3078
SNY 716
E359

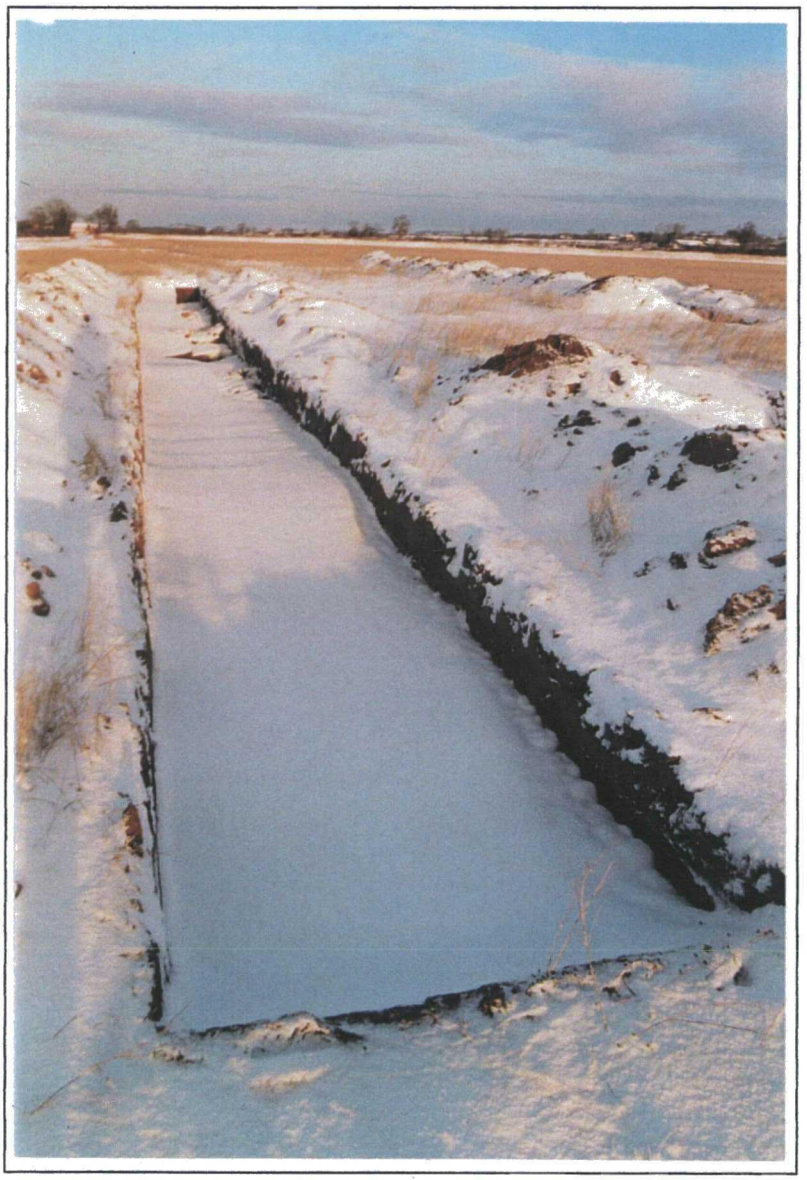
BPTSEP 169: WEST LILLING

AN ARCHAEOLOGICAL EVALUATION
OSA REPORT No. 99EV02

National Grid Reference: SE 640 644

July 1999

NYCC HER	
SNY	716
ENY	359
CNY	1816
Parish	3078
Rec'd	07/99



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Report Summary

REPORT NO: OSA99EV02

SITE NAME: West Lilling (BPTSEP 169)

COUNTY: North Yorkshire

PARISH: Lillings Ambo

NATIONAL GRID REFERENCE: SE 640 644

PLANNING APPLICATION No: N/A

ON BEHALF OF: BP Chemicals Limited
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ILLUSTRATIONS BY: Guy Hopkinson

TIMING: Excavation
1st February 1999 – 22nd February 1999

Post excavation & report preparation
March – June 1999

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PERIODS REPRESENTED: Roman, Medieval.

MUSEUM ACCESSION NO: not yet known

1.0 Abstract

An Archaeological Field Evaluation was carried out by On-Site Archaeology on behalf of BP Chemicals Ltd between the 1st and 22nd February 1999. Five trenches, each measuring c.30 metres by 1.80 metres, were positioned to investigate anomalies indicated by a fluxgate gradiometer survey carried out by GSB Prospection. The evaluation demonstrated that the geophysical survey provided a good, but not full, indication of the archaeological features across the site.

Part of a Romano-British villa, provisionally dated to the 4th century AD, and a system of probable field boundary ditches were revealed. One of the ditches predated the villa. A post-Roman ridge and furrow system trending approximately north - south was evident in all trenches. Finds recovered include pottery, tile, painted plaster, fragments of opus signinum, *a few sherds of possible window glass, iron nails and a pair of bronze shears or clippers.*

Trench 1

This revealed only a single furrow.

Trench 2

The earliest features in Trench 2 consist of a series of ditches. At the northwest end of the trench was a north – south aligned ditch. Towards the centre of the trench was a second ditch, aligned approximately east – west, and thought to be related. The fills of these ditches were waterlogged and contained organic material. The ditches were sealed by a 0.30m thick deposit containing Romano-British pottery. An intersection between two further ditches, aligned northeast – southwest and east – west, was also apparent further along the trench. A 0.5m wide slot through the intersection revealed a waterlogged fill similar to the other two ditches. Part of a cobble spread, possibly a surface, truncated by a furrow was situated at the northwestern end of the trench.

Trench 3

Two east – west aligned ditches were found in Trench 3, one situated at the southeastern end and the other towards the northwestern end of the trench. Located between them was a third ditch aligned approximately north – south. A cobble spread, truncated by a furrow, was situated at the southeastern end of the trench.

Trench 4

Two ditches, one aligned approximately north – south and the other east – west, were located in Trench 4. The ditches were thought to be related. Romano-British pottery was recovered from the fill of the east – west ditch. A row of three postholes, aligned east – west, were situated at the southeastern end of the trench and may be associated with the ditches. The ditches and one of the postholes were sealed by the remains of a relic soil horizon containing Romano-British pottery and a small dump of painted plaster fragments. Towards the centre

of the trench was a stone structure set within a cut. This was only partially revealed during the evaluation, and little can therefore be suggested as to its origin or function.

Cut into the relic soil horizon were two wall foundations aligned approximately northeast – southwest. The foundations bounded a cobble surface packed with clay which incorporated an earlier east – west aligned wall foundation. A pit containing a quantity of charcoal and burnt clay was sealed by the earlier wall foundation. The foundations were overlain by a spread of demolition debris containing lumps of opus signinum *and tile.*

Trench 5

The trench contained two ditches, one aligned north – south and the other northeast – southwest, and a ditch terminal. A cobble spread partially overlay the north – south ditch. A curvilinear slot and a ?narrow gully were situated at the southeast end of the trench.

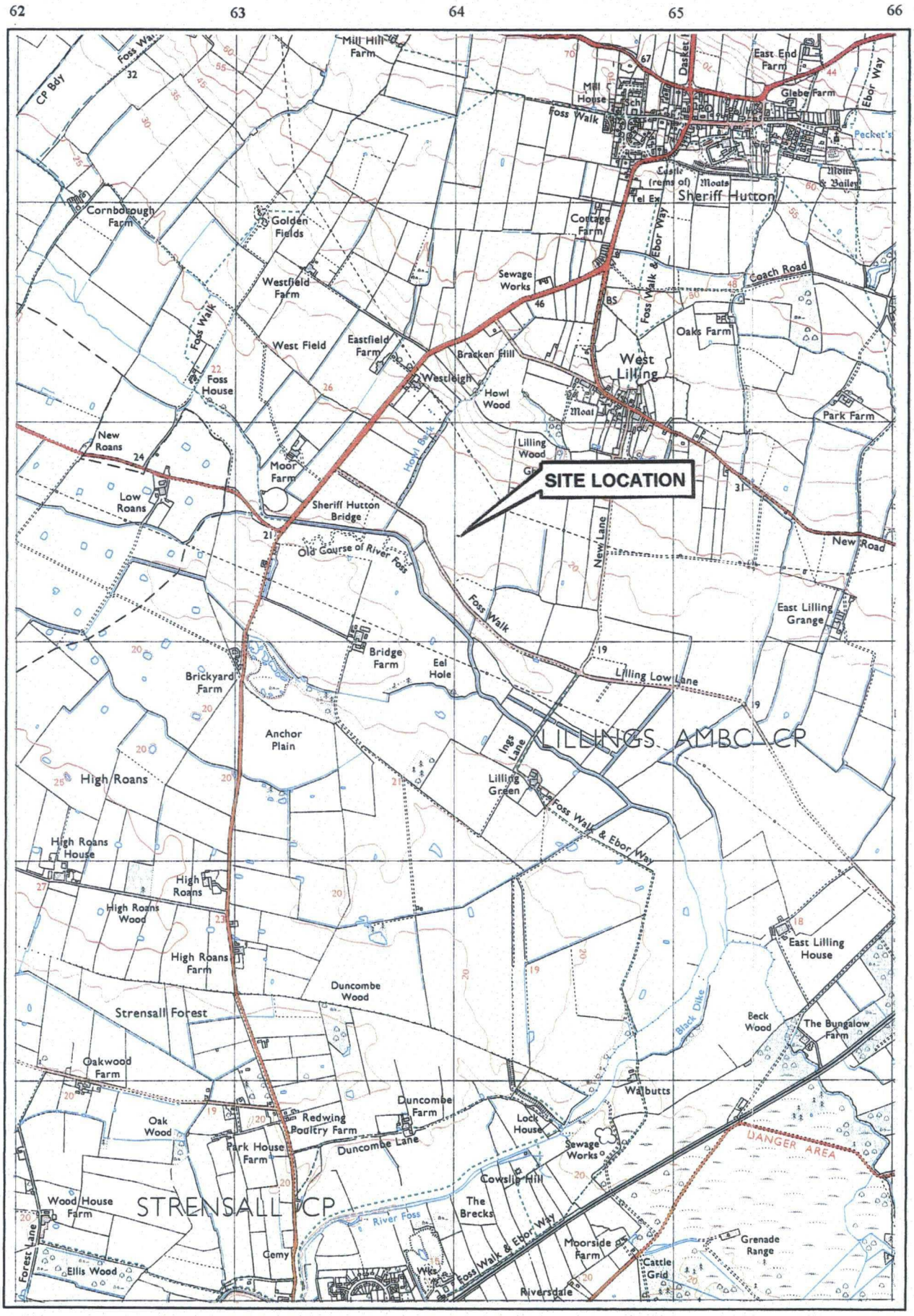

Figure 1. Site Location (NGR SE 640 644). Scale 1:25,000.

2.0 Site Location, Geology, Topography and Land Use

The site lies to the north of Lilling Low Lane *c*.0.9km southwest of the village of West Lilling in the County of North Yorkshire (NGR SE 640 644). The site is located on a discrete area of sand and gravel surrounded by warp and lacustrine clay, which overlies Bunter and Keuper Sandstone. The site is situated at the foot of the Howardian Hills, which rise to the north, and some 200 metres from the River Foss, to the south and west. The area is currently arable land.

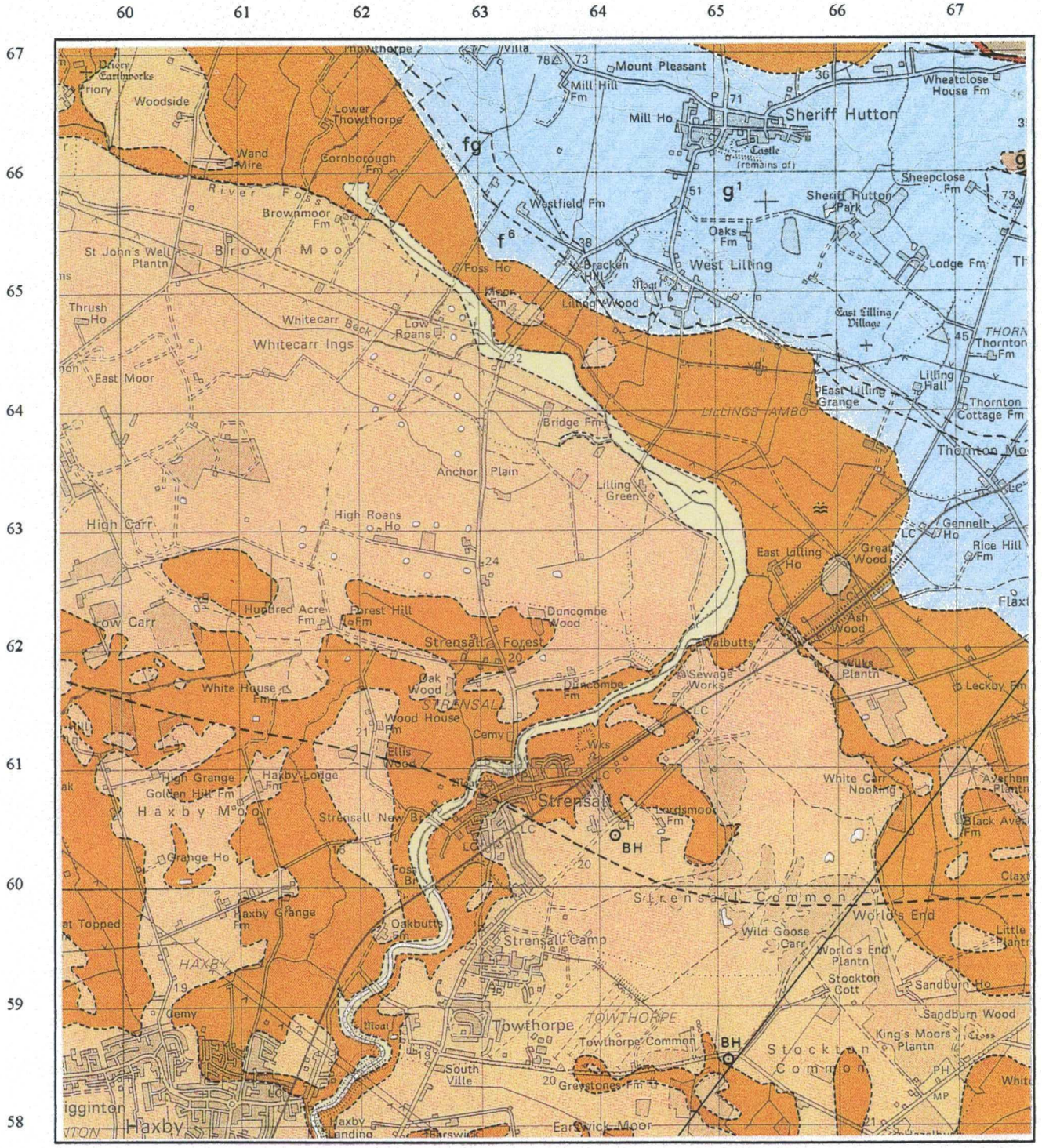

Figure 2. Geology of immediate vicinity. Scale 1:50,000. Extract from British Geological Survey Sheet 63

3.0 Archaeological Background

3.1 Archaeological Background

The site lies in an area of known archaeological significance. An aerial photograph (NYCC AP: DNR 1269/20) shows a large curvilinear cropmark (NGR SE 640644) with a contiguous northeast-southwest aligned linear spur on the southern side.

A sketch plot of the area produced by the Royal Commission on the Historical Monuments of England (RCHME), and based on a variety of aerial photographs, indicates the presence of a rectilinear enclosure spanning the junction of Lilling Low Lane and the minor road between Sheriff Hutton and Strensall (NGR SE 63456480). A small subcircular enclosure is also illustrated on the RCHME plot immediately to the south of the rectilinear enclosure, and a further two, in a similar location, are illustrated on Map 12, Cox and Cottrell (1998).

The RCHME plot also records parts of a double-ditched road or trackway. One fragment runs north – south (NGR SE 63746417 - SE 63756395), *c.*200m long, to the south of the area currently under investigation and the River Foss. The road transects the eastern part of Bulford Tofts Close and has probably forded the river at some point. The pre-1856 course of the River Foss formed a series of meanders, indicative of a sluggish flow, and thus a suitable place for a ford (Swan, Jones & Grady, 1993). Further to the south is a longer section, *c.*700m long, aligned approximately northeast – southeast (NGR SE 63616336 - SE 63356271). The latter section of the road runs within 300m of the Lilling Green Romano-British farmstead. The farmstead comprises a large rectilinear enclosure, partitioned internally into various-sized compounds; outside it is a co-axial complex of fields and associated trackways. Limited field-walking has produced a small amount of Roman pottery, including 4th century sherds (Swan, Jones & Grady, 1993).

To the east of the site an area of ridge and furrow trending approximately north - south (centred on NGR SE 646645) has been identified (Cox & Cottrell, 1998). The medieval background of the area has been comprehensively researched by Swan, Jones & Grady (1993). The data outlined above has been used to create Figure 3, over, which illustrates the immediate environs of the site.

3.2 Previous Archaeological Work

Further to the identification of the various cropmarks in the immediate vicinity of the site, a fluxgate gradiometer survey of the current investigation area was commissioned as part of the BP pipeline works.

This geophysical work revealed a number of anomalies, mainly concentrated at the western end of the survey area. These included ditch and pit type anomalies (see Figure 5, page 9). While these results bear no obvious correlation to the cropmarks on the site, they are in a similar location and may therefore be associated. See Ovenden-Wilson, 1998, for full details and an interpretation of the geophysical results.

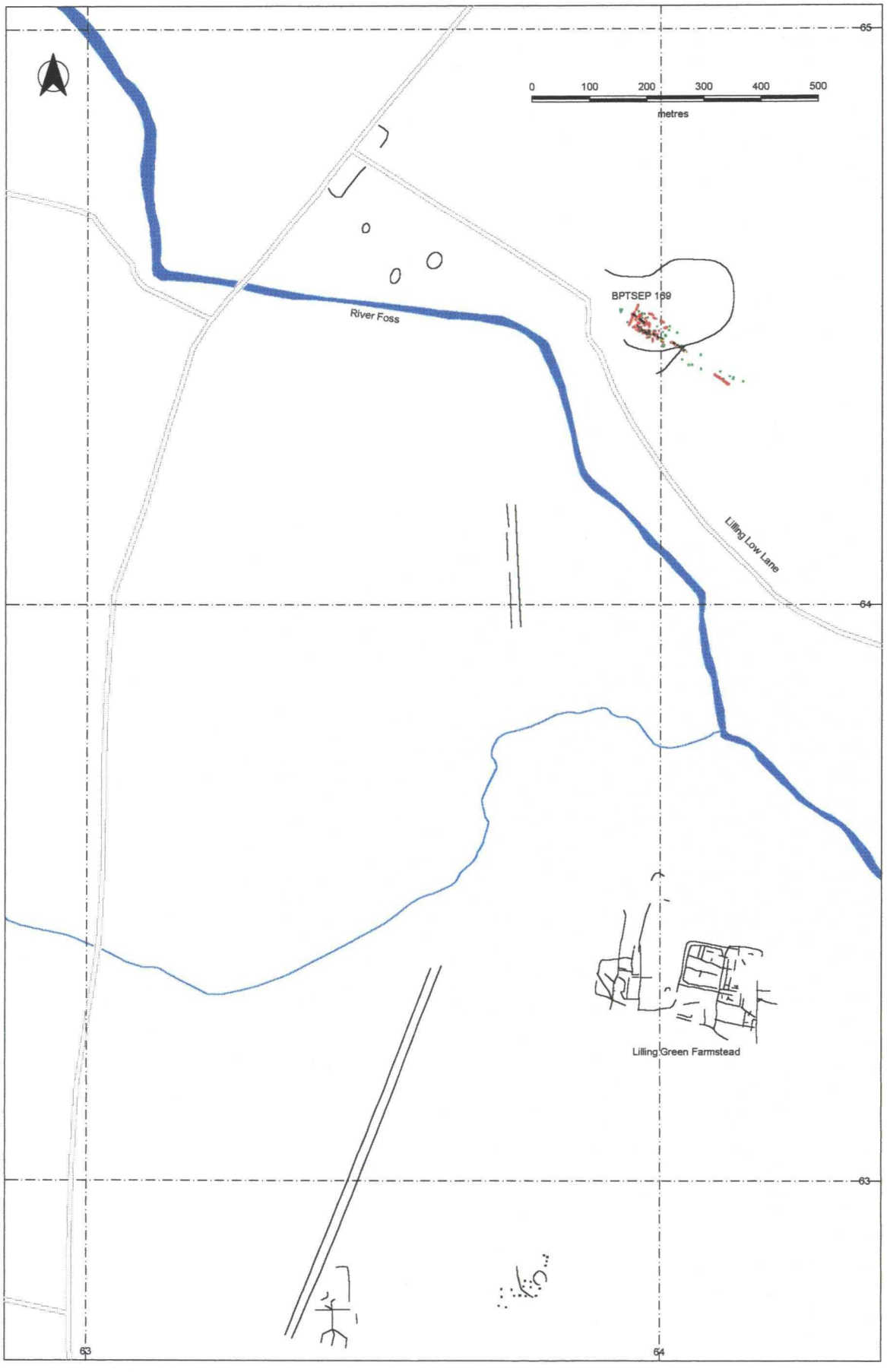

Figure 3 The archaeological environs of BPTSEP 169. Scale 1:10,000
(based on Figure 5 in Swan, Jones & Grady (1993), and Map 12 in Cox & Cottrell (1998))

4.0 Methodology.

4.1 Definition of Field Evaluation

An Archaeological Field Evaluation is defined as:

> *'a limited programme of non-intrusive and/or intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land or underwater. If such archaeological remains are present Field Evaluation defines their character and extent, and relative quality; and it enables an assessment of their worth in a local, regional, national or international context as appropriate'* (IFA 1994).

