ARCHAEOLOGICAL STRIP, MAP AND SAMPLE EXCAVATION AT BRANNEL SCHOOL, ST STEPHEN IN BRANNEL, CORNWALL

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Summary

A strip, map and sample excavation was carried out between January and March 2010 at Brannel School, St Stephen in Brannel, Cornwall. A number of ditches were exposed, representing boundaries of successive field systems dating from at least the early Iron Age if not earlier. Pottery evidence was consistent with some activity in the Late Bronze Age and the Early Iron Age, with most of the field system ditches belonging to the Middle Iron Age. No conclusive settlement evidence in the form, for example, of roundhouses was observed although settlement associated with the field systems must presumably have lain in reasonably close proximity.

90 sherds of Beaker pottery representing three vessels (at least two of which had cordoned rims) were recovered from a pit. This material forms one of the earliest assemblages yet known from Cornwall. The later prehistoric pottery is predominantly of Middle Iron Age date.

1. INTRODUCTION

This report has been prepared for Kier Western and presents the results of archaeological excavation and recording ('strip, map and sample') undertaken by Exeter Archaeology (EA) between January and March 2010 on land at Brannel School, St Stephen in Brannel, Cornwall. The work was required by Cornwall Council under a condition attached to the grant of planning permission for the construction of new school buildings (planning ref. 09/01080, condition 11).

1.1 **The site** (NGR SW 9429 5280, Fig.1)

The site comprised former school playing fields lying to the south of the school buildings. The fields sloped gently from NE-SW and covered an area of approximately 2 hectares. The underlying geology of the site consists of well drained fine loamy or silty soils over Palaeozoic slates, mudstone and siltstone (SSEW 1983).

2. PROJECT BRIEF

A brief for the recording project was supplied by the Cornwall Council Historic Environment Service (CCHES) (Ratcliffe, 2009). A Written Scheme of Investigation was subsequently prepared by EA in response to the requirements of the brief.

3. AIMS

The principal aim of the project was to ensure the adequate identification, investigation and recording of any surviving archaeological deposits within the development site. This was to be achieved via a 'strip, map and sample' exercise in advance of groundworks.

4. ARCHAEOLOGICAL BACKGROUND

An archaeological assessment of the site in its wider local context was undertaken by the Historic Environment Service (HES) for the then Cornwall County Council (Lawson-Jones, 2008). This assessment drew attention to the survival of remnant historic boundaries and the presence in the area of medieval settlement and sites of prehistoric date. In addition, the assessment area lies with an area classified as Anciently Enclosed Land (AEL) within a county historic landscape assessment carried out by the Cornwall Archaeological Unit (Countryside Commission, 1996). Anciently Enclosed Land is land which has been settled since at least the medieval period and often contains archaeological remains dating to prehistoric and medieval times. Recent excavations at Scarcewater some 2.5km to the northwest have revealed a range of prehistoric activity spanning the Middle Bronze Age through to the Romano-British period (Taylor, 2005).

In 2008 an archaeological watching brief was carried out within the development footprint during geotechnical investigations. Nine pits and four trenches were mechanically excavated but no significant archaeological remains were uncovered although mine waste deposits,

probably of 19th century date, were revealed in the western part of the site (Lawson-Jones, 2009, 7).

A geophysical survey of the site, including an area of approximately 2.4ha to its northeast, was undertaken by GSB Prospection Ltd in 2008 (Adcock, 2008). This survey identified numerous linear and curvilinear anomalies indicative of former boundary ditches relating to field systems. A number of pits and other features of probable archaeological interest were also recorded. In particular, the results indicated probable prehistoric field systems which appear to predate likely medieval boundaries shown on historic mapping. Also indentified was and a small square enclosure suggestive of a possible Romano-British date.

5. METHOD

All investigative work was undertaken according to the Written Scheme of Investigation (WSI) prepared by EA in response to the project brief and subsequently approved by CCHES (Stead, 2009).

The entire study area was stripped of topsoil using a tracked machine fitted with a toothless grading bucket, under the direct control of the site archaeologist. Where archaeological deposits were exposed the area were cleaned by hand and archaeological features indentified, and recorded onto an overall site plan. A site meeting was then held with the client and the CCHES Archaeology Officer to review the results and agree the scope of subsequent investigation and recording.

