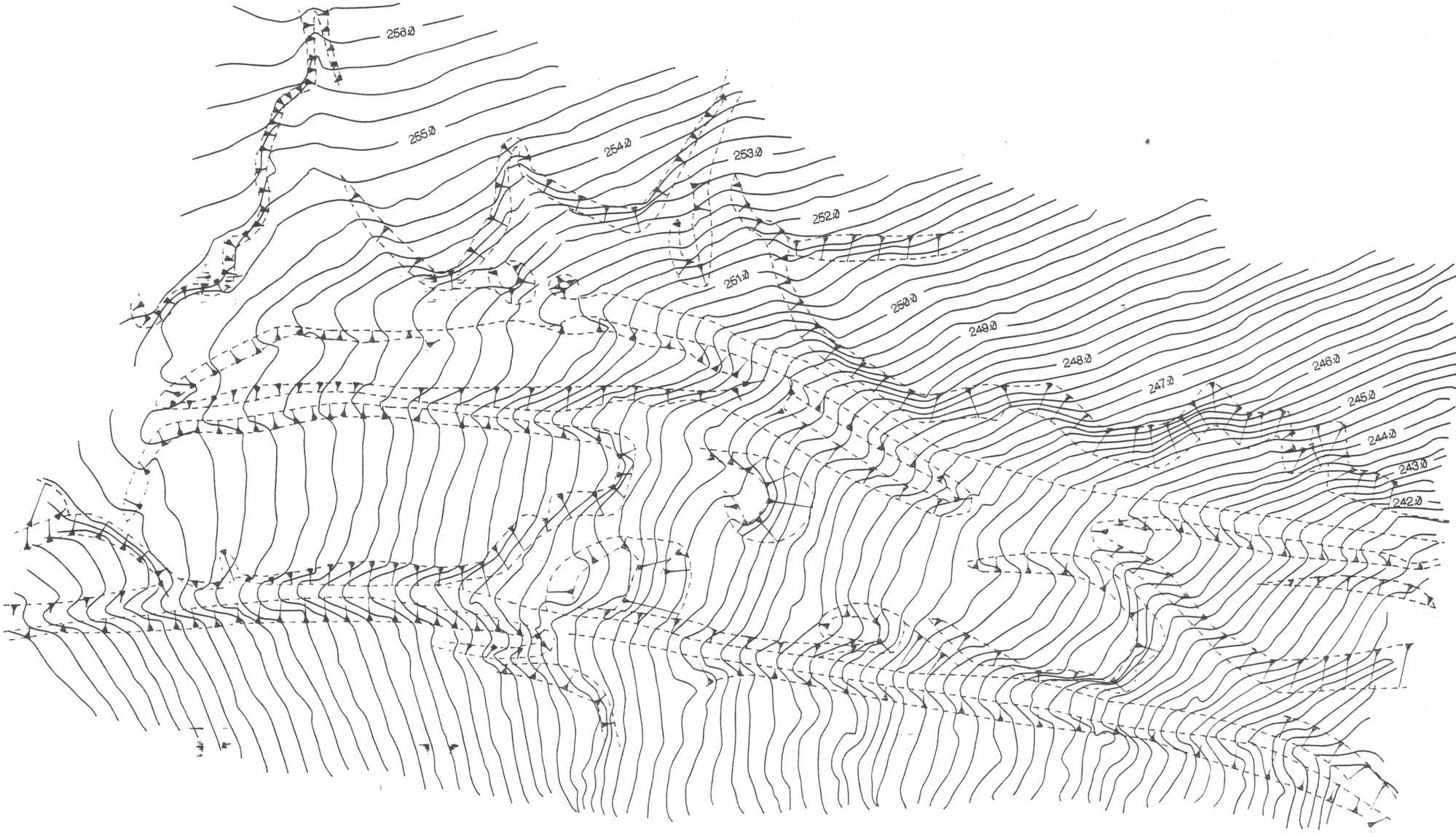
DRAWN BY DH CW MCK

DATE 09·95

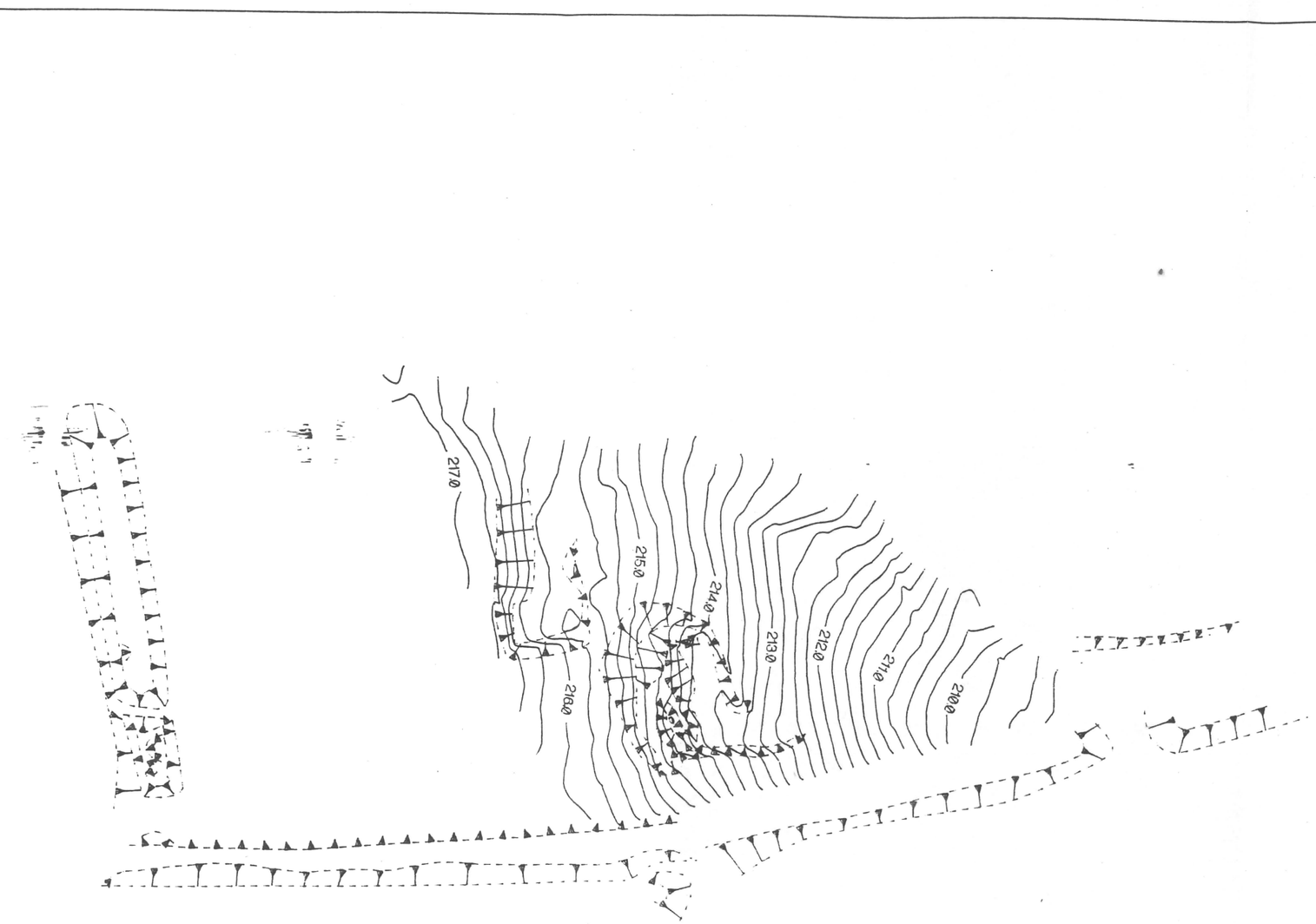
SCALE 1:500