4.2 Methodology

Five trenches, each measuring approximately 30 metres by 1.80 metres, were positioned to investigate anomalies located by a geophysical survey carried out on the site by GSB Prospection. All trenches were laid out prior to excavation using an electronic distance measurer (EDM), and, on completion of the evaluation, were re-surveyed in order to check their accuracy. The location of the trenches are illustrated in relation to the Ordnance Survey map in Figure 4, page 8, and in relation to the geophysical survey data in Figure 5, page 9.

All five trenches were excavated by a wheeled backhoe excavator fitted with a toothless bucket down to the level of the first archaeological horizon. The exposed surfaces were then cleaned by hand in order to detect any archaeological features revealed through textural or colour changes in the deposits. A series of sections were hand-excavated through the archaeological features that had been identified to determine their extent and nature.

Standard *On-Site Archaeology* techniques were followed throughout the excavation. This involved the completion of a pro forma context sheet for each deposit, cut or feature encountered, with plans and/or sections drawn to an appropriate scale. Due to time constraints, it proved necessary to record cobble spread [3017] photogrametrically, and plans were made by digitising from these photographs during post excavation. Heights above Ordnance Datum (AOD) were calculated by taking levels from a Temporary Benchmark (TBM) which was then tied in with an existing Ordnance Survey benchmark located on Sheriff Hutton Bridge (value 22.10mAOD). A photographic record of the deposits and features was also maintained, although poor conditions frequently prevented a full record being made.

Figure 4. Trench Locations. Scale 1:5,000

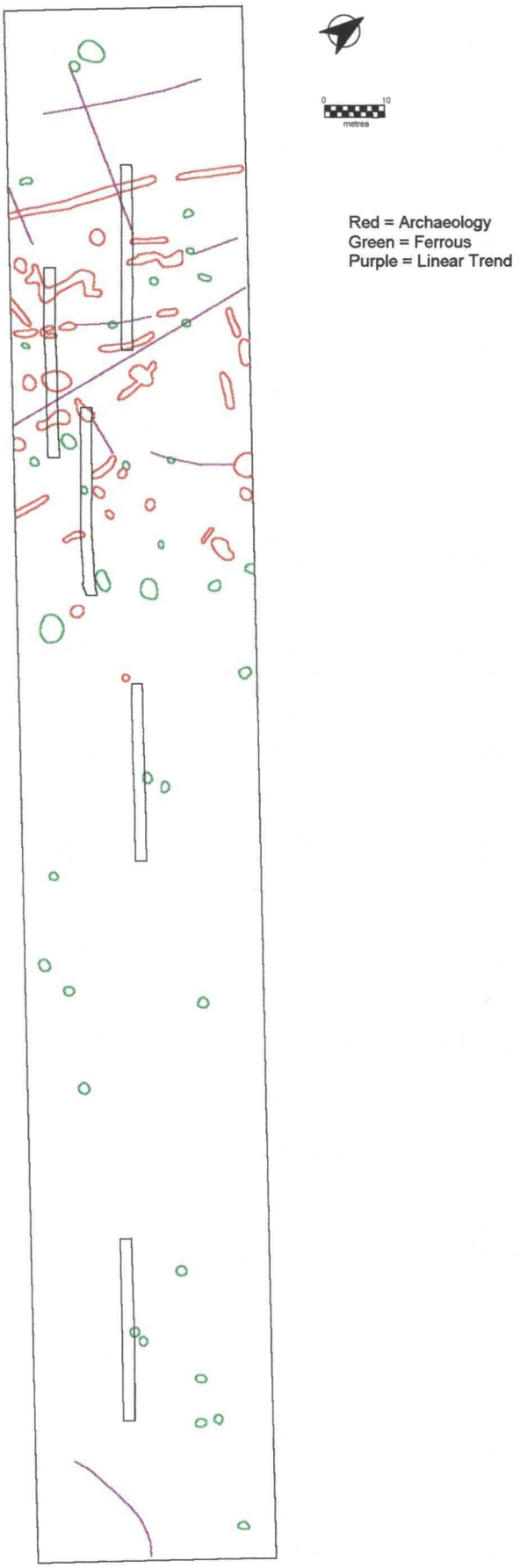

Figure 5. Trench Locations in relation to geophysical survey results.

5 0 Results

5 1 Trench 1 (see Figures 5 & 11 Plate 1)

Context	Description	Interpretation
1000	Layer Friable mid greyish brown silty sand containing occasional pebbles and rare chalk flecks Depth 0 30-0 35m	Topsoil
1001	Deposit Loose dark yellowish brown slightly silty sand mottled with light yellowish grey sand and dark brown root/animal disturbance Towards the northwest end of the trench the deposit consists of light grey sand mottled with dark brown root/animal disturbance Depth unknown	Natural
1002	Fill Loose mid brownish grey slightly silty sand with frequent reddish brown ferrous nodules The fill contained occasional small patches of dark yellowish brown natural material Depth unknown	Fill of furrow [1003]
1003	Cut Incomplete linear shallow sided cut Depth >0 10m	Furrow

The only archaeological feature in Trench 1 was a furrow [1003], aligned approximately north – south, and filled with [1002] The furrow remained unexcavated The base of the trench was criss-crossed with modern land drain cuts, one of which was investigated as a control

5 2 Trench 2 (see Figures 6, 8, 10, 11 & 13, Plates 2 & 3)

Context	Description	Interpretation
2000	Layer Friable mid brownish grey sandy silt containing occasional chalk flecks rare small pebbles and ceramic building material (CBM) fragments and rare charcoal flecks Depth c0 40m	Topsoil
2001	Layer Weakly cemented mid brownish grey silty sand containing occasional ferrous nodules and very occasional sandstone fragments Depth 90mm-0 20m	Subsoil
2002	Deposit Compact dark brownish grey silty sand containing frequent orange brown ferrous nodules occasional cobbles and pebbles some burnt occasional sandstone fragments and charcoal flecks Depth 0 12-0 47m	Deposit Possibly represents the uppermost fills of ditches [2017] and [2026] alternatively may represent historic landfill over a wet area
2003	Fill Compact mid greyish brown silty sand containing concentrations of reddish brown ferrous mottles rare small pebbles flecks of charcoal and fragments of CBM Depth 0 21m	Fill of furrow [2004]
2004	Cut Incomplete linear shallow slightly concave sided cut with slightly concave base Depth 0 21m	Furrow cut
2005	Layer Loose mid brownish grey silty sand with mid yellow brown and grey mottles and containing very occasional CBM flecks Depth 0 13m	?Buried soil horizon
2006	Layer Weakly cemented mottled mid bluish grey silty sand containing very occasional charcoal flecks Depth 90mm	Diffuse interface between overlying deposit [2002] and ditch fill [2007]
2007	Fill Firm dark grey sandy clay containing occasional charcoal flecks Depth 30mm-0 11m	Fill of ditch [2017]
2008	Fill Waterlogged firm dark brownish grey sandy clay containing moderate charcoal flecks and twigs	Fill of ditch [2017]
2009	Layer Dark grey silty sand containing frequent orange brown ferrous nodules Depth superficial	Curvilinear surface stain overlying ditch intersection [2029]
2010	Layer Compact mid brownish grey silty sand containing rare pebbles The lower boundary slopes northwest → southeast and southeast→ northwest towards a field drain at the lowest point Depth 0 10-0 20m	Triangular shaped deposit Possibly represents the water catchment area of a field drain or alternatively a furrow
2011	Layer Loose mid greyish brown silty sand Depth 80mm-0 14m	?Buried soil horizon Possibly a continuation of layer [2005]
2012	Fill Compact mid brownish grey silty sand with frequent ferrous nodules and very occasional pebbles Depth 0 21-0 24m	Fill of ditch intersection [2029]

Context	Descnption	Interpretation
2013	Fill Compact mid grey sand containing occasional charcoal flecks Depth 60-80mm	Fill of ditch intersection [2029]
2014	Fill Compact dark greyish brown silty sand containing occasional flecks of charcoal Depth 60mm-0 17m	Fill of ditch intersection [2029]
2015	Fill Compact mid brownish yellow sand Depth 0 15m	Redeposited natural Fill of ditch intersection [2029]
2016	Fill Waterlogged compact dark brown silty sand containing occasional twigs and flecks of charcoal Depth >60mm	Fill of ditch intersection [2029]
2017	Cut Incomplete linear moderate slightly concave sided cut Form of base is unknown	Ditch cut
2018	Fill Compact dark grey silty sand containing moderate brown ferrous nodules Depth 50mm-0 10m	Fill of furrow [2019]
2019	Cut Linear shallow irregular sided cut with concave base Depth 0 30m	Furrow cut
2020	Fill Compact mid grey slightly silty sand with moderate brown ?ferrous mottling Depth 0 24m	Fill of furrow [2019]
2021	Fill Compact mid grey sand mottled by root and animal disturbance Depth 0 24m	Fill of furrow [2022]
2022	Cut Incomplete linear shallow slightly concave sided cut with concave base Depth 0 24m	Furrow cut
2023	Layer Single layer of sub angular cobbles (130 x 90 x 60mm→ 260 x 230 x 140mm) Two of the cobbles were reddish brown sandstone Depth c 0 18m	Cobble spread Fill of cut [2027]
2024	Layer Compact mid grey slightly silty sand containing occasional patches of light greyish yellow natural Depth 0 12-0 25m	Layer over cobble spread [2023] Fill of cut [2027]
2025	Fill Dark brownish grey silty clay (slight sand fraction) Occasional charcoal flecks and fragments Frequent organic remains	Fill of [2026]
2026	Cut Incomplete linear aligned north – south	Ditch
2027	Cut Incomplete sub-rectangular shallow straight sided cut with flat base Depth 0 12-0 25m	Shallow cut for cobble spread [2023]
2028	Deposit Loose → compact mid yellowish brown sand mottled with patches of light grey sand Depth unknown	Natural
2029	Cut Incomplete linear moderate sided cut Depth unknown	Ditch intersection
2030	Layer Weakly cemented mid bluish grey silty sand containing occasional ferrous nodules and charcoal flecks Depth 70mm	Diffuse interface between natural [2028] and overlying deposit [2002]

A number of ditches were revealed in Trench 2 Towards the northwest end of the trench was a north – south aligned ditch [2026] filled with dark brownish grey silty clay [2025] A sample of this fill, taken for general biological analysis (GBA), showed it to be rich in orgamc material, including plant remains, charred cereal grains and various invertebrate remains (see page 41) Full excavation of ditch [2026] proved impossible due to ground water inundation In addition, records were not completed due to catastrophic section collapse resuhing in the total backfilling of the excavated slot Any results discussed below pertaining to the ditch have been obtained from the photographic archive

Further along the trench to the southeast was an east - west aligned ditch [2017] The basal fill [2008] comprised waterlogged dark brownish grey silty clay containing charcoal and organic material including fragments of twigs Fill [2008] was sealed by a thin layer of dark grey sandy clay containing charcoal flecks [2007] which, in turn, was overlain by a layer of mottled mid bluish grey silty sand [2006], also contaimng charcoal

Layer [2006] and fill [2025] were overlain by a deposit of dark brownish grey silty sand [2002], containing frequent ferrous nodules and occasional cobbles and sandstone fragments Artefacts recovered from [2002] include calcite-tempered and Huntcliffe wares, all of which date to the 4th century AD The deposit appeared to represent the uppermost fills of ditches

[2026] and [2017] since it was bounded by the western edge of ditch [2026] and the southern edge of ditch [2017] It was,however, also present in the area between the two ditches A thin layer of mid bluish grey silty sand containing charcoal [2030] was situated between the overlying deposit [2002] and the natural [2028] in this area Layers [2030] and [2006] are very similar in composition and depth and may represent a diffuse interface between layer [2002] and the respective underlying deposits

Towards the southeast end of the trench was an east - west aligned irregular linear feature that was initially interpreted as a single ditch Intrusive investigation revealed a possible intersection between northeast - southwest and east - west aligned ditches represented by a spur of natural in the base of a 0 5m wide slot The basal fill of the slot consisted of waterlogged dark brown silty sand containing charcoal and orgamc material including fragments of twigs [2016] Overlying fill [2016] was a wedge of redeposited natural [2015] This was in turn overlain by a layer of dark grey brown silty sand [2014] and a layer of mid grey sand [2013] The uppermost fill consisted of mid brownish grey silty sand with frequent ferrous nodules [2012] similar to deposit [2002] Following the limited investigation of the ditch intersection feature [2029], excavation was discontinued on the basis that the feature was too large and complex to be effectively evaluated within the confines of the trench

Situated at the northwest end of the trench was a shallow cut [2027] containing a cobble spread [2023] overlain by a layer of mid grey slightly silty sand [2024]

Deposit [2002] was sealed by a layer of mid brownish grey silty sand [2005] which in turn was possibly overlain by layer [2010] The boundary between layers [2005] and [2010] was impossible to define with any degree of certainty due to the similarity in composition between the two layers The lower boundaries of deposit [2010] sloped down towards a field drain Deposit [2010] was overlain by a layer of mid greyish brown silty sand [2011] very similar in composition to layer [2005]

A north – south aligned furrow [2019] cut deposit [2002] and the ditch feature [2029] The furrow was filled with mottled dark grey and brown slightly sihy sand [2020] and dark grey silty sand contaimng ferrous nodules [2018] The upward continuation of cut [2019] through layer [2011] was indistinct

The cobble spread [2023] and layer [2024] were truncated by a northeast – southwest aligned furrow [2004] The furrow was filled with mid greyish brown silty sand [2003] contaimng flecks of charcoal and ceramic building material (CBM)

At the southeastern end of the trench was a third furrow [2022] filled with [2021]

The archaeological features were sealed by a layer of subsoil [2001] which in turn was overlain by the topsoil [2000]

5 3 *Trench 3* *(see Figures 6, 8, 10, 11 & 12a, Plates 5-7)*

Context	Descnption	Interpretation
3000	Layer Friable mid greyish brown silty sand containing occasional cobbles and occasional flecks of CBM Depth 0 30-35m	Topsoil
3001	Layer Friable mid yellowish brown sandy sill containing occasional cobbles Depth c 0 13m	Subsoil
3002	Fill Loose mottled light greyish brown silty sand with extensive root/animal disturbance Depth 20mm-0 25m	Fill of ditch [3008]
3003	Fill Loose slightly mottled mid brownish grey silty sand containing occasional pebbles frequent lenses of darker siltier sand and occasional lenses of light grey sand Depth 0 10-0 17m	Fill of ditch [3008]
3004	Fill Loose mottled light brownish grey sand containing lenses of light brown sand Depth 10mm-0 15m	Fill of ditch [3008]
3005	Fill Loose mottled light greyish brown sand Depth 10mm-0 10m	Fill of ditch cut [3008]
3006	Fill Loose mid yellowish brown sand Depth 10mm-0 21m	Redeposited natural fill of ditch [3008]
3007	Fill Loose dark brown sandy silt Depth 20mm	Primary fill of ditch [3008]
3008	Cut Linear moderate slightly concave sided cut with concave base Depth 0 70m	Ditch cut
3009	Fill Loose mid greyish brown silty sand containing frequent cobbles and sandstone fragments and occasional charcoal flecks Depth 0 42m	Fill of ditch [3010]
3010	Cut Linear moderate straight sided cut with concave base Depth 0 42m	Ditch cut
3011	Fill Loose mid reddish brown silty sand containing occasional CBM fragments and charcoal flecks Depth 0 10m	Fill of ditch [3013]
3012	Fill Loose mid greyish brown sand containing grey mid brown and brownish yellow mottles Depth 0 37m	Fill of ditch [3013]
3013	Cut Linear steep straight sided cut with concave base Depth c 0 80m	Ditch cut [3013] The continuation of ditch cut [4013]
3014	Fill Friable light brownish grey sandy silt containing occasional small pebbles Depth 0 24m	Fill of furrow cut [3015]
3015	Cut Linear shallow straight sided cut with concave base Truncated by land drain Depth 0 24m	Furrow cut
3016	Layer Loose mid reddish brown silty sand containing moderate charcoal flecks and occasional sandstone fragments and pebbles	Layer over cobble spread [3017]
3017	Layer Cobbles in matrix of friable mid reddish brown silty sand	Cobble spread
3018	Layer Loose mid reddish brown silty sand containing occasional pebbles Depth 0 12m	Fill of depression in natural
3019	Fill Loose mottled mid brownish grey sand containing moderate lenses of dark brown silt	Fill of ditch [3013]
3020	Fill Loose slightly mottled mid yellowish brown sand containing lenses of mid grey sand	Primary fill of ditch [3013]
3021	Fill Fnable light brownish grey sandy silt containing occasional small pebbles Depth >80mm	Fill of furrow cut [3022]
3022	Cut Linear shallow slightly concave sided cut Not fully excavated Depth >80mm	Furrow cut
3023	Fill Friable light brownish grey sandy silt containing occasional small pebbles Depth >70mm	Fill of furrow cut [3024]
3024	Cut Linear shallow slightly concave sided cut Not fully excavated Depth >70mm	Furrow cut
3025	Fill Firm mid reddish brown clay Depth 50mm	Fill of ditch [3013] ?Burnt clay dump overlying fill [3011]
3026	Deposit Loose mid yellowish brown sand with patches of light grey sand	Natural

Trench 3 contained two east – west aligned ditches [3013] and [3010] with a third ditch [3008], aligned approximately northeast – southwest, located between them

The primary fill of ditch [3013] consisted of redeposited natural material [3020] This was overlain by a layer of slightly mottled mid browmsh grey sand contaimng lenses of dark brown

silt [3019] which, in turn, was overlain by a layer of mottled mid greyish brown sand [3012] The uppermost fill comprised mid reddish brown silty sand containing occasional CBM fragments and charcoal [3011] A small dump of mid reddish brown clay [3025] which showed signs of burning was situated over fill [3011]

The primary fill [3007] of ditch [3008] and the overlying fill [3006] comprised redeposited natural material This was overlain by a 'tear'-shaped deposit of mottled light greyish brown sand [3005] which fills a shallow scoop in the surface of fill [3006] The scoop may have been formed by water running down the side of the ditch and subsequently filled by deposit [3005] A fill of mottled light brownish grey sand containing lenses of light brown sand [3004] sealed deposit [3005] Fill [3004] had a similar shallow scoop in its surface in the same position as that in fill [3005] Overlying deposit [3004] was a deposit of slightly mottled mid browmsh grey silty sand containing lenses of darker siltier sand and light grey sand [3003] The uppermost fill consisted of mottled greyish brown silty sand [3002] (see Figure 12a, page 69)