The standard EA recording system was employed; stratigraphic information was recorded on pro forma context record sheets and individual context recording forms, a drawn record was compiled in plan and section at a scale of 1:10, 1:20 or 1:50 as appropriate and a detailed black and white print and colour (digital) photographic record was made. Registers were maintained for photographs, drawings and context sheets on pro forma sheets. Finds and samples were labelled and bagged on site and taken to EA's offices for processing and cataloguing.

6. RESULTS

Quality of survival and general comment

Across the site, the general level of preservation was variable, with a large number ditches or boundary features visible only at their base where the lowermost levels cut into natural subsoil; this was due to truncation and disturbance resulting from post-medieval and modern agricultural activity. Overall, this contributed to difficulties in establishing the stratigraphic relationship between some intercutting features where the surviving deposits were shallow.

For the purposes of description and discussion the site has been divided into three areas (Areas 1-3, Fig. 1). Archaeological features within Areas 2 and 3 were then further classified into a number of groups based on stratigraphic relationships, where present, and spatial association. Due to the staggered sequence of topsoil stripping separate context numbers were allotted to the same cut feature in some cases. Where this occurs the separate context

numbers have been brought together under a generic number for the purposes of discussion. Only a very small percentage of the features contained dateable finds. Where no finds were present stratigraphic relationships could allow only for relative dating of the ditch sequences. The deposit sequence was very simple with the features and deposits within all three areas sealed by a topsoil of mid-brown clayey sand (500). The depth of topsoil varied between 300-400mm. Unstratified material recovered from the topsoil during stripping and cleaning included a number of Middle Iron Age (La Tène decorated) pottery sherds, some undecorated prehistoric sherds and medieval pottery dating to the 13th or 14th century.

6.1 Area 1 (Fig. 2, plate 1)

Area 1 was on the site of a new access road in the southeast corner of the development footprint and was significantly smaller than Areas 2 and 3, measuring approximately 45m E-W by 8m N-S. The area had been disturbed by modern drainage and landscaping and this high level of disturbance was recognised in the geophysical survey (Adcock, 2008, 3). Few features of confirmed archaeological interest were recorded.

6.1.1 Ditches 506 and 508

Two linear ditches were exposed, broadly on the same NW-SE alignment as ditches subsequently seen in Area 2. One of these, ditch 506, was recorded over a length of 7m with a terminus to the southeast. The ditch measured 370mm wide and 230mm deep with a shallow bowl-shaped profile. A later ditch (508) on the same alignment may have superseded 506 although it continued to the southeast beyond the terminal of 506 and beyond the limits of excavation. The second ditch (508) measured 9.5m in length, was 680mm deep, 670mm wide and had a U-shaped profile. No pottery or dating evidence was recovered from area 1

6.2 Area 2 (Fig. 3, plate 2)

This area lies immediately to the south of the school and had maximum dimensions of 92m E-W by 82m N-S. Archaeological features were concentrated in the northeast and to a lesser extent within the east and south of Area 2. Of these, the predominant group of features (Group A) was a sequence of closely spaced parallel boundary ditches probably representing part of a more extensive field system. A later sequence of boundary ditches (Group C) cut through Group A at right angles to it. Evidence for a rectangular enclosure was also recorded (Group E). Many of the ditches comprising Groups A, C, D and E had been recognised as anomalies in the geophysical survey conducted prior to excavation (Adcock, 2008).

6.2.1 Group A - linear and curvilinear ditches: 978 - 983, 987

A number of parallel ditches (978-983, 987), some recut, were recorded in the northern section of the area. The ditches were commonly aligned NW-SE and extended across the site beyond the limits of the excavation. Their comparable nature and commonality of alignment suggest that they represent a recognised boundary probably defining a field system associated with agricultural or pastoral activity.

