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ARCHAEOLOGICAL INVESTIGATIONS SCORTON QUARRY, SCORTON RICHMONDSHIRE

ASSESSMENT REPORT 22nd February 1996

Client

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Large scale rescue investigations in advance of quarrying have revealed the remains of a Romano British agricultural landscape A number of different types of rectilinear enclosure were recognised by mapping and sample excavation amongst the tangled pattern of features recorded on the subsoil surface Apart from a thin spread of prehistoric finds in the ploughsoil there is no evidence for pre-Roman occupation of the site

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I 0 AIMS AND OBJECTIVES

1 1 INTRODUCTION

The site was investigated at the invitation of Tilcon Ltd who had previously obtained licence to extract sand and gravel from the field (planmng permission decision C1/34/6A) The proposed works constituted Phase 5 (East) of the Quarry Development Plan which specified that following the extraction of the available mineral deposit the field would be used for three deep silt ponds Quarrying operations would not be comprehensive it was proposed that the eastern side of the field should be left intact and the area instead be reserved for the stock of topsoil and subsoil Therefore the shape and size of the available excavation area was dictated by the geometry of the mineral deposit and the position of the spoil heaps A third factor the position of a set of telegraph poles also influenced the stripping operation during the first session in 1994

The purpose of the investigations at Scorton Quarry was to record the archaeological remains on the site in advance of these quarrying operations A programme of works was implemented which followed the Brief detailed by the County Archaeological Officer (Appendix A) The Brief specified a sequence of archaeological operations intensive fieldwalking the mapping of all archaeological remains and the selective excavation /investigation of such remains

The objectives of the archaeological programme were

to evaluate the reliability of the cropmark evidence

to characterize and date the principal sequences revealed during mapping and excavation

to investigate the relationship between finds from the ploughsoil and the archaeological features cut into the subsoil

to evaluate the condition and visibility of the archaeological remains

1 2 SCOPE OF REPORT

This report describes the archaeological investigations carried out at The Grange Scorton in the parish of Richmondshire during 1994 and 1995 Investigations at the site comprised a session of fieldwalkmg (Intervention 1) two sessions of excavation (Intervention 2) and a watching brief which was carried out during the relocation of the telegraph poles

(Intervention 4)

The site is located on the north side of the river Swale approximately three kilometres north of Catterick at NGR NZ 240/009 (Fig 1) It lies on a terrace of the old river gravels of the Swale which overlie a solid geology of sandstone and marls and is situated on the 60m contour at the mouth of a small valley The soil profile of the site is consistent with the Brickfield Series (Sizer and Brignall 1993) and is composed of a moderate-stoney sandy silt/clay loam (7 5YR4/3)

The site covers an area of approximately 3.1 hectares being the western side of a larger rectangular field which lies immediately south-east of the farm (Fig 2) Before the investigations began a new fence was erected along the eastern edge of the site. This new field was bounded on the north and west by a farm track and on the southern side by another fence following the alignment of a redundant railway line.

Positioned diagonally across the field from the north-east towards the south-western corner were three electricity poles During the first excavation session these poles were protected by an embankment of soil but in the winter of 1994 the poles were re-sited just outside the eastern fenceline A public footpath which ran tangentially across the north eastern corner of the field was maintained throughout the operations Further south beyond the railway line but already destroyed by quarrying was Scorton Airfield This complex was operational during the Second World War but a few scattered buildings of the aerodrome complex still survive in the surrounding fields

Due to an intensive agricultural regime no upstanding earthworks were visible in the field In the previous year crops of cereal maize and silage were grown here The week before our investigations began the ground surface was broken by plough and partially harrowed

A detailed programme of geological prospection had been carried out for Tilcon prior to the commencement of the archaeological work in order to map and characterise the geological profile at selected points across the field Seventeen test pits were machine dug numbers 108 124 (Fig 3) broadly along three north south alignments (Minshall 1993) Each pit was approxunately 5 0m square and was backfilled immediately after recording Two boreholes (nos 87/2 and 87/4) much smaller in size (c 0 20m diameter) also driven mto the subsoil caused minimal disturbance

The site grid was laid out along the axis of the fence on the eastern side approximately following the alignment of the National Grid (see Fig 2) with a theoretical origin 300m beyond the south western corner of the field All measurements and bearings described in the text refer to the site grid



Scorton Quarry, Site Location Map

Fig 1





1 3 TIMETABLE

Investigations at the site began with fieldwalking in late July 1994 but the excavations were carried out in two sessions from August October 1994 and then in April 1995 The delay in completing the excavations was caused by the slow response of the electricity contractors in re-siting the telegraph poles and the quarry regulations which prohibited mechanical topsoil stripping during the wet winter months The excavation area covered 20 600m² which represents 68 5% of the total area of the field (30 100m²) In the first session of excavation an area of 17 900m² was opened (Fig 4) This was then extended by a further 2 700m² when the embankment was removed and the southern end slightly extended

A watching brief was conducted during the re-siting of the telegraph poles at the end of October 1994 (see Appendix B)



20 ARCHAEOLOGICAL BACKGROUND

2 1 INTRODUCTION

Since the Second World War no other rural landscape has seen such intense archaeological investigation as the gravels of lowland Britain A major stimulus for these investigations has been the growth and expansion of commercial mineral extraction during post war reconstruction and development Geographically the published results of this work show a regional imbalance with a strong emphasis on the southern Midlands and the fringes of East Anglia In particular important research programmes and fieldwork have been undertaken along the Thames Valley on the Upper and Middle gravels (eg Miles 1984 Miles 1986 and Parrington 1978) and more recently along the Lower gravels where well preserved sites lie beneath alluvial deposits in the valleys of the Bedfordshire and Cambridgeshire Ouse on the Nene (eg Pryor 1984) Welland and fen edge in the Severn valley and along the Warwickshire Avon and Trent