Ditch [3010] was filled with mid greyish brown sihy sand containing frequent cobbles and sandstone fragments [3009]

Towards the southeast end of the trench was a cobble spread [3017] overlain by mid reddish brown silty sand [3018] similar in composition to the uppermost fill [3011]of ditch [3013] The cobble spread sloped upwards towards the end of the trench and had been disturbed by modern ploughing

Three north - south aligned furrows [3022], [3024] and [3015], filled by [3021], [3023] and [3014] respectively, were located within the trench

The archaeological features were sealed by a layer of subsoil [3001] which was overlain by topsoil [3000]

5 4 *Trench 4* *(see Figures 7, 9 10, 11 & 12b, Plates 8-12)*

Context	Description	Interpretation
4000	Layer Friable mid greyish brown sandy silt containing occasional pebbles rare chalk and CBM flecks Occasional fragments of CBM and stone over masonry features Depth 0 30-35m	Topsoil
4001	Layer Friable dark greyish brown silty sand containing occasional small pebbles fragments of yellowish brown sandstone and occasional tile and flecks of charcoal Depth 0 25-35m	?Relic soil horizon
4002	Layer Friable dark brown sandy silt containing very occasional small pebbles very occasional flecks of CBM and rare flecks of charcoal Depth c 0 20m	?Relic soil horizon/ uppermost fill of ditch [1017]
4003	Fill Friable light brownish grey sandy silt containing occasional small pebbles and fragments of masonry Maximum depth 0 20m	Fill of furrow cut [4030]
4004	Same as ditch cut [5028]	Ditch cut
4005	Layer Friable mid brovm sandy silt containing moderate fragments of masonry moderate cobbles moderate lumps of clay and occasional tile fragments Depth 80mm-0 10m	Demolition debns
4006	Wall Trench built foundation comprising unworked yellowish brown sandstone (120-200mm) (c 80%) and cobbles (140-190mm) (c 20%) bonded with friable mid brovm sandy silt (c 85%) containing flecks of plaster and lumps of mid brown silty clay (c 15%) Height 0 24m	Wall foundation

Context	Description	Interpretation
4007	Fill Soft light brownish grey silty sand containing very occasional ferrous nodules and flecks of charcoal Depth 0 45m	Fill of ditch cut [4013]
4008	Fill Friable dark brown sandy silt containing very occasional small pebbles occasional fragments of tile fragments of yellow brown sandstone fragments of charcoal and rare fragments of oyster shell Depth 0 40-45m	Fill of foundation cut [4023]
4009	Layer Friable dark brown sandy silt containing occasional fragments of whitish grey limestone fragments of yellowish brown sandstone and very occasional large cobbles Possibly the same deposit as [4010] Depth 0 19m	?Relic soil horizon
4010	Layer Friable dark brown sandy silt Depth 0 20m	?Relic soil horizon
4011	Fill Compact dark grey silty sand with frequent mid brown mottles Depth 0 28m	Fill of furrow cut[4029]
4012	Fill Compact dark grey silty sand with frequent mid brown mottles containing rare small pebbles Depth 0 28m	Fill of furrow cut [4031]
4013	Cut Linear moderate → steep sided v shaped ditch Depth 0 75m	Ditch cut
4014	Wall Unworked yellowish brown sandstone masonry (90-260mm) dry stone construction Height 0 30m	Structure Fill of cut [4023]
4015	Cut Oval shaped moderate → steep sided cut with a postpipe evident in base Depth 0 25m	Pesthole cut
4016	Cut Sub-square shaped shallow irregular sided cut with flat base Depth 80mm	Pesthole cut
4017	Cut Incomplete oval shaped shallow → steep straight → concave sided cut with flat irregular base Depth 35-90mm	Pesthole cut
4018	Fill Firm mid grey silty clay with mid yellowish brown mottles Depth 35-90mm	Fill of pesthole cut [4017]
4019	Fill Compact dark brownish grey silty sand Depth 0 21m	Fill of ditch cut [4013]
4020	Fill Compact mid brownish yellow sand with light grey mottles containing moderate ferrous flecks Depth 70mm	Fill of ditch cut [4013]
4021	Fill Firm mid grey silty clay with mid yellowish brown mottles Depth 0 11m	Fill of pesthole cut [4016]
4022	Fill Firm mid grey silty clay with mid yellowish brown mottles containing a single large cobble Depth 0 22m	Fill of pesthole cut [4015]
4023	Cut Incomplete sub-rectangular shaped steep sided cut Depth >0 40-45m	Cut for structure [4014]
4024	Wall Unworked/rough hewn yellowish brown sandstone (30% 90-180mm 70% 180-330mm) two courses with stones angled 45° in elevation forming a herringbone pattern Height 0 36m	Wall foundation
4025	?Wall Unworked yellowish brown sandstone (80-200mm) (c 90%) cobbles (130-280mm) (c 10%) single course no obvious construction technique no cut apparent Height 0 21m	Possible wall foundation
4026	Cut Incomplete linear steep→ vertical sided cut Depth >0 26m	Cut for wall foundation [4024]
4027	Surface Cobbles (130-210mm) occasional cobbles (80-160mm) packed with firm mid brown silty clay Depth 0 20m	Cobble and clay surface
4028	Cut Incomplete linear steep sided cut Depth >0 13m	Cut for wall [4006]
4029	Cut Incomplete linear shallow slightly concave sided cut with a concave base Depth 0 28m	Furrow cut
4030	Cut Linear shallow slightly concave irregular sided cut with a flat irregular base Depth 0 20m	Furrow cut
4031	Cut Linear shallow slightly concave sided cut with a concave base Depth 0 28m	Furrow cut
4032	Deposit Loose mid yellowish brown sand with patches of light grey sand Depth unknown	Natural
4033	Fill Friable dark brown sandy silt containing frequent flecks and fragments of charcoal occasional flecks of CBM and a small patch of burnt orange ?clay flecks Depth 0 28m	Fill of pit cut [4034]
4034	Cut Incomplete moderate concave sided cut Depth 0 28m	Pit cut
4035	Fill Sequential deposition refer to fills of ditch [5028] for full description	Fill of ditch cut [4004]

The earliest features in Trench 4 were two ditches [4004] and [4013] aligned north – south and east – west respectively The primary fill of ditch [4013] (see Figure12b, page 69) consisted of redeposited natural material [4020] This was sealed by fill [4019] which was thought to comprise a naturally deposited mixture of sand and topsoil A thin layer of dark brown, possibly orgamc, material (2-5mm thick), confined to the centre of the ditch, was situated at the top of fill [4019] at the interface with overlying deposit [4007] A few fragments of animal

bone and pottery (calcite-tempered and grey wares) were recovered from deposit [4007] immediately above the interface with fill [4019] Deposit [4007] may represent the deliberate backfilling of ditch [4013] The deposit was sealed by a layer [4002] which may form the uppermost fill of the ditch or, alternatively, comprise a relic soil horizon slumped into the top of the ditch following the subsidence of underlying unconsolidated ditch fill The layer contained pottery (oxidised wares and greyware [some quartz tempered]), animal bone and flecks of CBM and *opus signinum*

Prior to recording the fill sequence within ditch [4004] the section catastrophically collapsed rendering further work impossible A section was excavated through the ditch in Trench 5 and the reader is referred to page 17 for a full description

At the southwestern end of the trench, and parallel with ditch [4013], was a row of pestholes [4015], [4016] and [4017], aligned east – west Posthole [4015] was filled with clay [4022] and contained a large placed cobble on the northeastern side which provided packing for the post A rectangular postpipe (0 10m x 0 13m and 0 10m deep), filled with redeposited natural material, formed the bottom part of the posthole Postholes [4016] and [4017] were shallow cuts which appeared to provide 'seating' for clay postpads [4021] and [4018] respectively Clay postpad [4018] had a pronounced hp, *c* 50mm high, on the northwest side, possibly resulting from a post exerting pressure on an area smaller than the total surface area of the pad

Ditch [4004] was sealed by a possible relic soil horizon [4001] which may be associated with similar deposit [4002] Deposit [4001] contained fragments of tile and building stone concentrated towards the top of the deposit in addition to pottery, ammal bone and rare fragments of *opus signinum* Towards the southwest limit of the deposit was a small dump of plaster, some of which was painted At the southwestern end of the trench were two further layers, [4009] and [4010], which may also form part of a relic soil horizon Both layers had a similar composition to deposit [4002] and contained calcite-tempered, Crambeck and sandy wares Layer [4009] also contained animal bone and fragments of building stone and tile Layer [4009] sealed posthole [4015]

Towards the centre of the trench a sub-rectangular cut [4023] contained part of a structure [4014] This was built of roughly-coursed, dry-stone construction and contained fragments of Crambeck greyware pottery within its upper course Some of the outer stones were angled *c* 45° in elevation The space enclosed by the foundation appeared to be sub-divided by a northeast-southwest aligned row of stones The quality of the build suggests that it was not intended to bear a large wall, but given the small area exposed it is difficult to ascribe a detailed interpretation The fill [4008] of the cut was very similar in composition to the relic soil horizon layers and contained occasional fragments of tile and building stone, ammal bone and Crambeck greyware and calcite-tempered pottery There was no evidence within the trench of the relationship between structure [4014] and ditch [4013]

Relic soil horizon [4001] was cut by a northeast-southwest aligned construction cut [4028] containing a trench-built wall foundation [4006] of dry-stone construction comprising

sandstone and cobbles with occasional tile fragments Lumps of mid brown silty clay were packed between the stones No coursing was apparent

Relic soil horizon [4002] was cut to the northwest by a northeast – southwest aligned construction cut [4026] containing a trench-built wall foundation [4024] The foundation was of dry-stone construction and comprised two courses of stones angled at *c* 45° forming a 'herringbone' pattern when viewed in elevation The foundation contained lumps of mid grey brown silty clay packed between the stones A large fragment of *opus signinum* was contained within the construction cut

A possible wall foundation [4025], aligned approximately east-west, was situated to the northwest of wall foundation [4024] The foundation [4025] consisted of a single course of sandstone angled *c* 45° north-south in elevation with occasional cobbles and very occasional fragments of tile bonded with mid grey brown silty clay The foundation sealed a pit [4034], the fill [4033] of which contained a quantity of charcoal and burnt material The foundation appeared to have been incorporated within a surface comprising cobbles packed with clay [4027] The cobble surface [4027] and wall foundation [4006] were sealed by a layer of disuse/ demolition material [4005] which included building stone, tile fragments and frequent flecks of plaster A number of the tile fragments had *opus signinum* adhering to them

Three furrows [4029], [4030] and [4031], trending approximately north – south, were evident along the length of the trench The furrows were filled with [4011], [4003] and [4012] respectively

The archaeological features were sealed by a layer of topsoil [4000]

5 5 *Trench 5* *(see Figures 7, 9 10, 11, 12c & 12d, Plates 13-14)*

Context	Description	Interpretation
5000	Layer Loose mid greyish brown silty sand containing occasional cobbles Depth 0 30-35m	Topsoil
5001	Fill Loose dark brownish grey sandy silt containing mod CBM fragments occasional pebbles and charcoal flecks and rare fragments of burnt bone Depth 50mm	Uppermost fill of ditch [5008]
5002	Fill Loose light greyish yellow sand Depth 50mm	Fill of ditch [5008] Redeposited natural material
5003	Fill Loose dark brownish grey sandy silt containing frequent charcoal flecks and fragments and occasional pebbles Depth 0 13m	Fill of ditch [5008]
5004	Fill Loose light greyish yellow sand Depth 70mm	Fill of ditch [5008]
5005	Fill Loose dark brownish grey sandy silt containing frequent charcoal flecks and occasional pebbles Depth 50mm	Fill of ditch [5008]
5006	Fill Loose light greyish yellow sand containing occasional pebbles and rare charcoal flecks Depth 0 15m	Fill of ditch [5008]
5007	Fill Loose mid greyish yellow sand containing rare cobbles and charcoal flecks Depth c 0 30m	Primary fill of ditch [5008]
5008	Cut Linear moderate → steep irregular sided cut with concave base Depth c 1 10m	Ditch cut
5009	Fill Loose light greyish brown sand containing rare pebbles and charcoal flecks Depth 0 22m	Fill of ditch [5010]
5010	Cut Linear steep concave sided u shaped cut with concave base Depth	Ditch terminal

Context	Descnption	Interpretation
	0 22m	
5011	Fill Loose mid greyish brown sand Depth 90mm	Fill of [5012]
5012	Cut Curvilinear moderate concave sided cut with concave base Depth 90mm	Curvilinear gully
5013	Spit Loose mid yellowish brown silty sand containing occasional pebbles Depth c 0 10m	Disturbed natural
5014	unused	
5015	Layer Cobble spread in sandy silt matnx Depth c 0 18m	Possible cobble dump to reinforce or level unconsolidated ditch fill [5001] or part of a surface
5016	Fill Friable dark grey/black silty sand with occasional charcoal fragments	Fill of [5017]
5017	Cut Linear irregular sided cut with irregular base	Relic hedge line Indistinct linear cut containing a line of concentrated root disturbance
5018	Fill Compact dark greyish black silty sand Depth unknown	Fill of cut [5019]
5019	Cut unexcavated	Linear cut Possibly a narrow ditch Unexcavated due to severe truncation by a land drain within the confines of the trench
5020	Layer Fnable mid yellowish brown sandy silt containing occasional cobbles Depth 0 12m	Subsoil
5021	Fill Fnable dark reddish brown sandy silt containing moderate charcoal flecks and occasional pebbles and cobbles Depth 0 10m	Fill of ditch [5008]
5022	Fill Fnable dark brownish grey sandy silt containing frequent charcoal flecks Depth 70mm	Fill of ditch [5008]
5023	Layer Loose mid greyish brown silty sand containing occasional rounded pebbles occasional cobbles and flecks of charcoal Depth 70mm-0 24m	Layer sealing ditch [5028]
5024	Fill Loose mid yellowish brown silty sand containing occasional pebbles and charcoal flecks Depth 10mm-0 21m	Uppermost fill of ditch [5028]
5025	Fill Loose light brownish grey sand containing occasional cobbles Depth 10mm >0 40m	Fill of ditch [5028]
5026	Fill Loose light brownish yellow sand Depth 0 10-0 24m	Fill of ditch [5028] Redeposited natural material on southeast side of ditch
5027	Fill Loose light brownish yellow sand Depth 50mm-0 30m	Fill of ditch [5028] Redeposited natural material on northwest side of ditch
5028	Cut Linear moderate straight sided cut with a concave base Depth 0 85m	Ditch cut Continuation of ditch [4004]
5029	Deposit Compact mid yellow sand with lenses of light greyAvhite sand Depth unknown	Natural
5030	Fill Fnable light brownish grey sandy silt containing occasional small pebbles occasional charcoal flecks Depth 0 30m	Fill of furrow cut [5031]
5031	Cut Shallow linear concave sides to gradual break of slope to concave base Depth c 0 30m	Furrow cut
5032	Fill Friable light brownish grey sandy silt containing moderate small pebbles occasional charcoal flecks Depth 0 30m	Fill of furrow cut [5033]
5033	Cut Shallow linear concave sides to gradual break of slope to concave base Depth c 0 30m	Furrow cut

At the northwest end of the trench was a northeast – southwest aligned ditch [5008] (see Figure12c, page 69), the basal fills [5006] and [5007] of which consisted of redeposited natural material Fill [5006] was overlain by a sequence of thin layers comprising a layer of redeposited natural material [5004] situated between two layers of dark brownish grey sandy silt, fills [5005] and [5003] A shallow 'scoop' in the surface of fill [5003] was filled by redeposited natural material [5002], sealed by dark browmsh grey sandy silt [5022] The uppermost fill of the ditch consisted of dark reddish brown sandy silt containing occasional cobbles [5021] Fills [5003], [5005], [5022] and [5021] contained flecks of charcoal A GBA

sample of fill [5005] revealed the presence of charred cereal grains (bread/club wheat, barley and oats) and charred ?heather (see page 42)

A northeast – southwest aligned ditch [5028] was situated in the centre of the trench cut into a layer of disturbed natural [5013] The ditch was a continuation of ditch [4004] (see section 4 4 above) The earliest fills comprised redeposited natural material, [5026] and [5027], evident on each side of the ditch A fill consisting of light brownish grey sand containing occasional cobbles [5025] was situated between these deposits The uppermost fill consisted of mid yellowish brown silty sand containing charcoal flecks [5024] (see Figure 12d, page 69) The ditch was sealed by a layer of mid greyish brown silty sand containng occasional pebbles, cobbles and charcoal flecks [5023] This layer was sealed in turn by a layer of cobbles within a sandy silt matrix [5015], which had been partly disturbed by modern ploughing The cobble spread was concentrated over ditch [5028] and may represent a dump of cobbles to reinforce or level unconsolidated ditch fill

A north-south aligned ditch terminal [5010] was located towards the southeast end of the trench The ditch was filled with light greyish brown sand containng a few pebbles and occasional charcoal flecks [5009] Adjacent to the ditch terminal, on the southeast side was a narrow curvilinear gully [5012] filled with mid greyish sand [5011] At the southeast end of the trench was a north-south aligned ?narrow ditch [5019] which terminated within the trench and was filled with dark greyish black silty sand [5018] Situated between the curvilinear slot/gully and the ?narrow ditch was a northeast-southwest aligned indistinct linear 'cut' [5017] containng concentrated root disturbance [5016] This feature possibly represents a relic hedge line

Two north-south aligned furrows [5031] and [5033] filled by [5030] and [5032] respectively were located within the trench

The archaeological features were sealed by a layer of subsoil [5020] which was overlain by topsoil [5000]

6 0 Discussion

6 1 Weather & Ground Conditions

Excavation was, at times, severely hampered due to the prevailing conditions Severe rain and snow resulted in a rise in the groundwater level, causing deep cut features to fill almost immediately with water Severe frost also impeded excavation, the ground on occasions being frozen to a depth of ten centimetres During periods of fine weather, low strong sunlight made subtle context distinctions difficult, and severely interrupted the photography of features

6 2 Redeposition/Residuality

Severe disturbance was evident in many instances, caused by deep ploughing and subsoiling over the site As a result, there may be some redeposition/contamination of the uppermost deposits Occurrences of occasional later material within a deposit otherwise producing significant quantities of earlier artefacts, e g the fragment of 19th/20th century drain from [4005], are most likely to be a result of such disturbance

6 3 Trench 1

The only feature noted in this trench was a single furrow on a north-south alignment With hindsight, however, and based on the evaluation results from Trench 2, a number of areas interpreted as discolourations in the natural may possibly have been features of an archaeological nature In this respect the lack of features evident in the geophysical results might have been misleading

6 4 Trench 2

Although the geophysical results initially indicated this area to be almost barren of archaeology, apart from three ferrous areas, the evaluation proved the opposite The earliest features in this trench were a number of ditches, and although the stratigraphic relationship between these was not established, they are thought to be related, possibly forming part of a field system It should also be noted here that the cropmark referred to by Cox and Cottrell (1998) would appear to cross Trench 2 of this evaluation where the short southwest – northeast aligned spur extends from the larger subcircular form[1] (see Figure 3) On the currently available information the precise location of the cropmark cannot be accurately defined in relation to the trench, but it would appear to coincide with ditch intersection [2029]

Although it was only possible to procure an environmental sample from fill [2025], the fills of all the ditches within Trench 2 appeared to be very rich in orgamc material (see Appendix 3, page 41)

[1] This is based on the digitisation of the cropmark as shown in Cox & Cottrell, 1998 As this figure was produced at a scale of 1 25 000 the margin for error is fairly high, and the position of the cropmark in relation to the evaluation trenches & geophysical results should be treated with caution

Deposit [2002], which overlay two of these ditches, proved difficult to interpret as the size and nature of the feature rendered it unsuitable for examination within such a small area