The northernmost ditch (978) was visible over a length of c.39m and had varying dimensions of 400-650mm wide and 450-550mm deep with a steep-sided U-shaped profile and rounded base. The ditch appears to have been replaced in part by a parallel ditch (979) dug immediately to its south (Fig. 7, section 92). Ditch 979 extended for a distance of about 23m. It

measured up to 1m wide and 550-780mm deep; the ditch profile was predominantly V-shaped (Fig. 7, section 112). At its southeast terminus ditch 979 was observed to have re-cut the terminal end of ditch 978 thus providing a clear relationship between the two. Towards the northwest, ditch 979 had been severely truncated by a modern soakaway pit, but it is possible that it continued for a further 8m towards the northwest as represented by ditch 987 which also had a V-shaped profile (Fig. 8, section 88). This ditch was in turn truncated by a shallow linear feature (605) at the boundary of the excavation (Fig. 8, section 80) and any further continuation could not be established although it seems likely that both the earlier ditch 978 and its replacement 979/987 had continued to the northwest.

Cutting the southeast terminus of ditch 979 was ditch 980. This ditch carried the same general NW-SE alignment as ditches 978 and 979. Ditch 980 measured 600-700mm wide and was 300-450mm deep with a U-shaped profile and flat base (Fig. 8, section 19a) although this was not so apparent elsewhere (Fig. 8, sections 83 and 129); it was visible for a length of 33m. Four sherds of prehistoric pottery were retrieved from its fill (694).

The relationship between ditch 980 and ditch 981 to its south could not be established where the two converged due to the similar colour and composition of fills (694 and 543 respectively). However, curvilinear ditch 981 appears to be part of the same sequence of boundary ditches. It shares the common alignment of this group i.e. NW-SE and was recorded parallel to and at a maximum distance of around 1.7m to the south of ditch 980. The observed length of this ditch was 36m with a pronounced curve (inturn) at its northwest terminus. The ditch had been cut with a deep bowl-shaped profile (Fig. 7, section 19b) although this could vary (see Fig. 7, section 93, plate 4). The ditch had a maximum depth of 750mm and width of up to 1.3m containing three fills in places. As the ditch extended towards the south-east its depth decreased to 500mm. The northern part of the ditch appears to have been partially recut once it had been infilled (Fig. 7, section 93), the recut (597) measuring 1.1m to 1.6m wide and 380-450mm deep. The profile towards the east end was wide and flat becoming deeper and U-shaped with a rounded base further to the west. The recut extended beyond the terminus of the primary cut of 981 (599). Beyond this, the alignment of the ditch continues across the area towards the northwest as represented by linear ditches 1011; these ditches were originally shallow or have been affected by truncation.

Visible for a length of nearly 39m on a NW-SE alignment was curvilinear ditch 983. This ditch was parallel with ditch 981 about 2m to its south. It had a shallow U-shaped profile and rounded base (Fig. 9 section 19c). The ditch measured 300-600mm wide and was 380mm deep; it contained up to three fills. To the northwest it was replaced or recut by curvilinear ditch 982 which was recorded over a length of 34m extending beyond the northern limit of the excavation area. It measured up to 1.1m in width and had a rounded profile 350-450m deep (Fig. 9 sections 21-22 & plate 3). The terminal, where it cut ditch 983 was rounded and very shallow. No dateable finds were retrieved from the fills.

6.2.2 Group B: post-holes: 650, 672, 674, 676, 678

The northern part of the area also contained a number of post-holes (650, 672, 674, 676 and 678). The postholes were aligned NW-SE over a distance of 13m. Whilst no direct stratigraphic relationship with other features was observed, they were located parallel and to the north of ditch 978 and on the basis of their common alignment they appear to be contemporary with the NW-SE boundary ditches of Group A. Only post-hole 650 produced evidence of a post-pipe (Fig. 9, section 97) the remaining post-holes being rather shallower (Fig. 9, sections 101-102 and 104). No finds were recovered from these post-holes.