These investigations have focused on settlement evidence rather than the strucmre of the associated peripheral enclosures and paddocks The work has been driven both by practical considerations and research interests Settlements themselves provide a core focus of interest within a complementary landscape of extensive linear features where ditches and gullies often continue out beyond the available excavation area Changes in settlement pattern are also more easily mapped and provide a means of measuring the impact of Romanisation on native sites following the incorporation of the territory within the influence and administrative structure of the Empire

In the south a variety of settlement types have been recognised during the transition phase between the 1st century BC and the 1st century AD These settlements include small nucleated hamlets for example Ashville from the upper Thames (Parrington 1978) or Fengate (Cat s Water Site Pryor 1984) which are estimated to contain over twenty people and single family umts living within prominent ditched enclosures for example Barton Court Farm Abingdon (Miles 1986) or Werrington Peterborough (Mackreth 1988)

Some of these sites illustrate a developing settlement pattern throughout the Roman period Settlements with origins in the preceding Early or Middle Iron Age (eg Ashville Fengate and Werrington) do not appear to continue beyond the 1st 2nd century AD although the land may still have been worked and presumably belonged to larger settlements situated elsewhere Other settlements which continue until the end of the Romano British period show continuity from the Late Iron Age for example the Middle Iron Age site at Claydon Pike (Miles 1984) was abandoned and shifted in the Late Iron Age to a new site nearby which then developed throughout the Roman period Other examples where a similar pattern was

uncovered include Barton Court Farm (Miles 1986) Stanton Low Buckinghamshire (Woodford 1989) and Stanwick Northants (Neal 1989) Some of these sites also exhibit villa type stmctures demonstrating a degree of Romanisation in their design At Lockington Leicestershire a cropmark site shows a Roman villa adjacent to a native settlement (Clay 1985 fig 3)

The sites which show stinctural continuity also reveal evidence for a corresponding intensification in the agricultural regime throughout the Roman period Innovation m the agricultural regime during the Late Iron Age and early Roman period followed a phase of stagnation (Jones 1981) although it is clear that the adoption of new crops and different techniques of ammal husbandry was not consistent either geographically or chronologically (Jones 1989) Innovations included the adoption of new horticultural crops such as dill fennel celery coriander plum and cherry (Robinson & Wilson 1987) and the introduction of new techniques such as haymaking which maintained the availability of nutritious pasture feed throughout the seasons (Lambrick & Robinson 1988) From the Late Iron Age there is also a proliferation of ditched enclosures and fields (Miles 1982 Benson & Miles 1974) The use of these fields is rarely known although at Drayton in the Thames Valley the excavators could demonstrate that the enclosure of poorly drained soils on the valley floodplain were used for arable cultivation during the Roman period (Lambrick & Moore 1987)

A review of the evidence indicates a significant re-ordering in the settlement pattern during the early Roman period a dramatic change recently described as a social revolution (Fulford 1992 29) Change was driven by the growth of Roman towns which offered the prospect of new markets and increased demand for goods and produce as well as the unposition of Roman taxation In response it seems that the smaller number of settlements increased their productivity by innovation and the adoption of new strategies The occupants themselves also adopted other aspects of Romanisation including the acquisition of the material culture and elements of design in their buildings **30 EVALUATION**

3 1 INTRODUCTION

The purpose of the evaluation was to establish the extent of the archaeological site and its state of survival (Carver 1986) The objective was to model the character of the archaeological resource During this process a number of different techniques were employed and are discussed in more detail below

- a) all existing information about sites in the locality was collected and a provisional table of earlier interventions compiled (Appendix C)
- b) the extent of the site was sought by reconnaissance including aerial photography and fieldwalkmg
- c) the state of strata preservation was determined by exploratory examination during the preliminary embanking operations

3 2 **RESULTS OF EVALUATION**

3 2 1 PREVIOUS INVESTIGATIONS

The area around The Grange farm is rich in archaeological remains although the majority of the evidence has been lost through recent quarrying and intensive agriculture Two campaigns of excavation were conducted during the late 1970s to the west of the current site and next to the Scorton Cursus In 1977 just a kilometre south west of the Cursus a group of prehistoric features was investigated including the vestiges of a flattened barrow containing a central burial and a pit alignment (Griffiths 1977) All these features were plough damaged and survived only as negative cuts into the subsoil beneath 0 40m of ploughsoil In the following year excavations at the northern end of the Cursus exposed the quarry ditches and makeup of the structure itself (Topping et al 1982) The preservation of a deposit of bank material along the spine of the Cursus suggests that ploughing has not completely obliterated all the stratigraphy Apart from demonstrating the variability m preservation of archaeological remains these interventions revealed an active ritual landscape dating from the Late Neolithic into the Early Bronze Age

Visible on the ground surface immediately north of the site and east of the farm are a well preserved set of ridge and furrow type earthworks These earthworks survive in a field which has remained under pasture and has not therefore suffered from intensive mechanised farming

3 2 2 RECONNAISSANCE

Aerial Photography (Int 5 11)

A series of aerial photographs were taken of an area around the farm over a number of years from 1949 to 1992 (Appendix C) One particular photograph (CUC DQ77) taken by Prof J K St Joseph during the hot summer of 1949 provided the blueprint for the current work by recording a network of cropmarks in the field under excavation This photograph captures a set of rectilinear enclosures and isolated linear features particularly visible at the northern end (Fig 5) They also continue west beyond the boundary of the field The shape and alignment of the features suggest that they belong to more than a single phase of activity Apart from the linear features there are at least two subcircular features in the north-eastern corner belonging to a different type of enclosure At the southern end of the field the signature of the cropmarks is fainter and the evidence for the continuation of the site more equivocal Only a few shorter lengths of linear ditch are visible