6 5 *Trench 3*

The earliest features evident in Trench 3 were a number of ditches cut into the natural None of these, however, intersected within the evaluation trench, and the stratigraphic relationships between them remain unclear From the geophysical evidence it can be suggested that ditches [3013] and [3008], which are aligned at approximately 90° to each other, form part of an enclosure Ditch [3010], however, is smaller than any of the other ditches encountered during the evaluation, and no finds were recovered from the fill [3009] This ditch cannot, therefore, be related to any other features by stratigraphy or by artefactual evidence

The cobble spread [3017] evident at the southeastern end of the trench was fairly well consolidated, and might relate to a surface However, this had been quite severely truncated by furrow [3015] and too little of its extent was revealed to draw any meaningful conclusions

The remainder of the features within Trench 3, cuts [3015], [3022] and [3024], were medieval furrows, aligned approximately north – west

6 6 *Trench 4*

This trench produced the most interesting results of the evaluation, with ditches [4004] and [4013] being the earliest features evident Although the stratigraphic relation between the two could not be determined, the geophysical evidence would suggest they are two separate features, [4004] being the same as [5028] in Trench 5, and [4013] forming part of an enclosure with ditches [3013] and [3008] in Trench 3 Late 3rd century pottery was recovered from the base of the upper fill [4007] of ditch [4013]

The alignment of postholes at the southeastern end of the trench would appear to follow the alignment of the possible enclosure ditch formed by [4013] and [3013], suggesting a structure within the enclosure On the basis of only three postholes, however, this hypothesis cannot be explored much further

A possible relic soil horizon comprising deposits [4001], [4002], [4009] and [4010] overlay the ditches, [4004] and [4013], and one of the postholes [4015] The pottery assemblages from these deposits dated mainly to the 4th century however contexts [4002] and [4007] respectively produced late 3rd century and late/sub-roman pottery

Two parallel wall foundations [4024] and [4026] were cut into the relic soil horizon The foundations are thought to be contemporary and possibly form part of a building A clay and cobble surface [4027] was bounded to the southwest by wall foundation [4024] and may be the levelling/foundation layer for a floor associated with the wall foundations The clay and cobble surface incorporated what appeared to be an earlier wall foundation [4025] The wall foundation may be contemporary with wall foundation [4024], however the acute angle formed by the walls argues against this hypothesis Wall foundation [4025] sealed a small pit [4034]

An incomplete sub-rectangular stone structure [4014] of unknown function was exposed towards the centre of the trench The wall foundations, [4024] and [4026], and the clay and cobble surface were sealed by a demolition layer [4005] containing brick, roof tile, box flue tile and fragments of *opus signinum*

Three north – south aligned medieval furrows, [4029], [4030] and [4031], were evident forming part of the ridge and furrow cultivation system identified over the evaluation area

6 7 Trench 5

The earliest features within Trench 5 were ditches [5008], [5028], [5010] and a curvilinear ?gully [5012] Ditches [5008] and [5028] share the same alignment, and are approximately 11 00m apart It can be tentatively suggested that they relate to the same phase of activity on the site, perhaps forming part of a double ditched enclosure (the extension of [5028] being visible in Trench 4 as [4004]), or alternatively part of a field system

No artefacts were recovered from the fill of ditch [5010], and no stratigraphic relationships between this and other features were within the evaluation trench Little can therefore be inferred regarding its date or function

The remaining features, cuts [5031] and [5033], form part of the north – south aligned ridge and furrow cultivation pattern which extended over the entire evaluation area

6 8 Synthesis

Few of the pre medieval features exposed during the evaluation can be related from one trench to another Of those that can, ditches [3013] and [4013] are assumed to be the same feature, picked up in two separate trenches From the geophysical resuhs, it would appear that this ditch forms part of a rectilinear enclosure, ditch [3008] forming the eastern limb, and ditch [3013]/[4013] the northern limb Based on the stratigraphic evidence, this enclosure would predate the 'villa', or at least the structure associated with wall [4024] The only dating evidence from any of the ditch segments forming the enclosure were single sherds of Calcite tempered ware and Crambeck greyware (both 4th Century) from [3011], the upper most fill of [3013], and a pair of copper alloy shears (see page 51) found at the interface of this fill and the subsoil [3001]

Ditches [4004] and [5028] also appear to be one feature, although the geophysical resuhs seem to indicate an interruption in its length between Trenches 4 and 5 These two contexts might form part of a double ditched enclosure, as ditch [5008] appears to run on the same alignment

The medieval features encountered were all furrows, and their pattern can clearly be seen in Figure 11, page 68 Of these furrows, [5030] corresponds with [4030], and [3024] with [4029] The remainder did not appear to span more than one trench All the furrows were aligned approximately north – south, paralleling the ridge and furrow system evident some 500 metres to the east, shown in Map 12, Cox and Cottrell (1998)

7 0 Conclusions

It can be seen from Figures 2 and 3 (see pages 4 and 6) that the cropmark which initially led to geophysical study and the subsequent evaluation of this site correlates almost perfectly with a tear-drop shaped 'island' of sand within the surrounding lacustrine clay, as shown on the BGS map of the area The aerial cropmark referred to in Cox & Cottrell (1998) may therefore represent the natural geology rather than an archaeological feature Given that the natural in all the evaluation trenches was of sandy material, however, and that a ditch intersection in Trench 2 appears to coincide with the cropmark plot, it remains possible that the cropmark does indicate an archaeological feature Only further excavation, geophysical analysis and/or a more accurate plot of the cropmark would enable this issue to be addressed Coincidentally, the cropmark to the north west, straddling Lilling Low Lane and the Strensall to Sheriff Hutton road, corresponds with a similar geological 'island'

Whatever the nature of the cropmark, it seems likely that the reason for the site's location relates to this area of sand and gravel, which is slightly raised from the surrounding clays, and would presumably have been better dramed

The evidence collected from the evaluation at BPTSEP 169 would seem to indicate either a villa or 'villa type' farmstead, which was sufficiently prosperous to be furnished with a hypocaust, and with painted plaster walls As regards the status of the settlement at BPTSEP 169, Frere and St Joseph (1983) suggest that many farmsteads had sufficient resources to develop villa style accommodation On the basis of the evidence currently available little further interpretation can be drawn

The limited field walking which has taken place at Lilling Green has produced a small assemblage of Roman pottery, including 4th century sherds (Swan, Jones & Grady, 1993) This would suggest either coeval occupation here and at BPTSEP 169, or a shift in settlement focus Swan, Jones and Grady have suggested that the Lilling Green farmstead might have been the centre of an estate which controlled access to a ford across the Foss, based on a projection of the alignment of sections of Roman road visible on aerial photographs (see Figure 3, page 6) If monitoring and the fording point were indeed a concern, it would seem quite probable for there to have been two coexistent settlements, with Lilling Green to the south of the ford, and West Lilling to the north

This site is clearly one of regional, if not national importance, and it is the opinion of the authors that some degree of further work would be very rewarding A comparison of the pottery from BPTSEP 169 with other assemblages from the region would significantly add to our understanding of the hinterlands of York during the Roman period In addition, comparison with the assemblage collected during the field walking at Lilling Green might provide useful information regarding the contemporaneity or otherwise of the two farmsteads Further geophysical work in the vicinty would be of interest in itself, and might also enable a more extensive interpretation of the evaluation evidence to be achieved

8 0 Bibliography

Cox, P W & Cottrell, T 1998 *BP Chemicals Limited Teesside to Saltend Ethylene Pipeline Preliminary Assessment of Archaeology and Cultural Heritage* AC Archaeology Report No 5297/1/0

Frere, S S & St Joseph, J K S 1983 *Roman Britain from the Air* Cambridge

Ovenden-Wilson, S 1998 Teeside [*sic*] to Saltend Ethylene Pipeline BP Site 169 GSB Prospection Report No 98/125

Institute of Field Archaeologists 1994 *Standard and Guidance for Archaeological Field Evaluation*

Margary, I D 1973 *Roman Roads in Britain (3rd edition)* London, John Baker

Swan, G S, Jones, B E A & Grady, D 1993 Bolesford, North Riding of Yorkshire a lost wapentake centre and its landscape *Landscape History* 15 p 13-28

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10 0 Appendix 1 ~ Archive Index

10 1 Drawing Register

Dwg No	Description	Scale	Date	Initials
1	Northwest end of Trench 4	1 20	9/2/99	DT
2	Central part of Trench 4	1 20	9/2/99	DT
3	Southeast end of Trench 4	1 20	9/2/99	DT
4	Plan of Trench 5	1 50	9/2/99	MGH
5	Plan of ditch [5008]	1 20	9/2/99	DT
6	Southeast end of Trench 5	1 20	9/2/99	MGH
7	Southwest facing section of ditch [5008]	1 10	9/2/99	MGH
8	Plan of Trench 2	1 50	9/2/99	DT
9	Plan of Trench 3	1 50	17/2/99	DT
10	Profile of posthole [4015]	1 10	16/2/99	DT
11	Profile of posthole [4016]	1 10	16/2/99	DT
12	Southwest facing section of posthole [4017]	1 10	16/2/99	DT
13	East facing section of ditch [4013]	1 10	15/2/99	DT
14	North facing section of ditch [5028]	1 10	12/2/99	MGH
15	Plan of cobble spread [5015]	1 20	12/2/99	MGH
16	Plan of ditch [5028]	1 20	12/2/99	MGH
17	Southwest facing section of Trench 2	1 10	19/2/99	MCF
18	Plan of cobble spread [2023]	1 20	19/2/99	LW
19	Southeast facing section through ditch [2029]	1 10	22/2/99	MGH
20	Northeast facing section through ditch [2029]	1 10	22/2/99	MGH
21	Plan of cobble spread [3017]	1 20	18/2/99	DT
22	Southwest facing section of ditch [3008]	1 10	12/2/99	MGH

10 2 Photographic Register

Frame	Description	Scale	Date	Initials
Film # 1/010299/0907				
20 → 22	Trench 1 post excavation	1x2 00m 1x1 00m	3/2/99	DT
23 → 25	Trench 1 post excavation	1x1 00m	3/2/99	DT
26 → 33	Section of ditch [5008] working shots	not used	3/2/99	MGH
34 → 36	Section of ditch [4004]	1x1 00m	5/2/99	DT
37	Trench 4 general shot	not used	5/2/99	DT
Film # 1/090299/0800				
1	Trench 4 working shot	not used	9/2/99	MGH
2	Trench 3 working shot	not used	9/2/99	MGH
3	Film identification			MGH
4	missed shot			
5 → 8	Section of ditch [5008]	1x2 00m	9/2/99	MGH
9 → 12	Section of ditch [5028]	1x1 00m	9/2/99	MGH
13 → 14	void			
15 → 16	Trench 2 working shot	not used	9/2/99	MGH
17	Trench 4 working shot	not used	9/2/99	MGH
18 → 21	Section of ditch [3008]	1x1 00m	9/2/99	MGH

Frame	Description	Scale	Date	Initials
22 → 24	Section of ditch [4013]	1x1 00m	15/2/99	DT
25 → 27	structure [4014]	1x1 00m	15/2/99	DT
28 → 30	structure [4014]	1x1 00m	15/2/99	DT
31 → 33	Section of ditch [3010]	1x1 00m	15/2/99	DT
34 → 36	Section of furrow [3015]	1x1 00m	15/2/99	MGH
37	Section of furrow [3015]	not used	15/2/99	MGH
Film # 1/150299/1250				
1	Film identification			MGH
2 → 4	Wall foundation [4024]	1x1 00m	15/2/99	DT
5 → 7	?Wall foundation [4025]	1x1 00m	15/2/99	DT
8 → 10	Clay and cobble surface [4027]	1x1 00m	15/2/99	DT
11 → 16	Wall foundation [4006]	1x1 00m	15/2/99	DT
17 → 19	Wall foundation [4024]	1x1 00m	15/2/99	DT
20 → 36	Overview of cobble spread [3017] with targets	1x1 00m	16/2/99	DT
Film # 1/160299/1400				
1 → 3	Overview of cobble spread [3017] with targets	1x1 00m	16/2/99	MGH
4 → 5	Ditch [2027] progress shot	1x1 00m	16/2/99	MGH
6	Film identification			MGH
7 → 9	void			
10 → 12	void			
13 → 15	Trench 4 post excavation	1x1 00m	19/2/99	DT
16 → 18	Trench 2 catastrophic section collapse	1x1 00m	19/2/99	DT
19 → 21	Trench 2 furrow [2004] and cobble spread [2023]	1x1 00m	19/2/99	LW

10 3 Bulk Finds Catalogue

Context	Description
2000	Calcite tempered 1 sherd Huntcliffe jar
	Imbrex abraded
	Brick
2001	Calcite tempered 2 sherds Huntcliffe jar
	Crambeck greyware 1 sherd ?flanged bowl
	Oxidised ware 1 sherd
2002	Calcite tempered 2 sherds
	Calcite tempered 1 sherd jar
	Calcite tempered 11 sherds Huntcliffe jar
	Oxidised calcite tempered 1 sherd storage jar
	Crambeck greyware 1 sherd flanged bowl
	Crambeck greyware 4 sherds closed vessel
	Crambeck greyware 1 sherd jar/beaker
	Crambeck greyware? 1 sherd closed vessel
	Crambeck greyware variant 1 sherd flanged bowl
	Crambeck parchment ware 1 sherd flat rimmed bowl
	Greyware 2 sherds
	Early Roman reduced sandy ware 3 sherds jar or bowl with curved rim
	Daub
	Flue x2
	Brick x9
	Tegula abraded
2012	Calcite tempered 3 sherds jar
	Crambeck greyware 1 sherd bowl/dish
	Crambeck greyware 1 sherd wide mouthed bowl
	Crambeck greyware? 2 sherds flanged bowl
	Crambeck parchment ware 1 sherd grooved rim bowl
	Oxidised ware 2 sherds ?flagon
	Brick x2
	Tegula abraded
2018	Calcite tempered 1 sherd closed vessel
	Crambeck greyware 1 sherd ?wide mouthed bowl
	Early Roman reduced sandy ware 1 sherd plain rimmed dish
3000	Reduced Roman coarseware 1 sherd closed vessel
	Crambeck greyware 1 sherd ?flanged bowl
	Crambeck greyware 1 sherd jar or beaker
	Greyware 1 sherd triangular rimmed bowl
	Early Roman oxidised sandy ware 1 sherd
	Brick
	Tegula x 3
3001	Crambeck greyware 3 sherds flanged bowl
	Crambeck greyware 8 sherds large lug handled jar
	Tegula x2
3002	Crambeck mortana 4 sherds mortanum with bead and flanged rim
	Oxidised ware 1 sherd jar
	Quartz tempered oxidised ware 1 sherd closed vessel
3003	Greyware 1 sherd ?cooking pot
	Quartz tempered greyware 2 sherds closed vessel
	Oxidised wares 1 sherd jar

Context	Descnption
3009	Crambeck greyware 1 sherd ?flanged bowl
	Greyware 1 sherd
	Greyware 1 sherd ?closed vessel
	Greyware 1 sherd jar or beaker
	Early Roman reduced sandy ware 1 sherd closed vessel
	Flue
	Imbrex
	Bnck
3011	Calcite tempered 1 sherd closed vessel
	Crambeck greyware 1 sherd closed vessel
	Brick
	Flint worked
3014	Crambeck greyware 1 sherd open form
	Bnck x2
3016	Calcite tempered 3 sherds jar
	Crambeck greyware 1 sherd ?flanged bowl
	Crambeck greyware 1 sherd wide mouthed bowl
	Crambeck greyware 1 sherd jar or beaker
	Crambeck greyware 1 sherd narrow necked jar
	Greyware 1 sherd closed vessel
	Early Roman reduced sandy ware 1 sherd closed vessel
	Early Roman reduced sandy ware 1 sherd plain rimmed dish
	Imbrex x2
	Bnck
	Tegula
3018	Crambeck greyware 3 sherds everted nmmed jar
	East Gaulish Samian ware? 1 sherd Drag 31
	Bnck x3
	Tegula x4
Trench 3	unstrat Crambeck greyware 1 sherd open form
	unstrat Quartz tempered greyware 1 sherd bucket shaped jar
4001	Calcite tempered 5 sherds closed vessel
	Crambeck greyware 1 sherd closed vessel
	Crambeck greyware 1 sherd ?open form
	North Gaulish mortaria 1 sherd mortanum with bead and flanged rim
	Imbrex x 5
	?Imbrex
	Limestone building stone?
	Opus signinum
	Painted plaster 6 fragments
	Brick x 7
	Tegula
4002	Oxidised calcite tempered 1 sherd
	Romano British greywares 4 sherds JFL
	Quartz tempered greyware 2 sherds closed vessel
	Oxidised ware 1 sherd closed vessel
	Oxidised ware 1 sherd ?everted nmmed jar
4003	Calcite tempered 1 sherd ?Huntcliffe jar
	Crambeck greyware 1 sherd ?flask
	Quartz tempered greyware? 1 sherd closed vessel
	Brick
4005	Drain fragment
	Flue

Context	Descnption
	Imbrex x2
	Opus signinum 3 fragments
	Bnck x3
4006	Bnck
4007	Calcite tempered 2 sherds
	Romano British greywares 2 sherds closed vessel
4008	Calcite tempered 2 sherds closed vessel
	Calcite tempered 1 sherd jar
	Crambeck greyware 2 sherds closed vessel
	Crambeck greyware 2 sherds jar
	Crambeck greyware 1 sherd everted nmmed jar
	Crambeck greyware 2 sherds ?everted rimmed jar
	Crambeck greyware 2 sherds large lug handled jar
	Crambeck greyware 1 sherd open form
	Crambeck greyware? 1 sherd closed vesssel
	Romano Bntish greywares 1 sherd closed vessel
	Flue
	Imbrex
	Limestone ball
	Opus signinum
	Brick x5
	Sandstone roofing?
4009	Calcite tempered 7 sherds closed vessel
	Crambeck greyware 2 sherds flanged bowl
	Crambeck greyware 1 sherd flanged bowl
	Crambeck greyware 1 sherd beaker
	Crambeck greyware 2 sherds closed vessel
	Crambeck greyware 1 sherd ?cooking pot
	Crambeck greyware 1 sherd jar or beaker
	Crambeck greyware 1 sherd large jar
	Crambeck greyware 1 sherd ?large lug handled jar
	Crambeck greyware 3 sherds ?open form
	Crambeck greyware? 1 sherd flanged bowl
	Crambeck parchment ware 1 sherd beaker
	Romano British greywares 1 sherd beaker
	Romano British greywares 1 sherd ?cooking pot
	Romano British greywares 1 sherd ?Huntcliffe jar
	Flue
	Imbrex x3
	Brick x3
	Tegula
4010	Calcite tempered 4 sherds closed vessel
	Calcite tempered (minimal calcite) 1 sherd closed vessel
	Romano British greywares 1 sherd beaker
	Romano Bntish greywares 4 sherds beaker
	Romano Bntish greywares 1 sherd plain nmmed straight sided dish
	Romano British greywares 1 sherd everted nmmed jar
	Romano British greywares 12 sherds wide mouthed jar
	Reduced sandv/itch fabric Middleton 3 sherds cooking pot
	Oxidised ware 3 sherds closed vessel
	Amphora 1 sherd as yet unidentified
5000	Calcite tempered 5 sherds closed vessel
	Calcite tempered 9 sherds Huntcliffe jar