6.2.3 Group C: ditches: 984, 985, 986

Ditch 984 extended in a N-S alignment across the area for about 49m and measured 900mm wide and 160mm deep; the profile of the ditch was a wide U-shape. Retrieved from the single fill (630) within the ditch was one sherd of prehistoric pottery. At its southern end the ditch curved to the east and terminated at the same location as the termination of parallel ditch 985; due to the shallow nature of both ditches no stratigraphic relationship between the two could be established at their joint termini. Ditch 985 was recorded running almost exactly parallel and about 1.5m to the east of ditch 984. From its southern end the ditch extended north for 36m; it had an average width of 750mm and a depth of 150mm with a wide U-shaped profile. The northern terminal was rounded and very shallow. Following a gap in this boundary of about 13m a ditch (595) on the same N-S alignment as 985 is recorded for a further 8m until it meets the edge of the excavated area. A post-hole (584) recorded at the southern termination of ditch 595 lends weight to the idea that there was a gap in the boundary ditch and this is reinforced by the observation of a similar if slightly smaller gap in the same position in a further parallel ditch (986) to the east.

Ditch 986, thought to be part of the same sequence, was recorded some 3.5m to the east of ditch 985. This ditch, which was on a N-S alignment, measured 43m in length, was up to 600mm wide and had an average depth of 100mm with a similar wide U-shaped profile to 984 and 985. Some prehistoric pottery shreds including a La Tène decorated Iron Age sherd were recovered from the fill (592) of its northern section. The southern terminal of 986 provided evidence of at least one recutting of the ditch (615/617). At the southern end of ditch 986 but to the north of its terminus were two ditches at right angles to the main alignment. One was a small spur ditch (613) which extended for a maximum length of c.2.5m to the east of 986. Just to the south of 613 was a further ditch (686) which extended again at right angles and to the east of 986 for a distance of 7m and then beyond the eastern extent of the excavation area. The stratigraphic relationship of these features with ditch 986 could not be distinguished due to their truncated nature but as they respect its boundary they are likely to be broadly contemporary.

6.2.4 Group D: ditches 988, 989, 990

Three E-W aligned linear ditches were located in the southern part of Area 2; the earliest stratigraphically appears to be 989; by commonality of alignment and dimensions ditch 988 continued the same boundary and was separated from 989 by only a small gap. Both ditches measured up to 700mm wide and up to 300mm deep with wide U-shaped profiles. Ditch 988 was 16.5m in length. The eastern terminal of this ditch was very shallow although some evidence of recutting was nevertheless suggested by the observation that 988 had cut an earlier ditch terminal at this location. The western end of ditch 988 was represented as a very shallow (70mm) rounded terminal. Ditch 989 was recorded over a length of 38m although it final length could not be established due to disturbance in the western part of the excavation area. Cutting into ditch 989 was ditch 990 which had similar dimensions as ditch 989 together with a U-shaped profile. This ditch was recorded for a distance of about 9m. No finds were recovered from the single fills contained within all three ditches.

6.2.5 Group E: ?enclosure ditches 999

Two ditches (729 and 713) perhaps representing two sides of a rectangular enclosure (999) were recorded (plate 6). Both ditches had very shallow U-shaped profiles up to 600mm wide

with a maximum depth of 80mm. A flint flake was recovered from the single fill (714) within ditch 713. A possible entrance gap to the enclosure was noted in the northeast corner. No opposing west or southern ditch forming a complete enclosure was however observed. No features or structures were recognised within the enclosure.

6.2.6 Group F: post-hole group 996

Located immediately to the southeast of ditch 982 (group A) were a series of five post-holes. Diameters varied between 350mm-600mm with depths of between 20mm-60mm. In general the profiles were U-shaped. All contained a single fill. No finds were recovered. No coherent structural form could be discerned from a study of the plan.

6.2.6 Miscellaneous features

An isolated feature (688) was revealed in the southeast of Area 2. It was irregular in plan and measured 1m long and 140-300mm wide and consisted of a burnt clay spread which presented as two merged sub-circular spreads. No coherent profile could be discerned due to the very shallow nature of the feature. The spread (689) contained frequent amounts of burnt daub and a prehistoric pottery sherd.