The dating of these cropmarks is speculative although a Romano-British or medieval date is proposed considering the shape of the features visible in the photographs and the presence of nearby earthworks (see Appendix A) Moreover the 1978 excavations confirmed the presence of such activity in the area from fragments of pottery recovered in the ploughsoil (Topping et al 1982 20)

II Fieldwalking (Int 1)

The entire field was intensively field walked during the summer of 1994 (Intervention 1) The objective of this operation was to plot the distribution of finds from the ploughsoil surface in order to identify specific areas of activity and to establish a preliminary date for the rectilinear field system On other sites field walking has demonstrated the practice of arable farming during the Roman period for example at Drayton south of Abingdon (Lambrick & Moore 1987)

A total of two hundred and ninety-six grid squares were fieldwalked over a period of eight man days each grid square covered an area of 10m x 10m The framework of grid squares was laid out by a variety of methods where the corner of each hectare was located using a total station theodolite (Wild TC1010) and each consecutive ten metre interval measured from the corner by tape and marked with a white stake The sides of each 100m long corridor was defined by a string line and a row of ranging rods The artefacts recovered from each ten metre square were collected bagged and labelled with a location and context number and all cultural material with the exception of lumps of metal from the tractor and plough was recovered



A total of five hundred and thirty artefacts was recovered from fieldwalking (Table 1) (Fig 6) but the maximum number of finds in any square was nine (grid square 480/280) Eighty two squares contained no finds representing 27 7% of the total number of grid squares and the majority of squares contained fewer than three fmds (71 6%) (Table 2) The assemblage is dominated by post-medieval and modern debris Distribution plots were generated for a selection of the different material types and all the finds were indexed (Appendix D) A contributory factor for the low yield of artefacts was the condition of the field which had recently been ploughed and partially harrowed flat Therefore the majority of the surface was extremely uneven made up of deep furrows and large clods of baked soil Deep ploughing had brought clean streaks of subsoil to the surface visible along the base of the furrows

Many of the sherds of china were in an abraded condition and broken into small pieces the largest sherd being no longer than 70mm Most of the pieces were body sherds of indeterminate shape although different forms were present - cups plates jars and an electrical insulator cap Various styles of decoration were recognised including transfer decorated floral design executed in both blue and brown feather edge decoration relief floral design and a NAAFI stamp with **B**ovey Pottery written on a cup base NOT PLOTTED

There were no manufacturers stamps on any of the fragments of clay pipe Twenty three stem fragments were recovered four with pieces of the bowl attached and a single fragment of a mouth piece The stems were of different thicknesses but the largest fragment was only 50nim long NOT PLOTTED

NOT FLOTTED

A quantity of **B**akelite was recovered but these pieces were small the largest being no longer than 40mm The fine rilling around the perimeter of many of the fragments suggest that they belong to clay pigeon shooting discs NOT PLOTTED

All the sherds of glass were modern but in a fragmentary and abraded condition The neck of a thick heavy bottle was the largest piece but this was only 80mm long The majority of the material derived from bottles - body sherds bases and necks - in a variety of colours (plain green blue and brown) Only two other forms were recognised - a few pieces of window glass and the base of a glass cup NOT PLOTTED

Earthenwares dominated the ceramic assemblage Heavily glazed wares were the most popular items Plates bowls and undiagnostic body sherds were present carrying a thick

Table 1

INT 1 FIELDWALKING ASSEMBLAGE

MATERIAL	COUNT	PERCENTAGE
ceramic	100	18 87
china	189	35 66
bflint	2	0 38
flınt	18	3 40
bone(a)	0	-
metal	26	4 91
glass	106	20 00
stone	0	
bakelite	60	11 32
clay pipe	24	4 53
slag	5	0 93
TOTAL	530	100 00

Table 2

FIELDWALKING SUMMARY INT 1

DESCRIPTION	COUNT	PERCENTAGE
total number of squares	296	100 00
number of squares no finds	82	27 70
number of squares with finds	214	72 30
total number of finds	530	100 00
max count of finds per square	9	1 70



yellow-white internal slip Jugs and other body sherds were coated in a heavy manganese glaze Other earthenwares carried a brown salt glaze or were unglazed Finally a few sherds of stoneware were recovered four pieces of tile and fourteen pieces of drain pipe This group of pottery is post medieval in date There were ten sherds of pottery which were earlier m date Four are probably Roman (A 1 8 13 & 16) all are in an oxidised fabric - three body sherds and a substantial rim fragment (M Darling pers comm) Six other sherds coated with a green glaze are medieval or later (Δ 3 6 9 10 14 & 15) PLOTTED (Fig 7)

All the metal artefacts were iron Different forms were present including nails (2 4 5) bolts (5" 7) washers nuts a piece of piping a chisel shaft and a length of chain link These are all modern and in a poor state of preservation Five lumps of slag were recovered PLOTTED (Fig 8)