Context	Description
	Calcite tempered 2 sherds Knapton jar
	Crambeck greyware? 1 sherd bowl
	Romano-British greywares 1 sherd jar with lid seated rim
	Quartz tempered greyware 4 sherds
	Daub 6 fragments
	Flue x 4
	?Flue x 3
	Imbrex
	Limestone building stone?
	Brick x 8
	Sandstone roofing?
	Tegula x2
5001	Calcite tempered 12 sherds
	Calcite tempered (minimal calcite) 1 sherd plain rimmed dish
	Crambeck greyware 1 sherd flanged bowl
	Crambeck greyware 1 sherd closed vessel
	Crambeck greyware 2 sherds ?large lug handled jar
	Fine greyware 2 sherds closed vessel
	Crambeck mortana? 1 sherd
5003	Crambeck greyware 1 sherd ?large lug handled jar
5005	Calcite tempered 1 sherd
	Nene Valley Colour Coated 1 sherd funnel necked beaker
5006	Oxidised calcite tempered? 1 sherd
	Romano-British greywares 1 sherd closed vessel
	Nene Valley Colour Coated 4 sherds funnel necked beaker
	Brick
5007	Calcite tempered? 1 sherd
	Crambeck greyware 1 sherd jar or beaker
	Crambeck greyware? 1 sherd jar with lid seated rim
	Romano British greywares 3 sherds
5013	Calcite tempered 14 sherds
	Calcite tempered 1 sherd closed vessel
	Calcite tempered 30 sherds jar
	Calcite tempered 1 sherd jar or bowl with curved rim
	Calcite tempered 6 sherds Huntcliffe jar
	Calcite tempered 13 sherds ?Huntcliffe jar
	Crambeck greyware 1 sherd beaker
	Crambeck greyware 1 sherd closed vessel
	Flue x3
	Imbrex x6
	Limestone building stone?
	Brick x9
	Tegula
5014	Crambeck greyware 1 sherd ?open form
	Crambeck parchment ware 1 sherd
	Brick
5015	Crambeck greyware 1 sherd closed vessel
	Flue
	Brick
5016	East Gaulish Samian ware 1 sherd Drag 37
	Brick
5023	Crambeck greyware 1 sherd ?open form
	Quartz tempered oxidised ware 2 sherds closed vessel

10 4 Small Finds Catalogue

Context	Description	Object No
3011	Cu alloy shears	1
3000	Lead object	2
5014	Fe nail	3
5015	Fe nail?	4
4008	Fe buckle?	5b
4008	Fe nail	5a
5016	Fe nail?	6
4001	Fe nail x 2	7
5013	Fe nail x 2	8
4002	Coin	9
4003	Fe nail x 3	10
3014	Fe nail	11
5001	Fe nail	12
5001	Fe nail	13
5001	Fe nail	14
3009	Fe nail x 2	15
3016	Fe nail shaft	16
5013	Fe bill hook	17
tr 3	Fe knife	18
4001	Glass fragments x 3	19
2002	Fe object	20

10 5 Sample Register

Context	Reason for sample	Sample No
5005	Highly organic fill with charcoal general biological analysis (GBA)	1
2025	Highly organic fill general biological analysis (GBA)	2

10 6 Archive Location

The environmental samples and vertebrate remains are currently held by the Environmental Archaeological Unit, York University All other classes of artefact and the written and drawn records are held by On-Site Archaeology The archive shall be deposited at the appropriate museum once this has been agreed upon by BP Chemicals

11 0 Appendix 2 ~ Pottery Assessment, BPTSEP 169

Alan Vince, & Barbara Precious[2]

11 1 Introduction

Three hundred and twenty sherds of pottery from West Lilling (site BPTSEP 169) were submitted for assessment Almost all are of late Roman date The pottery includes a range of finewares and imports which are consistent with the identification of the site as a villa

A handful of vessels are of very late or sub-Roman type, comparable with the latest types found in Roman York where they are dated to the late 4th or early 5th centuries This pottery forms a moderate-sized assemblage which, if it can be treated as a single assemblage, is sufficiently large for detailed analysis and comparison with other late Roman assemblages in the north

11 2 Aims and Objectives

The aims of the assessment were

- to identify and record all the material
- to provide a date-range for the finds
- to use these to infer previous land use
- to recommend and justify any further necessary work on the finds
- to identify any aspects of the site's archaeology recogmsable from the ceramic finds which require further study or preservation

11 3 Description

All items were recorded to common name and form level and any significant details of manufacture, decoration or use were recorded as comments Quantification was by sherd/fragment count alone and the data was entered into a MS Access 7 database The ware, fabric and decoration codes used are based on those being used currently to catalogue the West Heslerton Roman pottery, a large and contemporary collection

11 3 1 Prehistoric

Although the late/sub-Roman sherds described below have fabrics which are visually very similar to those of Iron Age pottery their treatment and form show that they are not in fact prehistory No prehistoric pottery was found on the site

[2] 25 West Parade Lincoln. LN1 1NW

11 3 2 *Roman*

Wares

The Roman pottery could be classified into eighteen groups (Table 1) Most of the pottery could have been obtained within 30 miles of the site The Crambeck area, for example supplied 95 sherds (29% of the total) and 149 sherds of calcite-tempered wares, all likely to have been made on the fringes of the Yorkshire Wolds in the Vale of Pickering, were present (45% of the total) Most of the remaining sherds were unsourced oxidized and reduced wares The only non-local wares were from the Nene Valley (5 sherds), the Eastern Gaulish samian factories (2 sherds) and a sherd of *mortaria* from an unknown source in northern Gaul

A small number of sherds were tempered with a coarse quartzose sand, including fragments of medium-grained sandstone and sparse shell fragments These are similar in appearance to both Iron Age and Anglian wares from Yorkshire and were probably tempered with sand derived from the glacial sands of the Vale of York Their forms (handmade jars with flat bases) are typical of late Roman cooking vessels and it is likely that they are of late Roman date Nevertheless, the opportunity to compare the fabric with that of earlier and later material would determine whether or not there were any differences in fabric at microscopic level and perhaps elucidate the relationship between this ware and earlier and later types

Table 1 Roman fabric codes

cname	full name	Sherds	Vessels
CALC	Calcite tempered	143	55
CALC?	Calcite tempered?	1	1
CALM	Shell calcite tempered with minimal calcite	2	2
CALOX	Oxidized calcite tempered	2	2
CALOX?	Oxidized calcite tempered?	1	1
COAR	Reduced misc Roman coarsewares	1	1
CRGR	Crambeck greyware	78	62
CRGR?	Crambeck greyware?	7	6
CRGRV?	Crambeck greyware variant?	1	1
CRPA	Crambeck parchment ware	4	4
GREY	Romano British greywares	42	22
GRFF	Fine greyware	2	1
GRQZ	Quartz tempered greyware	8	7
GRQZ?	Quartz tempered greyware?	1	1
GRSA	Reduced version of OXSA	7	5
GRSAN	Reduced sandwich fabric Middleton	3	1
MOCR	Crambeck mortaria	4	1
MOCR?	Crambeck mortaria?	1	1
MONG	North Gaulish mortana	1	1
NVCC	Nene Valley Colour Coated	5	2
OX	Oxidized ware	10	7
OXQZ	Quartz tempered oxidized ware	3	2
OXSA	Early Roman oxidized sandy ware	1	1
SAMEG	East Gaulish Samian ware	1	1
SAMEG?	East Gaulish Samian ware?	1	1

Forms

Three hundred sherds could be assigned to a form type (Table 2)

Table 2 Roman pottery forms

Code	Full name	Sherds
	Unidentifable	30
31	Drag 31	1
37	Drag 37	1
B	Bowl	2
BD	Bowl/dish	1
BFB	Flanged bowl	9
BFB?	Flanged bowl?	4
BFBL	Flanged bowl	3
BFL	Flat rimmed bowl	1
BGR	Grooved rim bowl	1
BK	Beaker	3
BKFN	Funnel necked beaker	5
BTR	Tnangular rimmed bowl	1
BUCKET?	Bucket shaped jar	
BWM	Wide mouthed bowl	2
BWM?	Wide-mouthed bowl?	1
CLAD		1
CLSD	Closed vessel	70
CLSD?	Closed vessel?	1
CP	Cooking pot	3
CP?	Cooking pot?	3
DPR	Plain rimmed dish	3
DPRS	Plain rimmed straight sided dish	1
F?	Flagon?	2
FS?	Flask?	1
J	Jar	43
JBK	Jar or beaker	6
JCUR	Jar or bowl with curved rim	4
JCURS		12
JEV	Everted rimmed jar	5
JEV?	Everted rimmed jar?	3
JFL		4
JHUN	Huntcliffe jar	30
JHUN?	Huntcliffe jar?	15
JKNAP	Knapton jar	2
JL	Large jar	1
JLH	Large lug handled jar	10
JLH?	Large lug handled jar?	4
JLS	Jar with lid seated rim	2
JNN	Narrow necked jar	6
JS	Storage jar	1
JUP		4
JWM	Wide mouthed jar	12
MBF	Mortanum with bead and flanged rim	5
MWAL?		1
OPEN	Open form	3
OPEN?	Open form?	6
PWAL		1

Trench 2

Five contexts in Trench 2 produced pottery (Table 3) All could be dated to the 4th century

Table 3

cname	Form	2000	2001	2002	2012	2018
CALC				2		
CALC	CLSD					1
CALC	J			1	3	
CALC	JHUN	1	2	11		
CALOX	JS			1		
CRGR	BD				1	
CRGR	BFB?		1			
CRGR	BFBL			1		
CRGR	BWM				1	
CRGR	BWM?					1
CRGR	CLSD			4		
CRGR	JBK			1		
CRGR?	BFB				2	
CRGR?	CLSD			1		
CRGRV?	BFB			1		
CRPA	BFL			1		
CRPA	BGR				1	
GREY				2		
GRSA	DPR					1
GRSA	JCUR			3		
OX			1			
OX	F?				2	

Trench 3

Nine contexts in Trench 3 produced pottery (Table 4) All contexts could be dated to the 4th century A sherd of early 3rd century East Gaulish samian ware came from context [3018] Very late or sub-Roman coarseware was present in context [3003] and unstratified

Table 4

cname	Form	3000	3001	3002	3003	3009	3011	3014	3016	3018	u/s
CALC	CLSD						1				
CALC	J								3		
COAR	CLSD	1									
CRGR	BFB		3								
CRGR	BPS?	1				1			1		
CRGR	BWM								1		
CRGR	CLSD						1				
CRGR	JBK	1							1		
CRGR	JEV									3	
CRGR	JLH		8								
CRGR	JNN								1		
CRGR	OPEN							1			1
GREY	BTR	1									

cname	Form	3000	3001	3002	3003	3009	3011	3014	3016	3018	u/s
GREY	CLAD					1					
GREY	CLSD								1		
GREY	CLSD?					1					
GREY	CP?				1						
GREY	JBK					1					
GRQZ	BUCKET?										1
GRQZ	CLSD				2						
GRSA	CLSD					1			1		
GRSA	DPR								1		
MOCR	MBF			4							
OX	J			1	1						
OXQZ	CLSD			1							
OXSA		1									
SAMEG?	31									1	

Trench 4

Roman pottery was present in eight contexts in Trench 4 (Table 5) Two contexts produced pottery which may date to the late 3rd century ([4007] and [4010]) All other assemblages were 4th century whilst contexts [4002] and [4003] produced late/sub-Roman coarseware Context [4001] produced a residual sherd of North Gaulish *mortarium*

Table 5

Cname	Form	4001	4002	4003	4007	4008	4009	4010	4014	u/s
CALC					2					
CALC	CLSD	5				2	7	4		1
CALC	J					1				
CALC	JHUN?			1						
CALM	CLSD							1		
CALOX			1							
CRGR	BFB						2			
CRGR	BFBL						1			
CRGR	BK						1			
CRGR	CLSD	1				2	2		1	
CRGR	CP?						1			
CRGR	FS?			1						
CRGR	J					2			1	
CRGR	JBK						1			
CRGR	JEV					1				
CRGR	JEV?					2				
CRGR	JL						1			
CRGR	JLH					2				
CRGR	JLH?						1			
CRGR	JNN								5	
CRGR	OPEN					1				
CRGR	OPEN?	1					3			
CRGR?	BFBL						1			
CRGR?	CLSD					1				
CRPA	BK						1			

Cname	Form	4001	4002	4003	4007	4008	4009	4010	4014	u/s
GREY							1			
GREY	BK							1		
GREY	CLSD				2	1		4		
GREY	CP?						1			
GREY	DPRS							1		
GREY	JEV							1		
GREY	JFL		4							
GREY	JHUN?						1			
GREY	JWM							12		
GRQZ	CLSD		2							
GRQZ?	CLSD			1						
GRSAN	CP							3		
MONG	MBF	1								
OX	CLSD		1					3		
OX	JEV?		1							

Trench 5

Eleven contexts in Trench 5 produced Roman pottery (Table 6) Context [5016] produced only a sherd of East Gaulish samian ware and could date as early as the early 3rd century Two contexts might be of 3rd or 4th century date ([5005] and [5006]) The remainder date to the 4th century, except for context [5000] which produced sherds of very late/sub-Roman coarseware

Table 6

cname	Form	5000	5001	5003	5005	5006	5007	5013	5014	5015	5016	5023
CALC					1			14				
CALC	CLSD	5						1				
CALC	J							30				
CALC	JCUR							1				
CALC	JCURS		12									
CALC	JHUN	9						6				
CALC	JHUN?							13				
CALC	JKNAP	2										
CALC?							1					
CALM	DPR		1									
CALOX?						1						
CRGR	B							1				
CRGR	BFB		1									
CRGR	CLSD		1					1		1		
CRGR	JBK						1					
CRGR	JLH?		2	1								
CRGR	OPEN?								1			1
CRGR?	B	1										
CRGR?	JLS						1					
CRPA	PWAL								1			
GREY							3					
GREY	CLSD					1						
GREY	JLS	1										
GRFF	CLSD		2									

cname	Form	5000	5001	5003	5005	5006	5007	5013	5014	5015	5016	5023
GRQZ	JUP	4										
MOCR?	MWAL?		1									
NVCC	BKFN				1	4						
OXQZ	CLSD											2
SAMEG	37										1	

11 3 3 Medieval

No medieval pottery was present

11 3 4 Post-medieval

A single sherd of Ryedale ware bowl, probably 16th or 17th, was present This was recovered from the fill of a modern land dram

11 4 Recommendations

It seems from this assessment that the pottery from West Lilling is mainly of 4th century date and that each trench has a similar date range It may, therefore, be possible to treat the entire assemblage as being representative of the pottery used at the site in the late Roman period and to compare this with other late Roman pottery assemblages in the north To compare with data published by Dr J Evans the assemblage should be quantified by weight Time would have to be spent working on the stratigraphic associations of the pottery to test the integrity of the assemblage

The good condition of much of the pottery enables substantial parts of vessel profiles to be reconstructed and fourteen vessels have been identified for illustration

A sample of six late/sub-Roman sherds should be scientifically characterised using thin-section analysis and ICPS (inductively-coupled plasma spectroscopy)

Finally a report should be written for publication in an archaeological journal

11 5 Acknowledgements

The Roman pottery was identified and catalogued by Barbara Precious The data was transferred to Access 7 and the assessment report written by Alan Vince

12 0 Appendix 3 ~ Environmental Assessment, BPTSEP 169

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12 1 Summary

Two sediment samples and a single box of bone were submitted for assessment of their bioarchaeological potential Sample 1 (Context [5005]) contained a small amount of charred cereal grains and charcoal The plant and invertebrate remains from Context [2025] (Sample 2) were consistent with the archaeological interpretation of a ditch fill but also indicated the potential for exploring aspects of human occupation in the vicinity The recovery of bioarchaeological remains is very rare from a site of this type in the northern part of the Vale of York, so that further analysis of these samples, and investigation of any others from the excavations, should be undertaken

The small vertebrate assemblage (61 fragments in total) was rather poorly preserved and contained the remains of domestic mammals (horse, pig and cattle) and a single bird fragment No further work is recommended on this material

KEYWORDS BP PIPELINE SITE 169, WEST LILLING, NORTH YORKSHIRE ROMANO-BRITISH VERTEBRATE REMAINS, PLANT REMAINS INVERTEBRATE REMAINS, ASSESSMENT

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12 2 Introduction

An evaluation excavation was undertaken by On-Site Archaeology, during February 1999, at Site 169 on the proposed route of BP Chemicals Ltd Teeside to Saltend ethylene pipeline Site 169 is situated near the village of West Lilling in North Yorkshire (NGR SE 640 644) Two sediment samples and a single box of bone (approx 10 litres) were presented for assessment Vertebrate remains were recovered from 12 contexts, all associated with a probable 4th century AD Romano-British villa The samples were taken from ditches possibly predating this structure

12 3 Methods

12 3 1 Sediment samples

The material was initially inspected in the laboratory and described using a standard *pro forma* A 1 kg 'voucher' of each sample was removed prior to the rest of the sediment being sieved to 300 m, the washover also being sieved to 300 m Subsequently, the <4mm fraction of the residue from Sample 2 (Context [2025]) was processed for the recovery of invertebrate remains following procedures of Kenward *et al* (1980, 1986), the resulting flot being treated as if it had been a 'test' subsample (labelled and recorded as '/T')

All invertebrate macrofossils were recorded semi-quantitatively using the scale described by Kenward *et al* (1986) and Kenward (1992) Records were made on a paper *pro forma* for later transfer to a computer database (using *Paradox* software) for analysis and long-term storage

12 3 2 Vertebrate remains

For the vertebrate remains, data were recorded electronically directly into a series of tables using a purpose-built input system and *Paradox* software For each context containing more than three fragments, subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces ('angularity') Additionally, semi-quantitative information was recorded concerning fragment size, dog gnawing, burning, butchery and fresh breakage

Where possible, fragments were identified to species or species group, using the reference collection at the Environmental Archaeology Unit, University of York Fragments not identifiable to species were grouped into categories large mammal (assumed to be cattle, horse or large cervid), medium-sized mammal (assumed to be caprovid, pig or small cervid), bird and completely unidentifiable

Measurements for mammals were taken (where appropriate) according to the system of von den Driesch (1976), with additional measurements following those outlined by Dobney *et al* (forthcoming)

Total numbers of fragments by species were recorded, together with the number of measurable fragments and isolated teeth yielding ageing or sexing information As well as counts of fragments, total weights were recorded for all identifiable and unidentifiable categories

12 4 Results

12 4 1 Sediment samples

Table 1 gives a list of the samples, the action taken and the retention/disposal requirements

Trench 2, Context [2025], Sample 2/BS

Moist, dark grey-brown, crumbly (working sticky then unconsolidated), slightly sandy silty clay with fine and coarse woody and herbaceous detritus Patches of light brown sand were present within the matrix Wood fragments were common and twigs with bark were present

The small washover of about 100 cm^3 was of fine herbaceous detritus with large numbers (though low concentrations, given the large subsample size) of well preserved seeds, the herbaceous detritus including many small fragments of monocotyledonous epidermis, the rest mostly brown fine roots with large cells

The small residue of about 750 cm^3 included some narrow rods (to 150 x 15 mm) tentatively identified as *Prunus* (perhaps blackthorn, *P spinosa* L) with woody and herbaceous detritus quite rich in well preserved seeds Human occupation is indicated by the presence of a few charred cereal grains (some of them extremely well preserved wheat caryopses) and a variety of weeds, and probably also by the presence of small heathland and grassland components mixed into an assemblage predominantly indicative of an intermittently wet ditch or the drying margins of a pond Indeed, the mixture of taxa was in some ways more reminiscent of an assemblage from an urban occupation deposit than a rural one

The large subsamples (8 kg) yielded a modest sized group of invertebrate remains, including around 50 adult beetles These represented approximately 35 taxa, so the assemblage was diverse (i e mixed and derived from a range of habitats, probably from a fairly wide area) There were several individuals of a *Helophorus* species, and single individuals of five other water beetles were present, together with numerous *Daphnia* ephippia (water flea resting eggs) These suggest that the deposit was formed in water, probably not permanent

Plant feeders were moderately common, the mne taxa probably all being derived from short herbaceous vegetation, including two indicating nettles (*Urtica* sp) Three species of dung beetles (two *Aphodius* and a *Geotrupes*, probably totalling several individuals) suggest the possibility that there was grazing land

There were no species strongly associated with human occupation, although there was a group of beetles associated with decaying matter which would not be likely to be found *together* in natural litter It seems unlikely that this interpretation could be greatly improved by fiirther work, in view of the large size of the subsample already examined, but fiill recording of the assemblage is desirable if the dating is reasonably secure

Trench 5, Context [5005], Sample 1/BS

Moist, dark grey-brown (mottled with dark grey, light yellow-brown and orange), crumbly (working unconsolidated), sandy silt with a possible ash component Stones to 6 mm were present together with charcoal and ?ancient root traces