6.3 Area 3 (Fig. 4, plate 9)

This area lies to the west of Area 2 and has dimensions of approximately 110m E-W by 120m N-S (1.2ha). The eastern edge of Area 3 was largely defined by two parallel N-S ditches (1009 and 1010) associated with a former post-medieval hedgebank although, for ease of defining Area 3 for discussion purposes, it includes also an area to the northeast inclusive of the large straight-sided rectangular enclosure(s) which was one of the predominant archaeological features identified in the geophysical study (Adcock, 2008, Fig.A7). In the north of the area was a sequence of curvilinear ditches similar in appearance to those seen in Area 2.

6.3.1 Group G: pit 865 containing Beaker pottery

An isolated pit (865) was excavated approximately in the centre of Area 3. The pit was ovoid in plan measuring 1.3m by 800mm and was160mm deep. It had a wide U-shaped profile with a rounded base (fig. 10, section 226). The pit contained two similar coarse sandy-clay fills (866 and 879). The primary fill (866) produced a number of Early Bronze Age Beaker vessel sherds from at least two separate vessels. The recorded maximum depth of the pit suggests that it may originally have been cut from a higher level but later truncated by agricultural activity.

6.3.2 Group H: ditches 1004, 1005

Two N-S aligned ditches (1004 and 1005) were recorded in the north of Area 3. They are the earliest stratigraphically of the palimpsest of ditches forming the complex found in the north of Area 3. The ditches were parallel and about 8m apart. The westernmost ditch (1004) was 16.8m in length, 500mm wide and 200mm deep with a gentle U-shaped profile and flat base. The ditch predates both of the curvilinear boundary ditches 998 and 1000 (Group J). Ditch 1005 was shorter in length than 1004 being 13m in length, 500mm wide and 80mm deep with a profile similar to 1004. These ditches may be associated with intense activity in this particular location perhaps as part of a successive entrance or stock-control arrangement. A feature which presented the characteristics of a small pit (917) may be related to the southern terminus of ditch 1004 although this is uncertain. This sub-circular feature measured 800mm

by 580mm and was 220mm deep with concave sides and a flat base. The skull of a juvenile pig was recovered from its fill (916).

No dateable finds were recovered.

6.3.3 Group J: 998, 1000, 1001, 1003

A number of curvilinear enclosure or boundary ditches, all aligned broadly E-W and with the appearance of an entrance arrangement at their centre, were observed in the northern part of Area 3. The southernmost of these ditches was 998. A length of about 40m of this ditch was recorded on an E-W alignment before it curved to the north for a further 22m. The ditch extended beyond the limits of the excavation on both sides. Measuring up to 800mm wide and 80mm deep it had a flat U-shaped profile with a single fill of coarse sandy clay (926) (fig. 11, section 248). Recovered from within fill 926 was a single sherd of prehistoric pottery. The ditch cut N-S linear ditch 1004.

Immediately to the north and parallel to ditch 998 was ditch 1001. This appeared to be composed of four separate segmented ditches with the longest length extending E-W for a distance of at least 29.6m. The three remaining component ditches curved to the north to mirror the arrangement of ditch 998. The profile of the ditches were uniformly a flat U-shape measuring 850-900m wide with a maximum depth of 50mm (fig. 11, sections 246, 284, 303). No finds were retrieved.

An E-W aligned linear ditch (1003, plate 7) may be related to the function of ditch 998 and/or 1001. The ditch measured 39m in length and was up 1m wide with a maximum depth of 100mm. The profile consisted of a wide flat U-shape with gently sloping sides and a flat base (fig. 11, sections 14, 15). The ditch appears to carry eastwards the same E-W alignment seen in 998/1001 and it is parallel to the ditch to the north (1000). No finds were recovered.

Ditch 1000 was the northernmost of the E-W sequence of parallel enclosure or boundary ditches recorded in the north of Area 3. Once again, a general E-W alignment was observed with an inturn to the north parallel with the same alignment of ditch 998 corresponding to an area of greater activity centred around the middle of the complex. A further isolated gap of about 2m was found in the eastern arm of the ditch; this arm turned to the northeast and continued beyond the area of investigation. The ditch measured 400mm-1.05m wide with a maximum depth of 120mm and with a flat U-shaped profile (fig. 11, sections 169, 174, 296). The western end of the ditch was very shallow and it was unclear whether it had been dug as a terminal end or severely truncated. The ditch cut linear ditch 1004 and was itself cut by the later rectilinear system (993 of Group N).