A small flint assemblage was present comprising both waste debris (flakes and cores) and implements (scraper and a bifacial) The parent material employed in the production of these pieces includes good quality flint and poor quality chert. A source for both types of material was probably available locally in the outcropping river gravels. The three fragmentary cores with multiple right angle platforms are in chert but only a few flake beds were visible on their abraded surface. All twelve flakes were broken seven were stimck from flint although one is now heavily patinated. The flint end and side scraper (Δ 23) is complete with steep retouch on the bulbar surface and over the proximal end. The bifacial (A 31) in chert has shallow invasive retouch over both faces. Two fragments of calcined flint (Bflint) were recovered (Δ 17 & 18) the latter possibly a burnt core. Close dating of such a small and fragmentary assemblage is not possible there are no diagnostic pieces but a neolithic or early bronze age date is most likely. PLOTTED (Fig 9)

Overall the fieldwalking recovered a small multi-period assemblage dominated by modem debris outcast by the nearby farm but containing a scatter of prehistoric and Roman artefacts Few inferences can be drawn from such a thin distribution of finds. The prehistoric finds however suggest that activity stretched beyond the focus of the ritual cursus monument although the character of the activity is enigmatic since no features of this period were recorded and the lithic assemblage was too small and unstratified. Iromcally the few finds of Roman date do not correspond with the quantity and density of features of this period discovered during the excavation. Severe attrition caused by intense farming on a stiff clay soil has curtailed the lifespan of the more fragile material. Under such conditions it is unlikely that any pottery except the better fired wares would survive in the ground (Lambrick 1984 Reynolds 1988).







3 2 3 EXPLORATORY EXCAVATION

Prior to major soil stripping operations an embankment was constructed across almost the full length of the site using the shallow ditching bucket of a JCB excavator Observations made during this operation allowed the depth of the archaeological strata to be measured. The "bund 16m wide and over 150m long was built either side of the telegraph poles to protect the heavy plant machinery from the powerlines.

The toothless ditching bucket removed the ploughsoil overburden and produced a clean' subsoil surface The purpose of this cutting was

to establish the depth of the ploughsoil and confirm the measurements taken during prospection (Minshall 1993)

to estunate the depth of archaeological stratification beneath the ploughsoil

to validate the techniques employed for cleaming archaeological surfaces beneath the ploughsoil

to confirm the presence of archaeological features

to locate the edges of the site

The exploratory cuttings were conducted during poor working conditions when the ground was dry and dusty However the results of the investigations confirmed that the depth of ploughsoil (0 40m) was consistent across the field and that ploughing had destroyed any stratification above the subsoil Beneath the ploughsoil an interface of disturbed subsoil was recogmsed which had been produced by occasional deep ploughing a characteristic described by previous excavators (Griffiths 1977) Poor visibility caused by lack of moisture in the subsoil and not by the dragging bucket prevented the identification of any features in these long cuttings

Additional evidence comes from the results of the geological test pits which suggested that waterlogged deposits could be expected if the features were very deep At Scorton the water table was contacted at variable heights 1 2m - 3 2m below the subsoil surface (Minshall 1993) The pits indicated that the water table was higher in the north eastern corner of the site and lower on the southern and western sides where it was contacted at a depth of 2 5 3 0m However since five of the pits were dry (at a depth of over 3 0m) it is clear that the water table also varied locally

40 STRATE**GY** (Int 2)

4 1 THE RESEARCH AGENDA

Whilst earlier investigations demonstrated the ritual content of the prehistoric landscape focused around the important cursus monument the evaluation has given Scorton Quarry a new personality revealing the presence of a substantial Romano British site covering more than five hectares This new personality will be taken as the point of departure to assess the value of further research

The relationship of the prospective Romano-British site with the prehistoric landscape is of significance and it is necessary to record the content of the prehistoric landscape in order to establish whether it was respected by the later occupants Additionally there is the possibility that elements of the ritual landscape may have been incorporated into the building repertoire of the later occupants for example were any of the ring-ditches which were the burial mounds of the prehistoric period re used for secondary burials during the Romano British or later periods?

In northern Britain excavated Romano-British settlement sites with corresponding field systems are not common and those which have been investigated are incomplete. The evidence for Romano-British activity is lunited to sites contaiming field systems which overlie earlier Iron Age settlements. At Thorpe Thewles Cleveland (Heslop 1987) and at Melsonby Barnard Castle (Haselgrove et al 1994) large scale enclosures of the Romano British period follow the abandonment of settlements and the enclosures extend beyond the boundaries of the excavated area. On Levisham Moor on the North York Moors a number of well preserved subrectangular enclosures contained roundhouses (Hayes 1983) Excavation produced a scatter of Roman pottery from two enclosures suggesting activity and possibly occupation into the Roman period (Wilson 1995)

No distinct settlement structures were reported from the evaluation at Scorton but contact with settlement evidence should be expected from such a large scale excavation The available evidence indicates that the native tradition of roundhouses continued into the Roman period (eg Hayes 1966 Close et al 1975) but excavation of gravel sites in southern Britain also suggests the possibility of larger buildings with characteristics of Romanisation (eg Barton Court Farm Miles 1986) although there are few villa type settlements from the gravels to suggest the prospect of a rich site (Fulford 1992) An important aspect of the proposed excavations is to establish whether the site developed from an earlier Iron Age predecessor or belonged to a new settlement hierarchy established under Roman rile and administration. If it was a newly occupied site what relationships existed across the hierarchy particularly with the developing towns of Roman Britain ?