The minute washover of a few cm^3 consisted of fine charcoal with some poorly preserved charred cereal grains, and the very small residue of about 400 cm^3 yielded further cereal grains together with some charcoal (to 40 mm in maximum dimension) and rounded fragments of brick/tile, with rather a lot of charred ?heather (cf *Calluna vulgaris* (L) Hull) root/twig fragments (to 20 mm) and a few small fragments of umdentified charred root or rhizome The cereals were bread/club wheat (*Triticum aestivo-compactum*), with single grains of barley (*Hordeum* sp) and oats (*Avena* sp) In all there were perhaps no more than about 10 cereal grains from this large subsample

12 4 2 Vertebrate remains

Vertebrate remams were recorded from all 12 contexts submitted for assessment Preservation records were made for material from seven of these contexts

Overall preservation was described as poor, except for Context [2016] which was recorded as good Angularity (appearance of broken surfaces) was mostly noted as battered or rounded Colour was recorded as variable, ahhough it was generally consistent within contexts

The degree of fragmentation of the bones was moderate, most fragments being between 5 and 20 cm in largest dimension Dog gnawing and butchery were evident on 10 - 20 % of fragments from some contexts Evidence of fresh breakage was observed on fragments in all contexts except [2016] Burnt fragments were noted in Contexts [4009] and [5001]

A total of 61 fragments (weighing 1435 g) were recovered, of which 17 (weighing 767 g) were identifiable to species (Table 2) The species present were cattle (13 fragments), pig (1) and horse (3) A single bird fragment (not identifiable to species) was noted in Context [4003] Two loose teeth (giving ageing information) and four measurable bones (all cattle) were noted and the measurements are given in Table 3

A preponderance of teeth was noted, which can be attributed to taphonomic rather than depositional factors as teeth generally survive better in conditions of poor bone preservation

12 5 Discussion and statement of potential

12 5 1 Sediment samples

The recovery of bioarchaeological remains is very rare from a site of this type in the northern part of the Vale of York, so the presence of moderate quantities of plant remains and appreciable numbers of invertebrate remains preserved by anoxic waterlogging is noteworthy In this case the biological remains from Context [2025] were consistent with the archaeological

interpretation of a ditch fill, but also indicated the potential for exploring aspects of human occupation in the vicinity

12 5 2 Vertebrate remains

The small size of the assemblage and poor preservation of the fragments precludes any further analysis of the vertebrate remains Therefore, the assemblage is of little interpretative or zooarchaeological value

The poor state of vertebrate preservation suggests that if further excavation were to take place, a moderate-sized bone assemblage might be recovered but would probably be poorly preserved and hence of little use in site interpretation or zooarchaeological work However, a basic archive should be made of any further vertebrate material recovered

12 6 Recommendations

Given the location of the site in an area with almost no palaeoenvironmental evidence, further analysis of these samples, and investigation of any others from the excavations should be undertaken, providing the deposits can be dated sufficiently accurately If further excavation is undertaken an extensive sampling programme should be implemented and provision made for the subsequent analysis and publication of the material

No further work is recommended on the current vertebrate assemblage If further excavation recovers a larger quantity of bone, which can be tightly dated, a basic archive should be produced

12 7 Retention and disposal

These samples and any residues derived from them should be retained in the short term in case further work can be undertaken, in the longer term, they should be stored as part of the site archive if further work is carried out and the results prove to be of value

The vertebrate remains need not be kept

12 8 Archive

All material is currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here

12 9 Acknowledgements

We are grateful to Nick Pearson of On-Site Archaeology for supplying the material and archaeological information and to English Heritage for allowing AH and HK to work on this material

12 10 References

Dobney, K M , Jaques, S D and Johnstone, C J (forthcoming) [Protocol for recording vertebrate remains from archaeological sites] *Reports from the environmental Archaeology Unit, York* 99/15

Kenward, H K (1992) Rapid recording of archaeological insect remains - a reconsideration *Circaea, the Journal of the Association for Environmental Archaeology* 9 (for 1991), 81-8

Kenward, H K , Engleman, C , Robertson, A , and Large, F (1986) Rapid scanning of urban archaeological deposits for insect remains *Circaea* **3** (for 1985), 163-72

Kenward, H K , Hall, A R and Jones, A K G (1980) A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits *Science and Archaeology* **22**, 3-15

von den Driesch, A (1976) A guide to the measurement of animal bones from archaeological sites *Peabody Museum Bulletin* 1 Cambridge Mass , Harvard University

Table 1 List of samples from Site 169, West Lilling, North Yorkshire

Context	Sample	Action taken	Retention/disposal
2025	2/BS	8 kg sieved to 300 m and the washover sieved to 300 m Paraffin flotation on the fraction of the residue <4mm	Should be retained
5005	1/BS	7 kg sieved to 300 m and the washover sieved to 300 m	Should be retained

Table 2 Vertebrate remains from Site 169, West Lilling, North Yorkshire

Taxa		No measurable	No teeth	Total no fragments	Weight (g)
Horse	*Equus* f domestic			3	206 5
Pig	Sus f domestic			1	11 0
Cow	*Bos* f domestic	4	2	13	549 8
Subtotal		4	2	17	767 3
Bird				1	1 0
Large mammal				37	654 4
Medium sized mammal				2	7 7
Unidentified				4	4 7
Subtotal				44	667 8
Total		4	2	61	1435 1

Table 3 Measurements of vertebrate remains from Site 169, West Lilling, North Yorkshire

Context	Date	Species	Element	Side	Measurements			
2002	?4th C AD	Cow	Metacarpal	l	Bp=51 22	Dp=29 86		
2016	?4th C AD	Cow	Tibia	l	Bd=65 39	Dd=48 17		
2016	?4th C AD	Cow	Calcaneum	r	GL=138 17	DS=42 69	C=29 80	C+D=52 35
4009	?4th C AD	Cow	Metatarsal	r	Bp=40 57	Dp=38 61		

13 0 Appendix 4 ~ Ceramic Building Material Assessment, BPTSEP 169

S Garside-Neville[3]

13 1 Introduction

Two boxes of ceramic building materials (CBM), daub and painted plaster were submitted for viewing The items were examined by eye, and hand lens where appropriate

13 2 Roman material

The bulk of the material is Roman The ceramic forms present include brick (used in wall bonds and in hypocausts), roof tile (tegula and imbrex) and box flue tile The material is often abraded, and some fragments show signs of reuse, probably during the Roman period The bulk of the CBM fabrics are familiar to the York area, though there are one or two unusual fabrics, including a light coloured flue tile, which may point to a variety of sources used for CBM building materials

The presence of flue tile means that there was probably a hypocaust (Roman under-floor heating) in the area Hypocausts are associated with bath houses, though not exclusively A good amount of material shows signs of burning This may not point to the deliberate burning of a building (hypocaust systems would be prone to catching fire anyway), but rather that the pieces were close to the stoking flue of the hypocaust, or in a section where smoke was likely to accumulate

Painted plaster on mortar was found in context [4001] It was very fragmentary, but shows signs of red, brown, pink and grey colours A pattern can't be discerned, though one piece may have been part of a stripe or border, a typical decorative scheme One plain white fragment has a curved surface which may have been the facing for a pillar There is one fragment of material which is opus signinum, and has been painted red

There are a few fragments of daub which will have been associated with less substantial buildings Some fragments of limestone and sandstone were present, and may have been used as building materials

13 3 Post Medieval material

The post medieval material consists of a few fragments of drain pipe

13 4 Conclusion

The Roman material is a good assemblage that must be associated with a substantial building The presence of combed box flue tile suggests a second century or later date There is

[3] Brick & Tile Services

evidence for the reuse of material, so that the occupation continued over some time, with alterations to the building taking place

This sample should be retained for further study Most usefully, it could be compared to other Roman assemblages from the area, including the Heslerton and Malton material Evidently, it is also drawing some of its tile supply from York Should further work take place on the site, full recording of the ceramic building material by a specialist should take place to maximise its usefulness to both the site, and to the study of the material and its substantial industry in a broader context

Context Listing

Context	Form	Thickness (mm)	Comments	Spot date
0	FLUE	16	TRENCH 3 U/S COMBED	2ND 4TH
0	IMBREX	0	TRENCH 4 U/S BURNT	ROMAN
0	RBRICK	0	TRENCH 2 U/S SMALL FRAG	ROMAN
	RBRICK	21	TRENCH 2 U/S ABRADED	
2000	IMBREX	0	ABRADED	
	RBRICK	28	TEGULA? KEYING? V SIGNATURE?	
2002	DAUB	0		ROMAN
	FLUE	16		
	FLUE	19		
	RBRICK	0	X 4 FRAGS	
	RBRICK	18		
	RBRICK	20		
	RBRICK	21		
	RBRICK	26		
	RBRICK	31	PAWPRINT DOG	
	RBRICK	50	BURNT?	
	RBRICK	52	LARGE FRAGMENT ABRADED	
	RBRICK	55	ABRADED	
	TEGULA	23	ABRADED	
2012	RBRICK	16		ROMAN
	RBRICK	22		
	TEGULA	22	ABRADED	
3000	RBRICK	18		ROMAN
	TEGULA	0		
	TEGULA	22	SOFT FABRIC	
	TEGULA	23		
3001	TEGULA	19		ROMAN
	TEGULA	19	LOWER CUTAWAY ABRADED X 3 JOINING FRAGS	
3009	FLUE	19	VENT	ROMAN
	IMBREX	17		
	RBRICK	15		
3011	RBRICK	26		ROMAN
3014	RBRICK	0		ROMAN
	RBRICK	17		
3016	IMBREX	15		ROMAN
	IMBREX	18		
	RBRICK	0		
	TEGULA	0	ABRADED BURNT	
3018	RBRICK	17		ROMAN
	RBRICK	19		
	RBRICK	34		
	TEGULA	18		
	TEGULA	19	1 ARC SIGNATURE LOWER CUTAWAY	
	TEGULA	19	UPPER CUTAWAY	
	TEGULA	21	LOWER CUTAWAY	
4001	IMBREX	15		ROMAN
	IMBREX	16		
	IMBREX	18		
	IMBREX	24		

Context	Form	Thickness (mm)	Comments	Spot date
	IMBREX	24		
	IMBREX?	13	POSS MODERN	
	LIMESTONE	26	LUMP	
	OPSIG	0	TRACES RED PAINT TURNED EDGE	
	PAINTED PLASTER	0	BROWN WITH STRIPES	
	PAINTED PLASTER	0	GREY PAINTED OVER RED	
	PAINTED PLASTER	0	PINK ROUGH SURFACE	
	PAINTED PLASTER	0	RED	
	PAINTED PLASTER	0	WHITE	
	PAINTED PLASTER	0	WHITE CURVED PERHAPS TO GO ROUND PILLAR	
	RBRICK	0	ABRADED MORTAR SMOOTHED AND/OR TRIMMED	
	RBRICK	0	X 5 FRAGS	
	RBRICK	17		
	RBRICK	18		
	RBRICK	22		
	RBRICK	29	ABRADED BURNT REUSED	
	RBRICK	35		
	TEGULA	0	FRAG	
4003	RBRICK	0	ABRADED	ROMAN
4005	DRAIN	13		19TH 20TH
	FLUE	19	COMBED SOOTED (2ND 4TH)	
	IMBREX	13	X 2 FRAGS	
	IMBREX	14		
	OPSIG	0		
	OPSIG	0	ATTACHED TO STONE BLOCK	
	OPSIG	0	SHOWS AT LEAST TWO LAYERS	
	RBRICK	30	OP SIG REUSED	
	RBRICK	35	REUSED OP SIG CORNER	
	RBRICK	38		
4006	RBRICK	45	REUSED MORTAR BURNT	ROMAN
4008	FLUE	16		ROMAN
	IMBREX	14		
	LIMESTONE	0	BALL	
	OPSIG	0		
	RBRICK	18		
	RBRICK	22		
	RBRICK	27		
	RBRICK	35	CORNER	
	RBRICK	41		
	SANDSTONE	9	FINE GRAINED ROOFING?	
4009	FLUE	15	VENT VENT EDGE 84MM FROM EDGE OF FLUE	ROMAN
	IMBREX	17		
	IMBREX	18	RIDGE BEGINNING OF CHIMNEY OR FINIAL?	
	IMBREX	21		
	RBRICK	17	X 2 FRAGS	
	RBRICK	20		
	RBRICK	24		
	TEGULA	20	X 2 JOINING FRAGS	
5000	COBBLE	0		ROMAN
	DAUB	0	X 6 FRAGS	
	FLUE	13		
	FLUE	15		

Context	Form	Thickness (mm)	Comments	Spot date
	FLUE	17	PALE FABRIC ALMOST TUBULAR SHAPE	
	FLUE	17	VENT	
	FLUE?	16		
	FLUE?	17		
	FLUE?	18		
	IMBREX	20		
	LIMESTONE	0		
	RBRICK	0	ABRADED	
	RBRICK	0	X 2 FRAGS	
	RBRICK	25	SIGNATURE	
	RBRICK	28	PAWPRINT CAT?	
	RBRICK	30	FINE FABRIC	
	RBRICK	33		
	RBRICK	39		
	RBRICK	42	SIGNATURE	
	SANDSTONE	0	FINE GRAINED	
	TEGULA	0	LOWER CUTAWAY	
	TEGULA	0	NO FLANGE	
5006	RBRICK	0	X 3 FRAGS	ROMAN
5013	FLUE	16		ROMAN
	FLUE	20	SOOTED VENT	
	FLUE	25	VENT	
	IMBREX	13		
	IMBREX	15		
	IMBREX	16		
	IMBREX	16		
	IMBREX	18	X 2 FRAGS	
	IMBREX	19		
	LIMESTONE	0	BURNT?	
	RBRICK	0	14 FRAGS	
	RBRICK	17	TEGULA?	
	RBRICK	22		
	RBRICK	23		
	RBRICK	26		
	RBRICK	26		
	RBRICK	28		
	RBRICK	31		
	RBRICK	40		
	TEGULA	23		
5014	RBRICK	0	X 2 FRAGS	ROMAN
5015	FLUE	12	COMBED VENT	2ND 4TH
	RBRICK	16	BURNT ON EDGES	
5016	RBRICK	17	BURNT	ROMAN

sgn

22/4/99

14 0 Appendix 5 ~ Registered finds, BPTSEP 169

14 1 Introduction

Nineteen registered finds were submitted for analysis and conservation to Lincolnshire County Council Heritage Services Conservation Department The non-ceramic finds from West Lilling are consistent with a Romanised settlement of moderate status

14 2 Iron

A number of corroded iron objects were recovered Most are either nails or the broken shafts of nails Other artefacts are a D-shaped buckle (SF5b), a bill hook (SF17), a whittle-tang knife (SF18) and fragments of what might be iron sheet, or natural concretion None of these items is independently-datable but all are of types found in the Roman period (and later)

SF3 *context 5014 X-Ray BPTSEP 169 4 1999* Nail, 32mm shaft, 10mm head

SF4 *context 5015 X-Ray BPTSEP 169 4 1999* Probably a heavily-corroded nail shaft

SF5a *context 4008 X-Ray BPTSEP 169 2 1999* Nail 45mm long broken shaft with 10mm wide head

SF5b *context 4008 X-Ray BPTSEP 169 2 1999* Probable D-shaped buckle with iron pin

SF6 *context 5016 X-Ray BPTSEP 169 4 1999* Probable nail shaft and tip 55mm long

SF7 *context 4001 X-Ray BPTSEP 169* 2 *1999* Two nails (a) 45 mm long broken shaft, 13mm head (b) 30mm broken shaft, 15mm head

SF8 *context 5013 X-Ray BPTSEP 169* 2 *1999* Two nails (a) 70mm shaft, 18mm head (b) 47mm shaft, 9mm head

SF10 *context 4003 X-Ray BPTSEP 169 4 1999* Three nails (a) bent in centre of shaft 400mm long, 12mm head, (b) broken shaft 20mm long, 10mm head, (c) 30mm broken shaft

SF11 *context 3014 X-Ray BPTSEP 169 4 1999* Nail 45mm shaft, 15mm head

SF12 *context 5001 X-Ray BPTSEP 169 4 1999* Nail 30mm shaft, 10mm head

SF13 *context 5001 X-Ray BPTSEP 169 4 1999* Nail 55mm shaft, 10mm head

SF14 *context 5001 X-Ray BPTSEP 169 4 1999* Nail 50mm broken shaft

SF15 *context 3009 X-Ray BPTSEP 169 4 1999* Two nails (a) heavily corroded, no metal shown in X-Ray, (b) 35mm broken shaft, 15mm head

SF16 *context 3016 X-Ray BPTSEP 169 4 1999* Broken shaft of nail, 55mm long

SF17 *context 5013 X-Ray BPTSEP 169 2 1999* Bill hook with broken? tang possibly folded back over blade Blade 110mm long and 80mm wide

SF18 *context Tr 3 from under Roman tile X-Ray BPTSEP 169 3 1999* Whittle-tang knife blade Tang 50mm long, blade 145mm long 35mm wide and 3mm thick

SF20 *context 2002 X-Ray BPTSEP 169 1 1999* Five fragments of possible iron object The x-rays show that no metal remains Could either be remnants of flat iron sheeting or natural iron panning

14 3 Lead

SF2 Unknown object constructed from a solid cylinder of lead 35mm long and 21mm diameter with flanges at either end At one end the flange (diameter 35mm) seems to have been moulded or beaten out of the metal comprising the cylinder but at the other (diameter 33mm) it seems more likely that the flange is formed from an added strip of metal, although no sign of any seam or join is visible There is no sign of wear on either end, nor on the central spindle Thus, although the object superficially looks like a pulley (without a central hole) or repair plug neither function is possible

The poor condition of the metal is consistent with a Roman date, although the object is unstratified and could be of any date up to the present day

14 4 Glass

SF19 *Context 4001* Three fragments of light green window glass, *c* 2mm thick These fragments have the characteristic irregular surface on one side resulting from being formed from a blown cylinder of glass from which both ends were cut after blowing This technique is characteristic of the Roman period

SF19 *Context 4001* One fragment of light blue ?mould blown vessel glass, 5mm thick Probably of Roman date

14 5 Copper Alloy

SF1 *Context 3011* Shears, c 123mm long In contrast to medieval shears from the London waterfront, the bow is not differentiated from the arms but in other respects there is little difference between these shears and the London examples, although there is no close parallel to the detail of the recesses either (Cowgill *et al* **1987**, 106-113)

14 6 Coins

SF9 *Context 4002 X-Ray BPTSEP 169 4 1999* Barbarous radiate Mid 3rd century

14 7 Wall Plaster

Context 4001 23 fragments of wall plaster, some of which have a red wash and one of which has the straight junction between an area of red wash and an area of plain plaster The plaster is of variable thickness and in one case was plastered onto wood, but in other cases the backing is unclear The finish of the plaster is irregular with tool marks showing on many pieces and despite the use of paint it seems that the plastering is of low quality

14 8 Bibliography

Cowgill, J, de Neergaard, M & Griffiths, N 1987 *Knives and Scabbards* Medieval Finds from Excavations in London HMSO