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 23



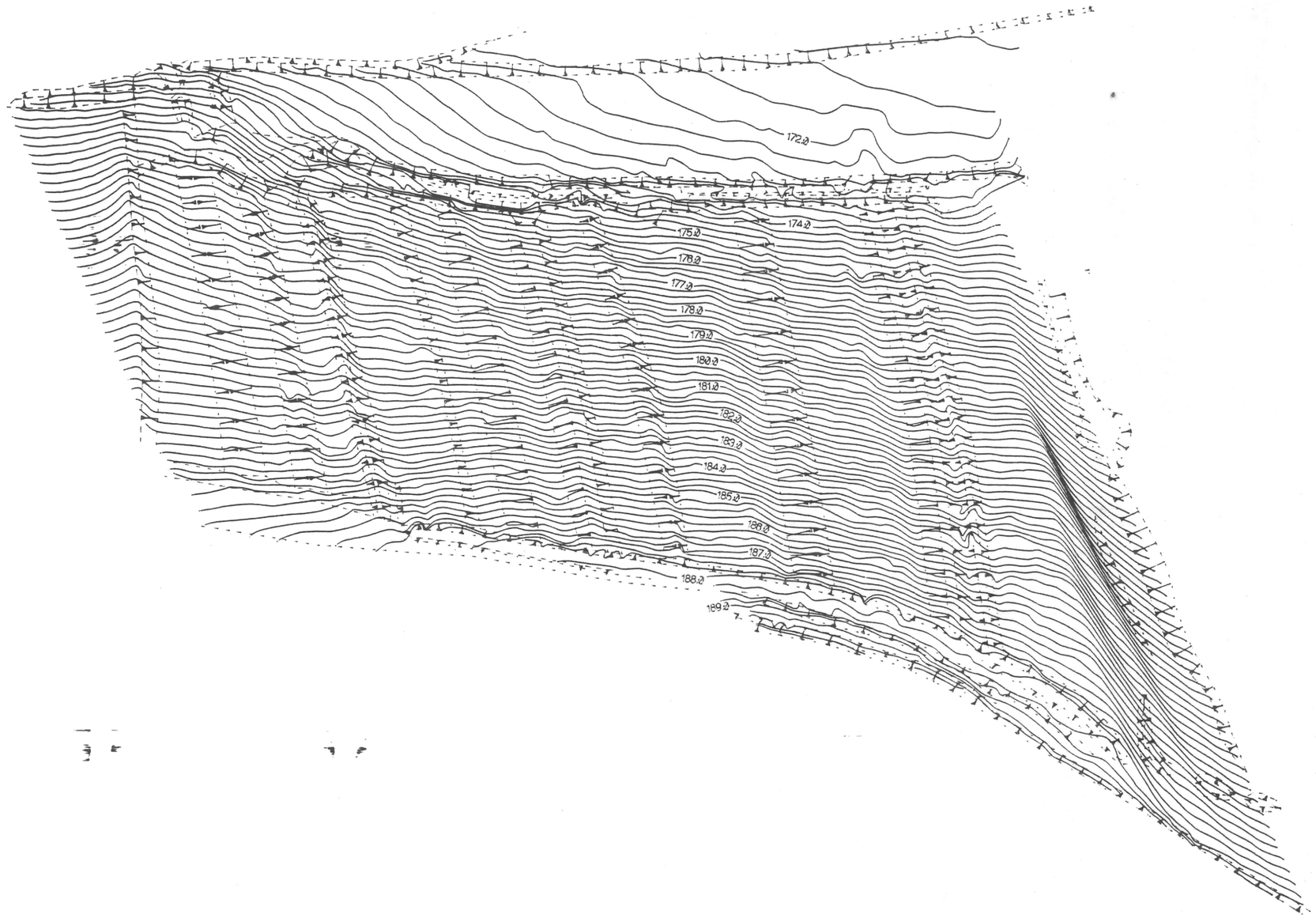
KIRKBY STEPHEN BYPASS	PLAN NAME: SITE 216		10m	DRAWN BY: DH CW MCK	SCALE: 1:500
				DATE: 09 05	
				LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT	FIGURE 24