The relationship between the towns of Roman Britain with their developing urban characteristics (eg markets) and the satellite settlements producing agricultural surplus to maintain the growing urban population is poorly understood. One interesting site at Claydon Pike Gloucestershire was re organised following the Roman conquest and could have been an estate centre' used for the collection of animal fodder for the nearby town of Cirencester (Miles & Palmer 1982)

At Scorton the extensive complex of ditches and gullies crossing the site suggest an established and successful agricultural regime which probably supplied its surplus to the small Roman town of Catterick a few kilometres away By the 4th century AD Catterick appears to be a relatively prosperous town supplying sites in the area with Romanised material such as pottery (Wilson 1995) Therefore an assessment of the material remains from the excavated features should provide a measure of the wealth and Romanisation of the site and illustrate the range of materials available in the local markets

It is predictable that intensive ploughing has destroyed all traces of ancient soils and occupation levels leaving only the timicated bases of the deeper features. Ancient soils which exceptionally are covered by alluvial deposits on the gravel floodplain can preserve direct evidence for the use of the former fields. For example cross-cutting ardmarks were seen scored beneath a thin soil at Drayton (Lambrick & Moore 1987) and pottery distributions have been interpreted as manuring scatters (Lambrick 1988 Gaffney & Tingle 1989). Without direct evidence reconstruction of farming practices comes from a study of the fossil remains of the contemporary flora and fauna preserved in archaeological deposits Elsewhere the success of environmental archaeology on the gravels has come from the study of such remains in waterlogged deposits retrieved from deep feamres and from the recovery of carbonised plant remains (Robinson 1992 Lambrick & Robinson 1979). Therefore to understand the function of the enclosures at Scorton it is essential that environmental samples are recovered from any potentially rich environmental targets (eg waterlogged prunary contexts)

4 2 EXCAVATION STRATEGY

The results of the evaluation demonstrate the potential quantity of archaeological features lying buried beneath the ploughsoil even if they were temporarily obscured in adverse working conditions Previous excavators have shown that only the deeper negative features cutting down into the subsoil would be preserved. We could also predict that only in exceptional circumstances (eg beneath field boundaries or trackways) or with regard to particular types of deposit (eg the cursus bank) would any additional archaeological strata survive. The nature of the surviving evidence has implications for the research potential and has therefore influenced the excavation strategy.

to record the stratigraphic relationships between elements of the field system at key locations

to record the shape and character of a range of potential feature types

to clarify the shape and alignment of different elements in the field system

to retrieve an assemblage of artefacts which will date the constituent elements of the field system

to recover an environmental assemblage for laboratory assessment

During the fieldwork a set of operating procedures were followed called *Field Research Procedures* (Carver 1990 Carver 1993) (Appendix E) and the information recorded during the investigations is held m a structured archive (Appendix F)

In order to map the extent of the site and the geometry of the archaeological remains the available area was mechanically stripped of topsoil A large 28 ton 360° back-actmg excavator fitted with a 5' wide toothless ditching bucket was able to work a 12m corridor in each strip This machine removed the ploughsoil in a single bite and the bucket was then brought back over the ground to clean the surface The ploughsoil was 0 40m deep but an additional 0 05m - 0 10m spit of disturbed subsoil was scraped-off to improve feature definition at the base of the ploughsoil

The stripping operations were carried out carefully to achieve a clean readable subsoil surface. The subsoil surface composed of a variable sand and gravel fraction was called Horizon 2 (see Appendix E for terminology) being the depth at which the archaeological strata (contexts features and structures) were defined and mapped. The horizon surface was not easily located in the prevailing conditions which were very dry and dusty. Indeed across the north-western corner of the site where the stripping operations began definition of the horizon surface was initially poor.

The outlines of all contexts and features were unmediately marked with white tags when they were revealed by the mechanical excavator although occasionally it was necessary to shovel scrape the surface to achieve a finer definition. This was particularly important where feature edges were blurred. The shapes of all archaeological anomalies were noted and described and the position of each tag surveyed three-dimensionally with the total station theodolite Using the list of co ordinates stored by the theodolite the position of each tag was plotted on

a drawing and from these the feamre plans were drawn up on site All heights stored m the records are the correct AOD (Above Ordnance Datum) values The site was divided into a series of plaiming modules or Quadrants (A-K) with each module covering an area of 80m x 50m (Fig 10) Each pre excavation plan of a module was drawn on A1 drafting film at a scale of 1 100

Mapped features were interrogated either by hand excavation or additional careful surface cleaning The purpose of excavation was to sample a range of different feature types in order to characterise their dimension and shape retrieve an assemblage of artefacts and recover soil samples from relevant contexts Feature intersections in particular were chosen for sample excavation in order to record both in plan and section the stratigraphic relationships

Selected features were sample excavated by hand (Level C recovery) using a mattock and trowel and every context mvestigated was described on the record cards (archive records Y2 and Y3) A hachure plan and a section/profile drawing described the shape of the excavated feature (record Y5) all post excavation drawings made on A4 film at a scale of 1 20 and 1 10 respectively Colour slides were taken of the ground surface during the definition exercises and at stages during the excavation of each feature (record Y6)

Where excavation was inappropriate intersections of features were hand cleaned by trowel This operation clarified the shape alignment and sequence of features which were retrospectively annotated on the site plans and described on the record cards



50 **PRELIMINARY ANALYSIS**

5 1 EXCAVATION RESULTS

No finds were recovered from the ploughsoil during the mechanical stripping but a few sherds of pottery were occasionally noticed sitting on the horizon surface These belonged to the feature fills and were bagged and anchored for later collection

A total of one hundred and ninety features were recorded (Appendix G) linear gullies and ditches penannular gullies postholes pits and field drains but this included a group of twelve features that were allocated duplicate numbers (Table 3 Fig 11) Features were labelled using a continuous numbering system from F1 - F193 although numbers F6 F128 and F151 were not used Not all the features listed were defined on the horizon surface since a few were discovered only as the surface weathered during surface definition (Fig 12) or during excavation (Table 4 Fig 13)

A preliminary analysis suggests that amongst the scatter of features there are at least four different types of Romano British enclosure