14 9 Artefact Illustrations

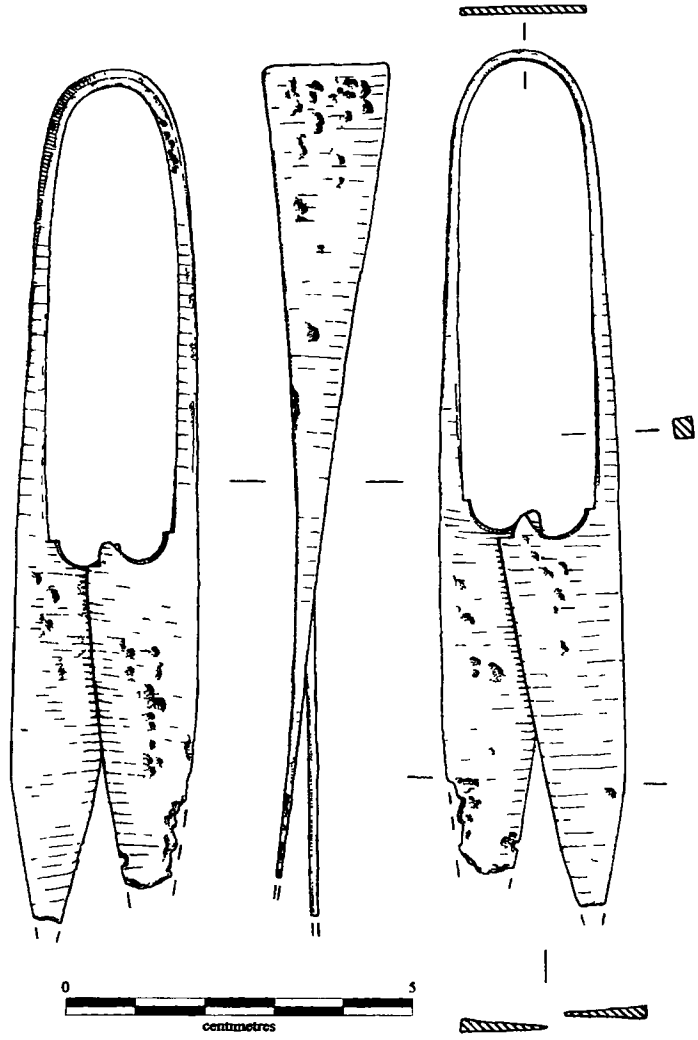


Figure 14 9 1 SF 1

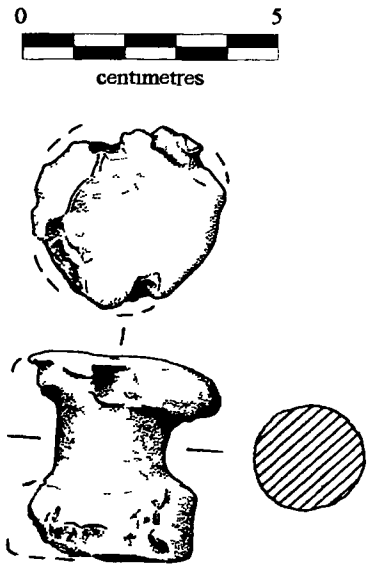


Figure 14 9 2 SF 2

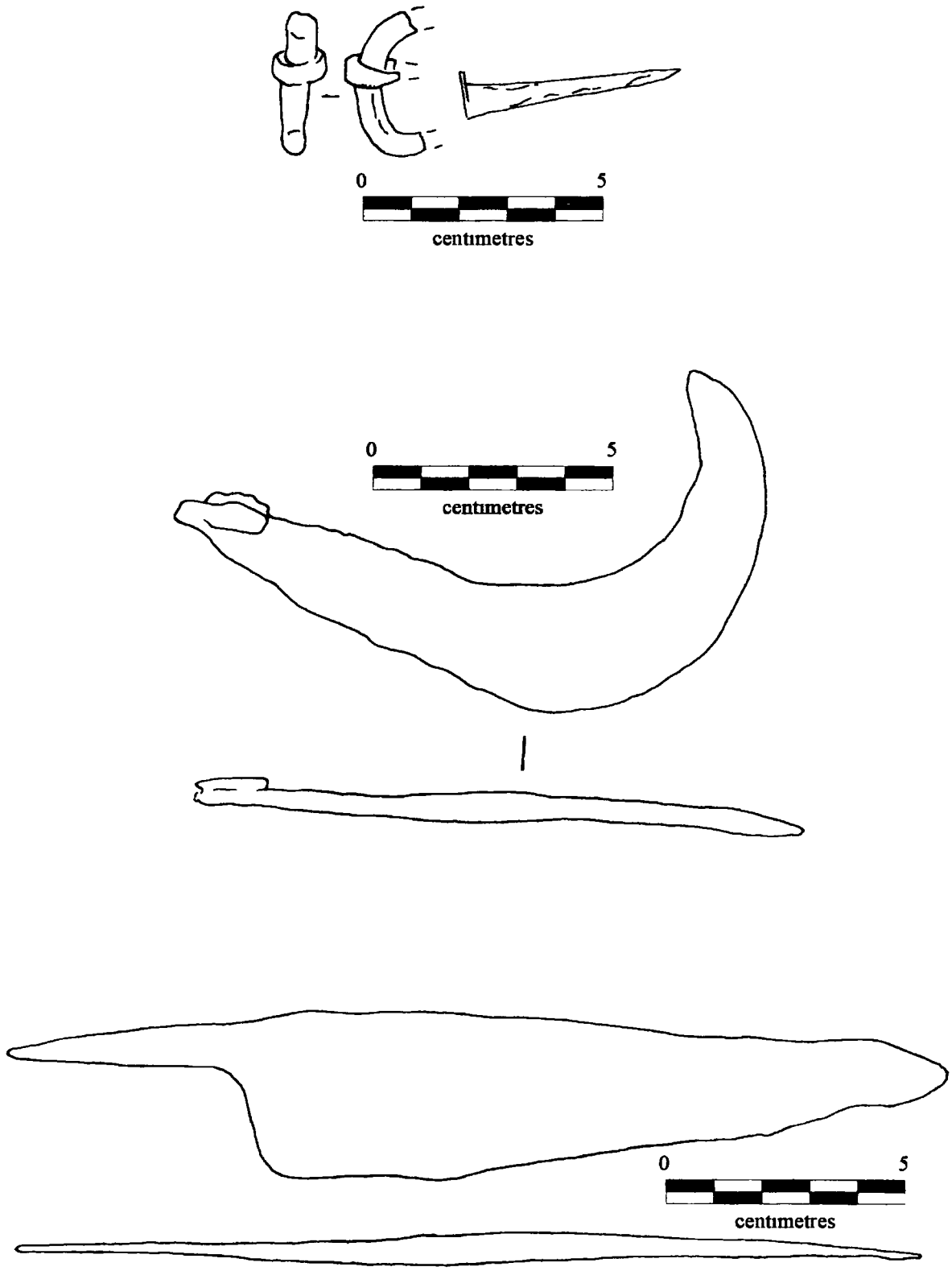


Figure 14 9 3 SF 5 (top) SF 17 (centre), and SF 18 (bottom) Drawn from x-rays

15.0 Appendix 6 ~ Plates and A3 Figures

Plate 1. Trench 1. Post excavation. Scales of 1.00m and 2.00m. *1/010299/0907 #22.*

Plate 2. Trench 2. Ditch [2026], progress shot. *1/160299/1400 # 5.*

Plate 3. Trench 2. Furrow [2004] and cobble spread [2023]. Scale of 1.00m. *1/160299/1400 # 21.*

Plate 4. Trench 3. Overview of cobble spread [3017]. Scale of 1.00m *1/150299/1250 # 20.*

Plate 5. Trench 3. Ditch [3010]. Scale 1.00m. *1/090299/0800 # 33.*

Plate 6. Trench 3. Furrow [3015]. Scale 2.00m. *1/090299/0800 # 34.*

Plate 7. Trench 3. Ditch [3008]. Scale 1.00m. *1/090299/0800 # 19.*

Plate 8. Trench 4. Dave Tyler at work. *1/090299/0800 # 17.*

Plate 9. Trench 4. Stone Structure [4014]. Scale 1.00m. *1/090299/0800 # 29.*

Plate 10. Trench 4. Ditch [4013]. Scale 1.00m. *1/090299/0800 # 24.*

Plate 11. Trench 4. Wall [4024], with surface [4027] behind. Scale 1.00m. *1/150299/1250 # 18.*

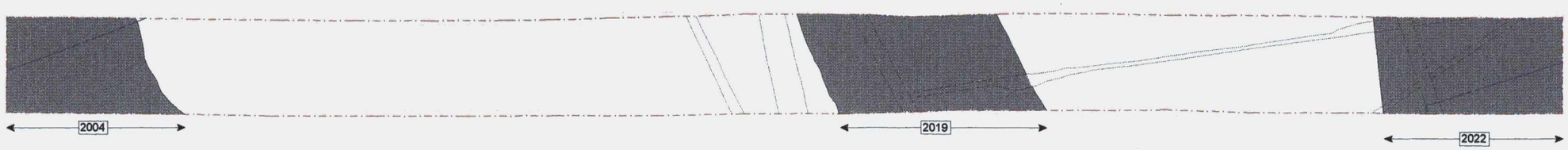
Plate 12. Trench 4. Wall [4024], detail. Scale 1.00m. *1/150299/1250 # 02.*

Plate 13. Trench 5. Ditch [5008]. Scale 1.00m. *1/010299/0907 # 29*

Plate 14. Trench 5. Ditch [5028]. Scale 1.00m. *1/090299/0800 # 10.*

Trench 2. BPTSEP 169

Red: Excavation Limits
Blue: Section Lines
Dotted: Land Drains



Trench 3. BPTSEP 169

Red: Excavation Limits
Blue: Section Lines
Dotted: Land Drains

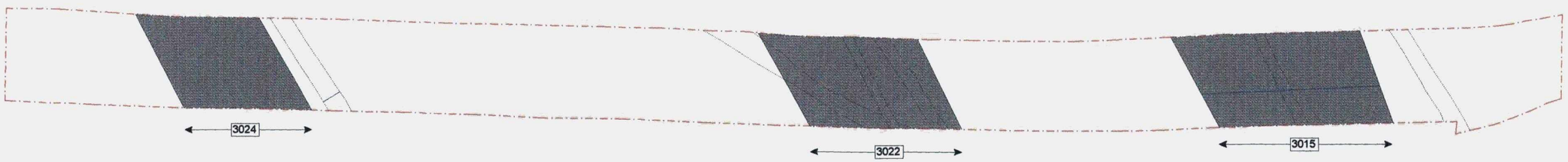
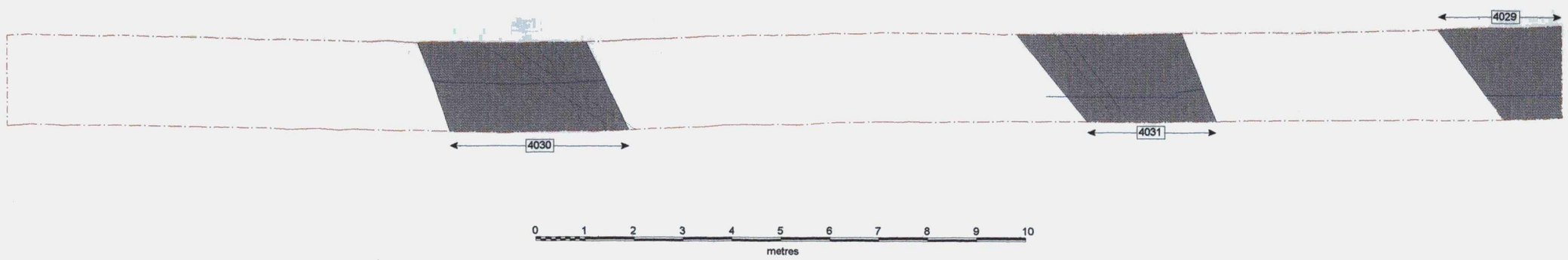


Figure 8. Trenches 2 & 3. Medieval features. Scale 1:100

Trench 4. BPTSEP 169

Red: Excavation Limits
Blue: Section Lines
Dotted: Land Drains



Trench 5. BPTSEP 169

Red: Excavation Limits
Blue: Section Lines
Dotted: Land Drains

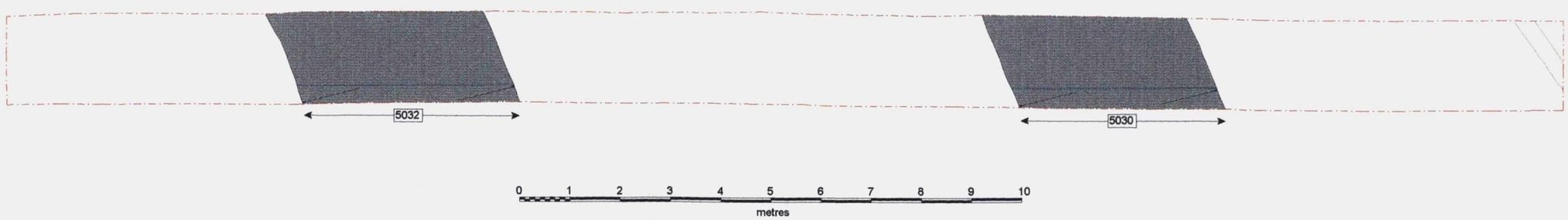
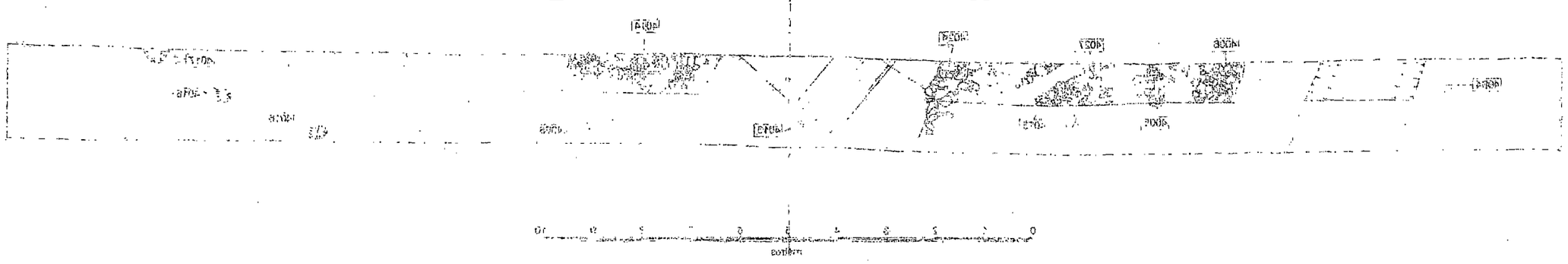
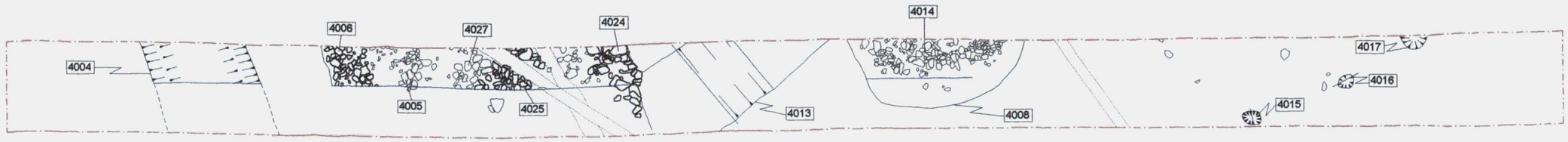


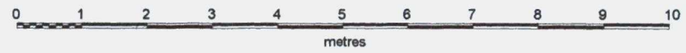
Figure 7. Trenches 4 & 5. Pre Medieval features. Scale 1:100



Trench 4. BPTSEP 169

Red: Excavation Limits
Blue: Section Lines
Dotted: Land Drains





Trench 5. BPTSEP 169

Red: Excavation Limits
Blue: Section Lines
Dotted: Land Drains

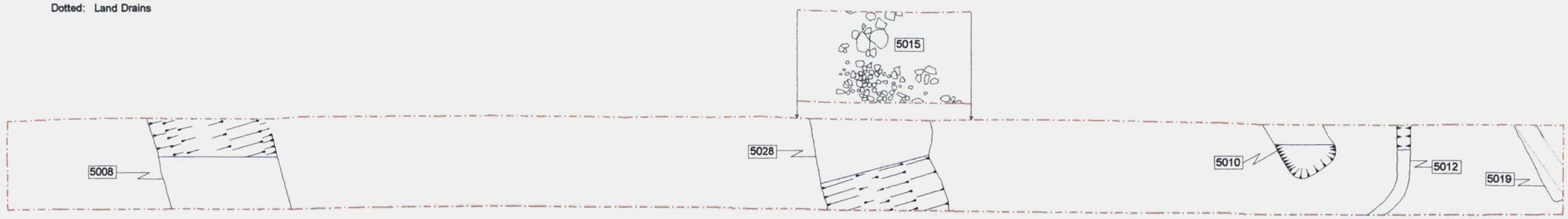
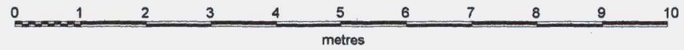


Figure 7. Trenches 4 & 5. Pre Medieval features. Scale 1:100

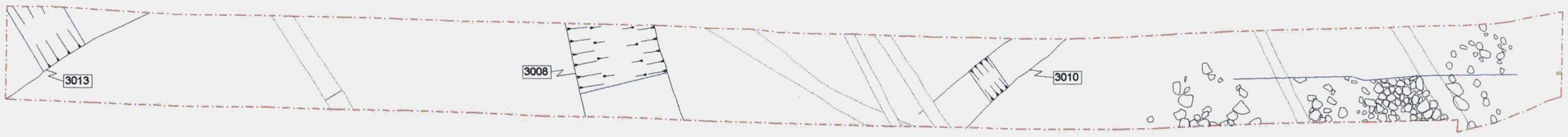
Trench 2. BPTSEP 169

Red: Excavation Limits
Blue: Section Lines
Dotted: Land Drains



Trench 3. BPTSEP 169

Red: Excavation Limits
Blue: Section Lines
Dotted: Land Drains



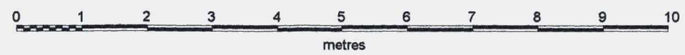


Figure 6. Trenches 2 & 3. Pre Medieval features. Scale 1:100

Figure 10. Trenches 2, 3, 4 & 5: pre-medieval features. Scale 1:500

Figure 10. Trenches 2, 3, 4 & 5. Pre Medieval features. Scale 1:500

Figure 11. All trenches, medieval features. Scale 1:600

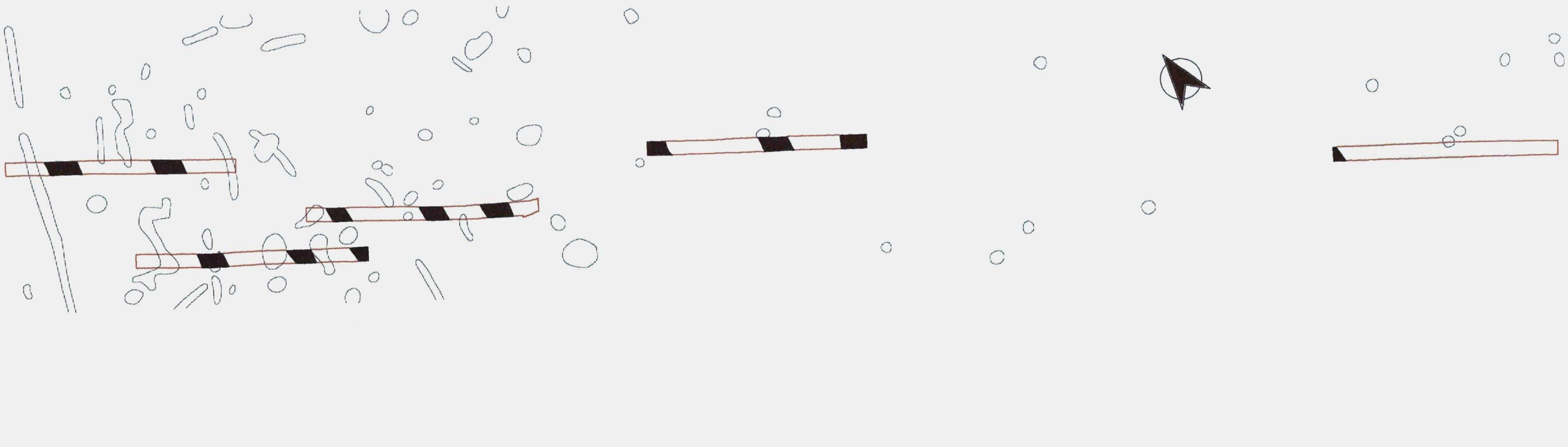


Figure 11. Trenches 1, 2, 3, 4 & 5. Medieval features. Scale 1:600

Figure 12a. Ditch [3008]