07700 07800

KIRKBY STEPHEN BYPASS	PLAN NAME SITE 227		10m	DRAWN BY DH.CW.MCK DATE 09·95 LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT
				SCALE 1:500 FIGURE 25

76350



08300 08400

KIRKBY STEPHEN BYPASS

PLAN NAME: SITE 231

DRAWN BY: DH,CW,MCK

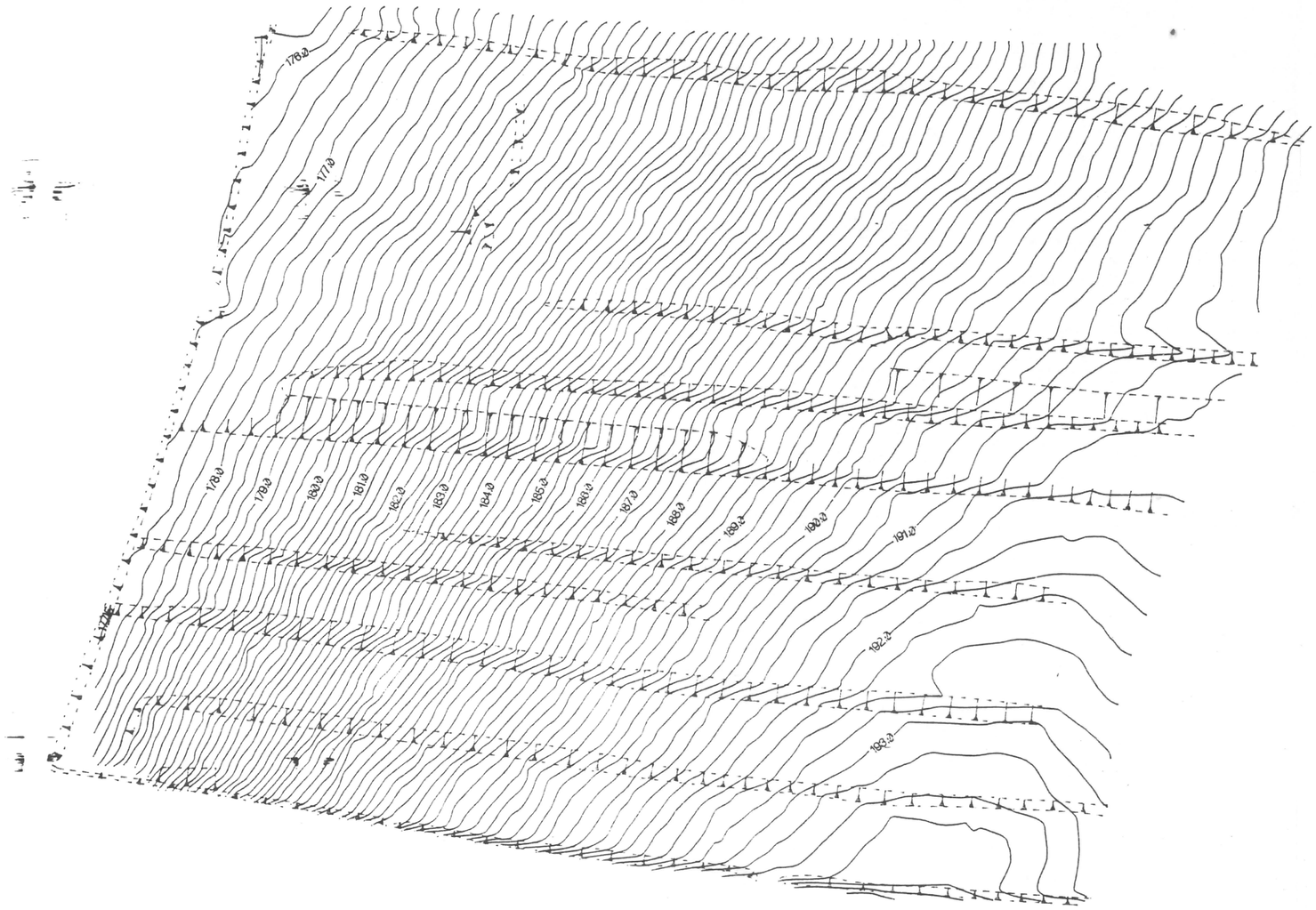
DATE: 09·93

SCALE: 1:750

LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT

FIGURE 26

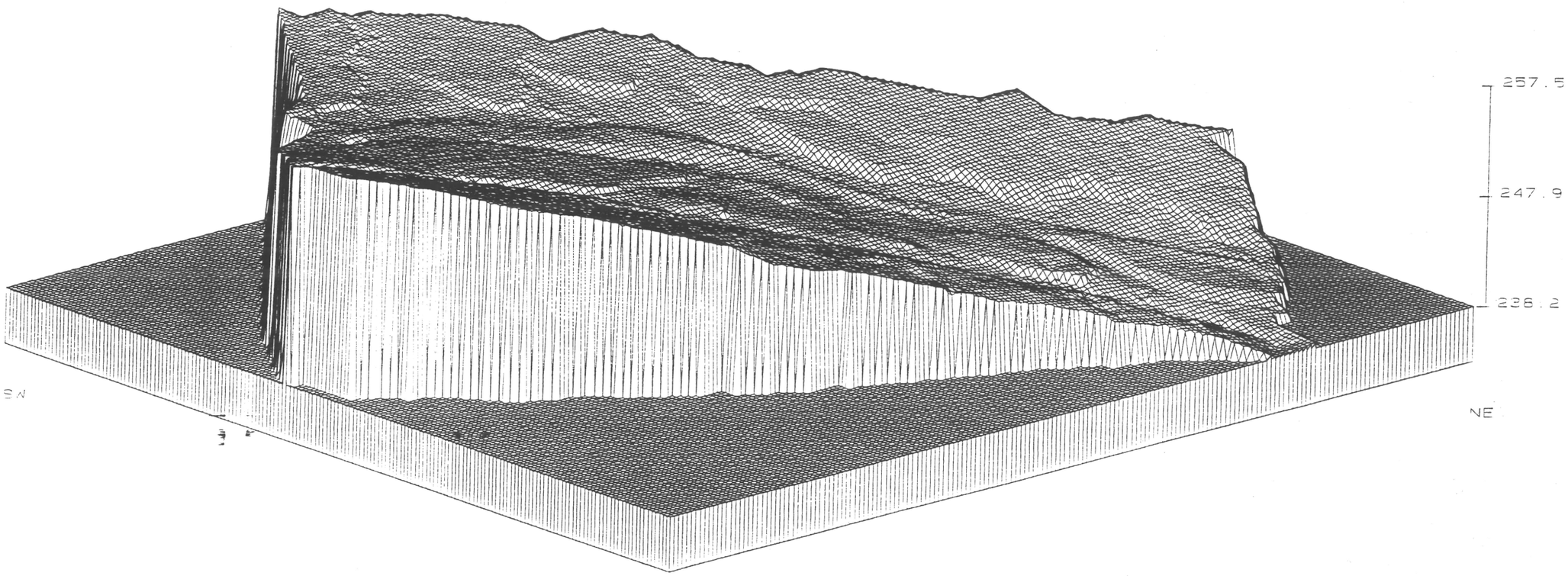
08700



76500

76550

KIRKBY STEPHEN BYPASS	PLAN NAME: SITE 237		15m	DRAWN BY: DH CW MCK	SCALE: 1:750
				DATE: 09·95	
			LANCASTER UNIVERSITY ARCHAEOLOGICAL UNIT		FIGURE 27



KIRKBY STEPHEN BYPASS

SITE 216

FIGURE 28