1) Small Rectilinear Enclosures (Fig 14a)

These were constructed of straight narrow gullies which intersect or mn orthogonally one to another The features tended to be shallow gullies suggesting that this type of enclosure has been severely truncated by recent farming practices One of the linear gullies F19 only survived to a depth of 0 06m These gullies had a sunple U shaped profile with no internal elaboration such as posts or palisade slots

The features survived in varying lengths from short isolated segments for example F16 F177 and F189 were between 8 00m 9 00m long to longer sinuous lengths of over 40 00m (F27) All the gullies were aligned (according to the site grid) in a NNE-SSW and a WNW ESE direction. None of the gullies were re-cut although F181 and F182 ran parallel to each other A total of thirty eight features were categorised within this class of enclosure (Table 5) 62% were investigated. These features produced a high yield of ceramic finds from their backfill - 47 6% by weight or 40 2% by count of all ceramic finds recovered.

There were no features belonging to this type of enclosure at the southern end of the site Where gullies survived the specific shape of the enclosure pattern remains ambiguous although the fragmentary remains suggest that it contained open-ended square and rectangular fields connected by a network of narrow trackways Since some of the gullies were set tangentially across one another it was clear that this type of enclosure was constructed Table 3

FEATURE	EQUIVALENT
10	191
22	30
23	24 66
27	52
28	29
49	56
50	57
53	58
60	186
73	74
80	89
157	174

LIST OF DUPLICATE FEATURES INT 2

Table 4

LIST OF FEATURES SEEN AFTER HORIZON 2 DEFINITION INT 2

METHOD	FEATURE		
surface weathering	88 108 109 110 111 112 113 114 115 116 117		
surface definition/excavation	90 91 92 93 94 95 97 98 99 101 102 103 107		







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Table 5

PROVISIONAL LIST OF FEATURES FROM ENCLOSURES

ENCLOSURE TYPE	FEATURE NUMBER		
Subrectangular (small)	12 13 14 16 19 20 27/52 28/29 30/22 31 32 96 109 129 140 141 142 143 149 153 154 155 156 157/174 158 160 167 170 171 176 177 180 181 182 184 185 189		
Subrectangular (large)	9 12(N) 15 23/24/66 18 21 47 67 71 75 76 91 92 97 98 99 106 107 130 150 165 168		
Open	25 26		
Subcircular	48 61 62 64 173		

consecutively

11) Large Rectilinear Enclosures (Fig 14a)

Constructed of broader deeper gullies and ditches these field boundaries were spread over the whole area The southern boundary of this enclosure type was defined by a continuous structure composed of gullies F23/24/66 Since these features were more substantial it is less likely that we have lost their original pattern although the supplementary components must have been lost through plough damage

Features belonging to this type of enclosure were larger and the enclosures themselves more extensive for example F23/24/66 was over 110 00m long and was cut with a steeper profile Excavation confirmed that some of these features had been periodically re cut along the same or similar alignment for example a sequence of deep gullies (F97 F98 and F99) overlying each other was discovered beneath F10

A segment of each feature from this type of enclosure was investigated (Table 5) and although a smaller percentage of finds was recovered 30.1% by weight or 24.2% by count a wider range of material types was represented ceramic ammal bone and the only metal finds discovered during the excavations a pair of Group 4 bronze trimpet brooches (Snape 1993) came from the terminal of F47

111) Open Ended Enclosures (Fig 14b)

Only one example of this type of enclosure was discovered composed of two linear features F25 and F26 forming a concentric pattern toward the south end of the site (Table 5) Both features lie across the other types of enclosure and enclose the eastern end of an apparently long rectangular field aligned WNW ESE Apart from the short return of both features the northern side of this structure was open (although it is possible that a plough damage has destroyed other ephemeral evidence eg fencelines) A small ceramic assemblage came from the segments of ditch and gully excavated - 5 0% of the total weight or 8 9% by count

1v) Subcircular Enclosures (Fig 14c)

Two continuous penannular gullies were discovered at the southern end of the site beyond the other enclosures The shape of these structures suggests a different function to the other enclosures - they are both similar to domestic roundhouse structures (Table 5)

F48 enclosed an area of approximately $393m^2$ the internal diameter of this enclosure being 24 00m (measured E-W) with an entrance over 15 00m wide facing north The surrounding

gully F48 was 1 20m wide and had been cut with a steep sided U-shaped profile surviving to a depth of over 0 50m After carefully cleaning the interior ground surface no additional features were discovered

The surrounding gully of the second enclosure F61 had a shallower U-shaped profile only 0 19m deep There were no postholes or post unpressions noted in the segments excavated The gully enclosed an area of approximately $313m^2$ with an internal diameter of 20 50m A narrow entrance survived on the north western side approximately 7 00m wide Inside F61 were two shallow concentric gullies F62 and F64 features which were not continuous and had obviously been trinncated by modern ploughing Both gullies were shallow 0 20m and 0 22m respectively They were situated 1 00m - 2 00m inside F61 and continued across the entrance The position and shape of these features suggest they were the internal bedding trenches for successive walls belonging to the enclosure The internal diameter of this strincture is approxunately 15 50m. Unfortunately further hand and machine cleaning over the interior failed to recover any additional strinctural features

v) Unassociated Linear Features

The remaining linear features are isolated but it is possible that a few could belong to a larger system of field boundaries. For example on the eastern side of the excavation a large prominent ditch F63 ran for over 140 00m parallel to a smaller gully F73/74 Almost orthogonal to the ditch F63 in the southern corner of the site was a narrow gully F49/56 suggesting its return