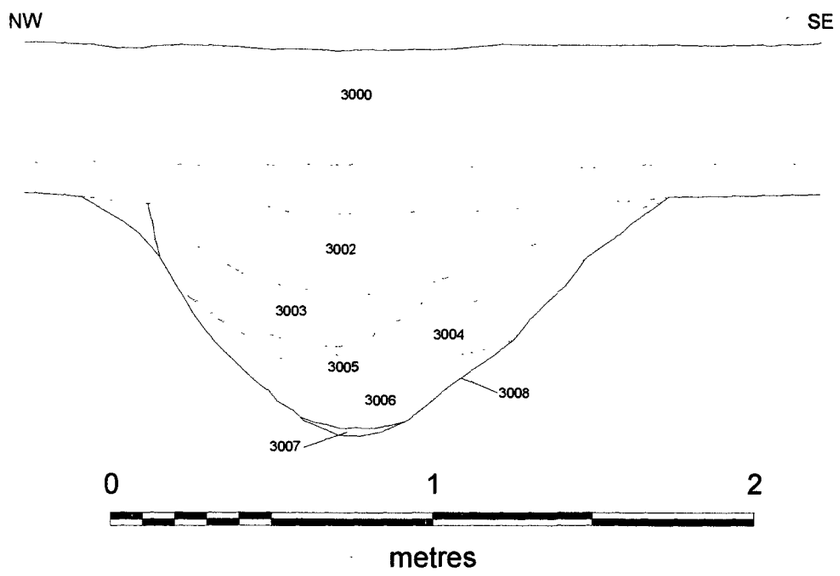


Figure 12b. Ditch [4013]

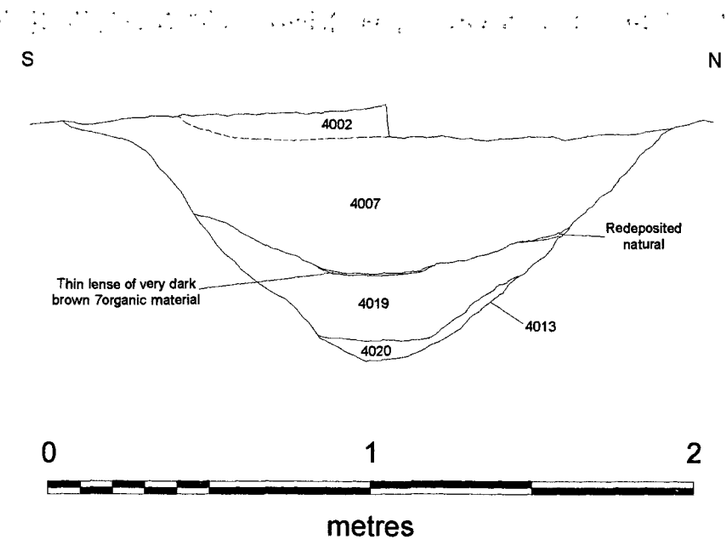


Figure 12c. Ditch [5008]

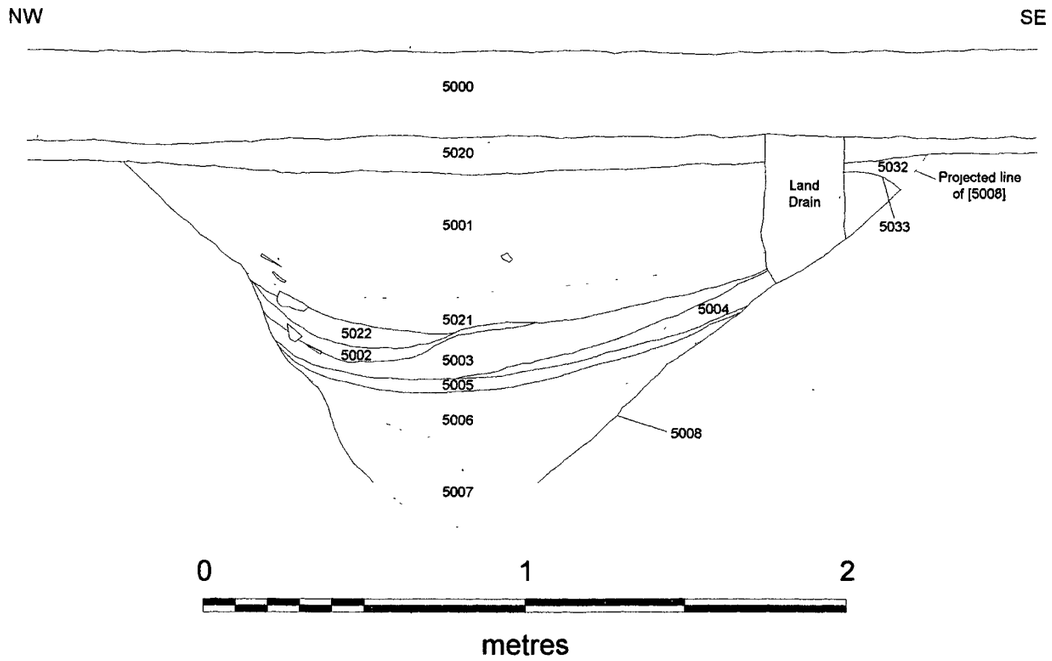


Figure 12d. Ditch [5028]

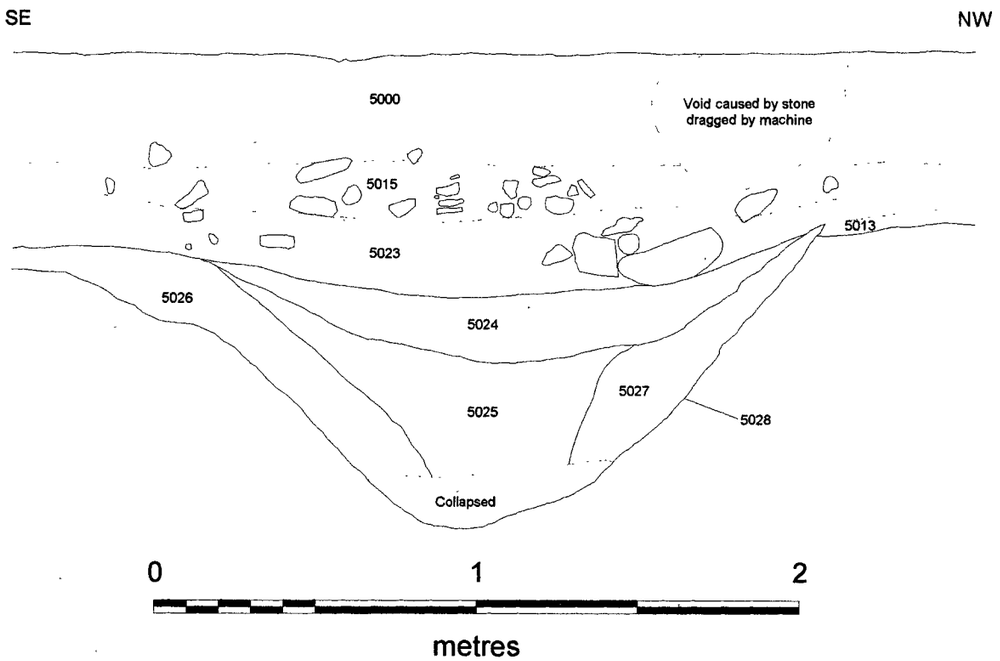


Figure 12. Sections through ditches [3008], [4013], [5008] and [5028]. Scale 1:20.

Figure 13. Section, Trench 2. Scale 1:30.

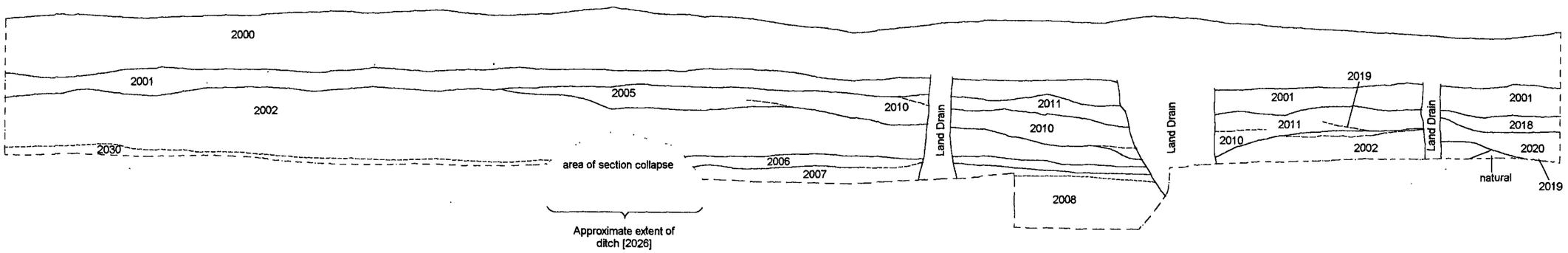


Figure 13. Southwest facing section, Trench 2. Scale 1:30

Figure 14. Matrix, all trenches.

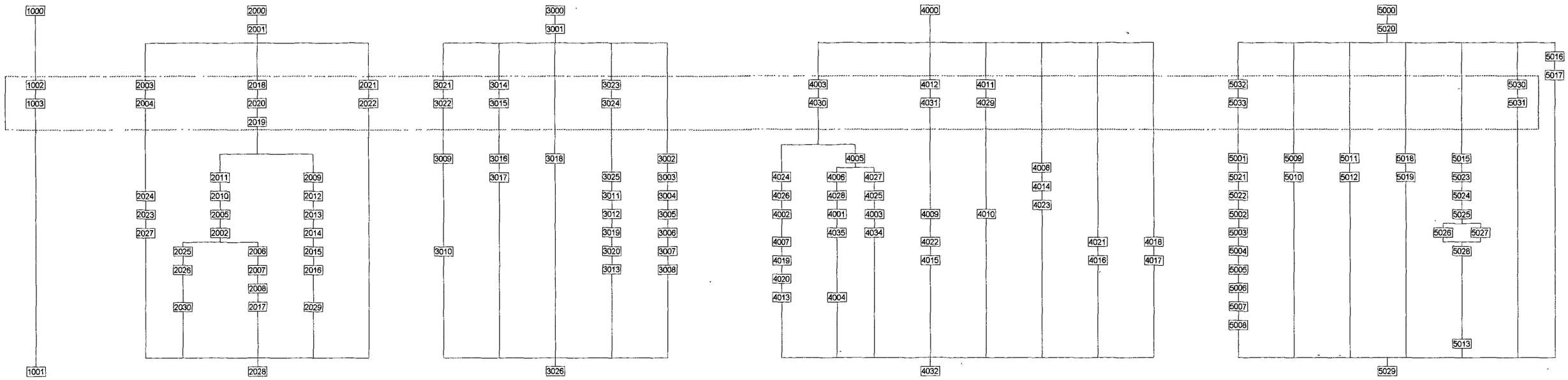


Figure 14. Matrix, all trenches

16 0 Appendix 7 ~ Method Statement

16 1 Site Description

The site lies close to the village of West Lilling in the County of North Yorkshire It is located to the north of Lilling Low Lane at National Grid Reference SE 640 644 The area is currently arable land The site is located on river alluvium

16 2 Archaeological Background

The site lies in an area of known archaeological significance An RCHME sketch plot of the area indicates the presence of a rectilinear enclosure spanning the junction of Lilling Low Lane and the minor road between Sheriff Hutton and Strensall (NGR SE 6345 6480) The same plot also records a Roman road running north – south to the south of the current investigation (approx NGR SE 6375 6415) Further to the south is Lilling Green Romano-British farmstead with associated fields and trackways (Swan Jones & Grady 1993)

Aerial photographs of the area studied as part of the BP pipeline project have also revealed a number of cropmarks in the immediate vicinity

A fluxgate gradiometer survey has been undertaken of the current investigation area as part of the BP pipeline works This revealed a number of anomalies mainly concentrated at the western end of the survey area These included ditch and pit type anomalies (see Figure 1) These resuhs bear no obvious correlation with cropmarks on the site they are in a similar location and may therefore be associated

16 3 The Evaluation Programme

It is proposed that approximately 2% of the fluxgate gradiometer survey area shall be examined by machine stripped trial trenches Initially five trenches each measuring 30 metres by 1 80 metres will be excavated These shall be positioned to investigate a number of the anomalies and also over two areas in which the geophysical survey produced no evidence other than occasional ferrous interference Provision shall be made for the extension of the trenches or the excavation of further trenches if required by the County Archaeologist subject to discussion between A C Archaeology and the County Archaeologist or their representative

All work shall be undertaken in accordance with the IFA standards and guidance for archaeological field evaluations

16 3 1 Excavation

The entire site will be visually inspected before the commencement of any machine excavation This will include the examination of any available exposures (e g recently cut ditches and geotechnical test pits)

Trench positions will be accurately surveyed prior to excavation and related to the National Grid It may be necessary to survey the positions after excavation in some instances

All machimng will be earried out using a JCB 3CX or similar fitted with a 1 80m wide toothless bucket

All machimng will be carried out under direct control of an experienced archaeologist

Undifferentiated topsoil or overburden of recent origin will be removed in successive level spits down to the first significant archaeological horizon

Machine excavated material will be examined in order to retrieve artefacts to assist m the analysis of the spatial distribution of artefacts

Prior to machine excavation the topsoil within the trench confines shall be subject to a metal detecting sweep All metal detected finds shall be recovered according to the Code of Practice laid down by the 1996 Treasure Act

All faces of the trench that require examination or recording will be cleaned using appropriate hand tools

All investigation of archaeological horizons will be by hand with cleamng inspection and recording both in plan and section as appropriate

A minimum number of features within each significant archaeological horizon required to meet the aims will be sampled by half-sectiomng although some features may require complete excavation Linear features will be sectioned as appropriate Features not suited to excavation within the confines of narrow trenches will not be sampled No deposits will be entirely removed unless this is unavoidable As the objective is to define remains it will not necessarily be the intention that all trenches will be fully excavated to natural stratigraphy However the full depth of archaeological deposits across the entire site will be assessed Even in the case where no remains have been located the stratigraphy of all evaluation trenches will be recorded

Any excavation whether by machine or by hand will be undertaken with a view to avoiding damage to any archaeological features or deposits which appear to be demonstrably worthy of preservation *in situ*

For palaeo environmental research different sampling strategies will be employed according to established research targets and the perceived importance of the strata under investigation For carbomsed remains bulk samples of a mimmum of 10 litres (but up to 30 litres for early prehistoric features) will be collected Bulk samples of 10 30 litres will be taken from waterlogged deposits for analysis of macroscopic plant remains Columns for pollen analysis will be taken where appropriate Mollusc samples will be gathered when required Other bulk samples for small animal bones and other small artefacts may be taken from appropriate deposits depending on the aims of the project

Any finds of human remains will be cleaned and recorded but left *in situ* covered and protected Human remains will only be removed if this is absolutely necessary and then under conditions approved by issue of a Home Office Licence

All finds of gold and silver will be moved to a safe place and reported to the coroner s office according to the procedures relating to the Treasure Act 1996 Where removal cannot be effected on the same working day as the discovery suitable security measures will be taken to protect the artefacts from theft or damage

After recording the trenches will be backfilled with excavated material

16 3 2 Recording

For each trench a block of numbers in a continuous sequence will be allocated

Written descriptions comprising both factual data and interpretative elements will be recorded on standardised sheets

Where stratified deposits are encountered a Harris -type matrix will be compiled during the course of the excavation

The site grid will be accurately tied into the National Grid and located on the 1 2500 or 1 1250 map of the area

Plans will normally be drawn at a scale of 1 20 or 1 50 as appropriate Burials will be drawn at 1 10 Other detailed plans will be drawn at an appropriate scale

Long sections of trenches showing layers and any cut features will be drawn at 1 20 or 1 50 Sections of features or short lengths of trenches will be drawn at 1 10 or 1 20

Generally all sections will be accurately related to Ordnance Datum There may on occasions be instances where this is unnecessary when it will be agreed with the local authority s archaeological representative in advance

Registers of sections and plans will be kept

A full colour (35mm transparency) photographic record will be maintained This will illustrate the principal features and finds both in detail and in a general context The photographic record will also include working shots to represent more generally the nature of the fieldwork

A register of all photographs taken will be kept on standardised forms

All recording will be in accordance with the standards and requirements of the *Archaeological Field Manual* (Museum of London Archaeology Service 3rd edition 1994)

16 3 3 Finds

All identified finds and artefacts will be collected and retained Certain classes of material i e post medieval pottery and building material may on occasion be discarded after recording if a representative sample is kept No finds will be discarded without the prior approval of the archaeological representative of the local authority and the receiving museum

Finds will be examined to assess the date range of the assemblage with particular reference to pottery In addition the artefacts will be used to characterise the site and to establish the potential for all categories of finds should further archaeological work be necessary

All finds and samples will be treated in a proper manner and to standards agreed in advance with the recipient museum Finds will be exposed lifted cleaned conserved marked bagged and boxed in accordance with the guidelines set out in United Kingdom Institute for Conservation s *Conservation Guidelines No 2*

Ownership of artefacts and deposition of the archive are to be determined by A C Archaeology the appointed consultant for the pipeline project

16 3 4 Reporting

An Interim report will be available one week after the completion of fieldwork This shall be prepared in accordance with the guidelines laid down m MAP 2

The style and format of the evaluation report will be determined by *On-Site Archaeology* The report will include as a minimum the following

A location plan of the site

A location plan of the trenches and/or other type of fieldwork strategy employed

Plans and sections of features and/or extent of archaeology located These will be at an appropriate scale

A summary statement of the results

A table summarising per trench the deposits features classes and numbers of artefacts encountered and spot dating of significant finds

Consideration to the methodology will be given along with a confidence rating for the resuhs

16 4 *Personnel*

All work will be under the overall supervision of Mr N Pearson MIFA (Member of the Institute of Field Archaeologists) Other project staff include

Project Officer	Guy Hopkinson
Palaeo-environmental advisor	Environmental Archaeology Unit York University
Finds Analysis	Dr Alan Vince
	Barbara Precious
	Jane Cowgill
	Sandra Garside-Neville
Conservation	Soma O Connor Bradford University

16 5 *Health and Safety*

Introduction

The Health and Safety at Work Act (1974) is designed to promote stimulate and encourage high standards of health and safety at work It does this by ensuring safety awareness and an effective safety organisation within all areas of employment according to the particular dangers risks and needs associated with that employment

Summary of Policy

It is the policy of *On-Site Archaeology* to comply with the requirements of the Health and Safety at Work Act 1974 the Management of Heahh and Safety at Work Regulations 1992 the Factories Act 1961 the Offices Shops and Railway Premises Act 1963 and all Regulations and Codes of Practice made under the Acts which affect *On-Site Archaeology* operations

On-Site Archaeology undertakes to safeguard as far as is reasonably practicable the health safety and welfare of its staff and of others who may be affected by its work This applies in particular to providing and maintaimng suitable premises ensuring the safety of all equipment supplied by the Company providing all reasonable safeguards and precautions against accidents and promoting and ensuring safe practices on fieldwork sites

The policy will be reviewed from time to time as our activities develop Review of the safety performance of *On-Site Archaeology* and the functiomng of the Policy is the task of the Director and *On-Site Archaeology* Health and Safety Committee At yearly intervals or sooner where circumstances require they will review the contents of this document and indicate how performance can be improved

The attention of all *On-Site Archaeology* staff and any others who may be engaged on *On-Site Archaeology* projects is directed to this Health and Safety Policy Statement

16 6 Project Timing

Anticipated 1st February – 5th February

16 7 Bibliography

Cox P W & Cottrell T L 1998 BP Chemicals Limited – Teeside to Saltend Ethylene Pipeline preliminary Archaeological Assessment of Archaeology and Cuhure Heritage A C Archaeology Report No 5297/1/0

Harvey L 1998 Teeside to Saltend Ethylene Pipeline BP Site 181 GSB Prospection Report No 98/79

Institute of Field Archaeologists 1994 Standards and Guidance for Archaeological Field Evaluations

MAP 11 1991 Management of Archaeological Projects English Heritage