Two modern linear features were recognised during the course of the field work F166 and F50/57 (Fig 15) Both these features were datable by the concentration of modern debris (tunber brick and china pieces) in their fill and were not excavated They represent the abandonment of a modern field system which overlay the Romano British enclosures

On the eastern side of the site regimented rows of modern field drains (F78 F113 F114 F115 F116 and F117) were cut across a patch of heavier clay subsoil There were no features of this type elsewhere in the excavation area

vi) Pits and Postholes

A scatter of postholes and postpits covered the entire excavation area No structural pattern was recognised amongst this group of features although F88 could belong to the entrance of an enclosure A 50% sample of these features was selected for excavation (Table 6) and the majority proved to be isolated shallow earth-bound postholes or pits Some variety was reported from a minority of the features For example possible post-packing stones were



Table 6

108

110

163

FEATURE MAX DIAMETER MAX DEPTH FINDS (M) (M) 7 1 00 0 15 Х 8 1 10 0 28 Х 33 1 00 0 21 Х 0 35 34 0 14 Х 35 1 20 0 15 40 1 00 0 17 41 0 60 0 15 42 0 90 0 12 0 70 0 30 43 44 0 80 0 22 45 0 80 0 20 46 0 60 0 20 -51 0 25 0 15 -68 1 00 0 23 70 1 20 0 10 87 1 60 0 24 Х 88 1 30 0 20 93 0 90 0 20 Х 94 1 40 0 15 95 1 00 0 20 Х 104 1 30 0 10 105 0 80 0 20

SIZE OF EXCAVATED POSTHOLES INT 2

36

0 22

0 20

0 37

Х

1 00

1 10

discovered in the backfill of F8 and F95 and a subrectangular postpit F33 contained the ghost mipressions of two small posts (contexts 1205 and 1206) F188 was recogmised as one of the three modern telegraph poles removed from the field in 1994 A few ceramic finds were recovered from the backfill of the postholes representing 4 4% by weight or 3 7% by count

Three postholes F93 F94 and F95 cut the bottom of a shallow palisade trench F100 situated against the western edge of the excavation Unfortunately this palisade trench was badly truncated and did not survive to any depth Indeed the trench was no longer visible after the horizon surface was cleaned at the junction with F9

The rectangular distribution of large pits covering the horizon surface (F11 F54 F55 F65 F77 F85 F111 F112 F152 F172 F179 F187) were the machine cut test pits of the preluninary geological prospection Not all of the pits reported by the contractors were visible on the horizon surface This type of feature was particularly difficult to record since each pit had been immediately backfilled with gravel

Five smaller subrectangular pits (F118 F125 F136 F137 F139) were considered to be possible inhumation burials None produced any evidence for burial although a few smaller animal burials were discovered at the northern end of the site (F2 F3 and F4) Their location and character suggest that they were the burials of domestic ammals The features contained fresh clean articulated bones within a loose dark brown backfill

5 2 THE FINDS ASSEMBLAGE

A total of six hundred and eighty five finds were recovered from the excavations and these are listed in the finds index (Appendix H) The assemblage consists of a variety of different material types (Table 7) but is dominated by the ceramic component which contributes 91 5% of the total number

The assemblage contained no prehistoric finds instead the overwhelming majority of finds were Roman with a strong representation of pottery styles dating from the 2nd - 4th centuries AD Significantly one group of ceramics representing over 40% of the total number of ceramic finds suggests an important Early Medieval component to the occupation (M Darling pers comm) Only one modern item a small piece of brick (Δ 551) was recovered from the excavated features suggesting that the assemblage is relatively undisturbed

1) Ceramics (Table 8)

The discussion below is based on notes taken during a cursory visual inspection of the

Table 7

MATERIAL	COUNT
Bone (A)	40
Ceramic	627
Metal	2
Tooth	3
Matrix	13
TOTALS	685

STRUCTURE OF THE FINDS ASSEMBLAGE INT 2

Table 8

CERAMIC				
FEATURE	COUNT	%	WEIGHT (g)	%
4	1	0 2	20	0 2
7	2	03	51 5	06
8	3	0 5	42 6	05
9	3	0 5	95 6	11
11	1	0 2	10 8	01
12	2	03	23 7	03
15	1	0 2	6 5	0 1
18	2	03	96	01
20	1	0 2	59	0 1
21	5	08	35 6	04
23	33	5 2	384 1	4 3
24	11	18	49 6	06
25	28	4 5	184 7	2 1
26	28	4 5	261 7	3 0
28	10	16	66 6	08
30	6	09	142 6	16
31	218	34 7	3562 5	40 1
32	3	0 5	22 1	0 2
33	4	0 6	61 5	0 7
34	2	0 3	2 5	0 1
36	20	3 2	145 5	1 6
47	5	0 8	49 3	06
52	7	11	110 8	1 2
61	1	0 2	18 3	0 2
66	61	97	490 5	5 5

SUMMARY OF FEATURES WITH CERAMIC FINDS INT 2

67	14	2 2	77 9	09
FEATURE	COUNT	%	WEIGHT (g)	%
71	4	06	29 3	03
72	5	08	198 1	2 2
75	14	2 2	104 2	1 2
76	3	05	44 4	0 5
81	1	0 2	16	01
87	2	03	24 4	03
91	50	80	647 8	73
93	3	0 5	146 1	16
96	3	0 5	262 2	29
97	12	19	611 7	69
99	9	14	234 0	2 6
101	2	03	13 7	01
102	6	09	36 6	04
104	7	1 1	59 3	06
106	1	0 2	1 3	0 1
108	7	11	61 2	0 7
130	4	06	56 5	0 6
165	1	0 2	43 7	0 5
168	19	3 0	338 5	38
170	1	0 2	21 4	0 2
184	1	0 2	56	0 1

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assemblage conducted by Maggie Darling from The City of Lincoln Archaeological Umt

A range of Roman vessel types are present which include Samian wares (a glossy red coated tableware) Mortaria (general purpose mixing bowls with the interior surface covered with rough grits) Black Burnished Wares (black/dark grey coloured wares in a variety of forms including cooking pots bowls and dishes) Dalesware (coarse hand made cooking pots) Grey Wares Nene Valley Wares Rhenish Wares (various forms in a thin orange fabric including beakers) and Amphora (large two handled containers used as trade-packaging) In general this assemblage dates from the 2nd - 4th century but with a particular focus in the 3rd and 4th centuries AD

Bowls and drinking cups are represented in Samian wares in both decorated and plain styles The decorated forms carry images of figures and figure types motifs and zone separators A Gaulish origin (south and ⁹ east Gaul) was suggested for some of these wares One sherd carries evidence of repair in the form of a small rivet hole

A few fragments of poorly preserved Mortaria are present in an oxidised fabric these could be locally manufacmred or imported from the kilns at Corbridge

The Black Burnished Wares date from the late 2nd century AD In particular three forms are present bead and flange bowls plam rimmed dishes and cooking pots the latter carrying obtuse decoration incised on the exterior

One sherd of ⁹ Dalesware represents a locally made imitation of this type of pot

A number of Grey Wares unitate the forms of Black Burmshed Ware but include at least two beakers and a jar

Different forms are present in a light orange oxidised fabric including a beaker base a plain rimmed dish a flagon foot ring a flagon rim a narrow necked jar and a mortarium. The rim of the mortarium carries the image of a manufacturer's stamp. A number of miscellaneous fragments cannot be identified to form and this includes one piece (A 440) reused as a counter (a measuring weight or playing piece)

There are fewer forms of Nene Valley colour coated pottery The forms represented include a Castor box lid and fragments of beakers which date between the 3rd and 4th centuries AD

The few sherds of Dressel Ware amphora present are manufactured from a sandy fabric

Over 30% of the assemblage was composed of sherds from an unknown type of pot possibly

Early Medieval in date The majority of this pottery was discovered in a single feature F31 These vessels were hand made or finger pressed into large saggy shapes with large rims and small bases

11) Metal (Table 9)

Two Roman brooches (Δ 671 672) were recovered from F47 (context 1049) They were discovered as a pair loosely attached together through their pins Both these timpet brooches are superficially identical and belong to Group 4 1 of their typological series (Snape 1993) (formerly known as Group R Timpet Brooches Collingwood & Richmond 1969) Similar examples are known from excavations at Corbridge Red House (Snape 1993 Fig 4 no 6) and Corbridge (ibid Fig 6 no 23)

These forms date from the second half of the 1st century to the mid 2nd century (Mackreth 1973) and are of a type occasionally worn in pairs (Snape 1993 6)

5 3 ENVIRONMENTAL ARCHAEOLOGY ASSESSMENT

The purpose of the environmental archaeology assessment was to recover samples from suitable deposits to assess the preservation of environmental remains and to develop a strategy for future work (Hall et al 1995)

No ancient / buried soil horizons were contacted and the umform character of excavated deposits focused attention on the recovery of biological remains (fauna and flora) The absence of deep features and the lower depth of the local water table did not produce any waterlogged deposits and furthermore there were no deposits rich in charred macrofossil remains suitable for bulk sampling Consequently the strategy adopted was to sample appropriate deposits for microfossil remains in particular pollen. The contexts selected were the fills of the deeper ditches which were considered to be less disturbed although it should be noted that no strictly primary deposits were recognised in the section of any excavated feamre

A total of thirteen samples were bagged from different contexts belonging to the enclosure system (Table 10 Fig 16) Two of the samples were submitted for preliminary assessment at the Environmental Archaeology Umt York Umversity (reported Appendix I) A number of factors account for the poor preservation of the pollen component in particular the hydromorphic and alkaline conditions present at the site (Hall pers comm) The unfavourable results of the assessment were predictable from the results of previous investigations and as a result of the evaluation (Topping et al 1982)

Table 9

SUMMARY OF FEATURES WITH METAL FINDS INT 2

METAL(AE)								
FEATURE	COUNT	%	WEIGHT	(g)	%			
47	2	100	36 3		100			
LIST OF POLLEN SAMPLES								
FIND #	CONTEXT	FEAT	URE #	Μ	ATERIAL			
673	1091		66	MA	ATRIX SOIL			
674	1110		96	MATRIX SOIL				
675	1093		71	MATRIX SOIL				
676	1065		63	MATRIX SOIL				
677	1049		47	MATRIX SOIL				
678	1111		9	MATRIX SOIL				
679	1107		98	MATRIX SOIL				
680	1090		63	MATRIX SOIL				
681	1068	· · ·	66	MATRIX SOIL				
682	1109		97	MATRIX SOIL				
683	1108		99	MA	TRIX SOIL			
684	1100		47	MATRIX SOIL				
685	1073		71	MATRIX SOIL				

Table 11 SUMMARY OF FEATURES WITH BONE & TOOTH FINDS INT 2

BONE(A)								
FEATURE	COUNT	%	WEIGHT (g)	%				
12	8	20	144 7	22 7				
130	29	72 5	468 5	73 5				
184	3	75	24 2	3 8				
ТООТН								
130	1	33 3	28 4	48 3				
153	1	33 3	6	10 2				
184	1	33 3	24 4	41 5				