6.3.4 Group K: ditch 1002

Ditch 1002 comprised a NE-SW linear ditch measuring 10m in total length with a terminal dog-leg to the east. It appeared to cut ditches 998 and 1000 and is therefore considered to be late in the relative sequence. The ditch was 740mm wide and only 90mm deep with a shallow V-shaped profile; the eastern terminal end was shallow (fig. 12, sections 228, 230). No finds were retrieved.

6.3.5 Group L: post-hole group 997

Immediately to the south of the complex of curvilinear and linear ditches within the northern part of the area was a group twelve post-holes aligned E-W. These post-holes were located spread over a distance of 11m and they may have had a common purpose. Certainly, their

position in relation to the recognised area of greater activity in the curvilinear ditch system to the north would appear to be significant and they are probably contemporary with at least one phase of that complex. Dimensions varied between 50mm to 290mm in depth, and 260mm to 760mm in diameter. Three post-holes (837 and 839) were sited slightly to the north of those discussed above may be unrelated to the main group. No finds material was recovered from the post-holes.

6.3.6 Group M: ditch 991

Ditch 991 was a single and apparently isolated E-W aligned ditch. It extended for 62m across Area 3 providing a boundary line only to the east of the post-hole group 997. It had a more linear than curvilinear aspect and appeared unrelated to the series of curvilinear ditches to the north although its western terminus does appear to respect the already recognised 'entrance' activity noted above. The ditch was 1.22m wide and 420mm deep with a flat-bottomed wide U-shaped profile (fig. 12, section 155). A possible eastern terminus (605) to the ditch was seen in Area 2 where it was observed to cut boundary ditch 987 although the gap caused by the unexcavated area between the two observations does not allow a safe stratigraphic relationship between ditches 987 and 991 to be argued.

6.3.7 Group N: rectangular enclosure/field system 992, 993 994

One of the dominating features of the geophysical survey (Adcock, 2008, Figs. 3 and A7) was a series of anomalies defining what appeared to be a large rectangular field system, occupying the greater part of Area 3. Following clearance of topsoil the clear straight linear anomalies seen on the geophysical mapping were revealed as ditches. The ditch defining the main NE-SW axis (993, plate 8) was 104m in length; it was noted to continue to the northeast beyond the edge of the excavated area. The dimensions of this ditch measured up to 1.6m in width and up to 1.3m deep with a concave U-shaped profile and flat base (fig. 16, section 18). Two fills (532, 533) were recorded filling the ditch with the secondary fill 533 containing a single sherd of Gabbroic pottery (possibly Middle Iron Age) although this could be a residual sherd. The profile of the ditch was fairly consistent comprising a slight U- to V-shape. It was filled in places with up to four distinct coarse sandy to silty clay deposits. The ditch had been recut at least once on its southwest length and this recut is reflected in the two distinct termini at the southwest corner of the enclosure of which 807 is the earlier. The ditch terminus 807 was observed to have been cut by ditch 995 (see Group P).

A ditch (994, plate 8) forming the southwest boundary of the system extended NW-SE for a distance of about 69m from the southeast corner terminus before it was lost to the edge of excavation. The ditch had dimensions of up to 1.1m in width and 480mm in depth with a flat-bottomed U-shaped profile (Fig. 16, section 189). A parallel ditch (992) extended from the main axis for a distance of 87m to the northwest and continued beyond the edge of excavation. This ditch had dimensions of up to 730mm in width and 430mm in depth with a U-shaped profile (Fig. 16, section 149). These observations allowed the width of the southwest field of the system to be established as approximately 57m and the arrangement suggests at least one further field of comparable dimensions to the northeast.

6.3.8 Group P: ditch 995

Ditch 995 was aligned E-ESE and traced for a distance of 54m in the south of Area 3. It curved slightly to the southwest beyond the bounds of excavation. It was 950mm wide and up to 650mm deep with a flat-bottomed U-shaped profile, and contained two fills (787, 794). A single small sherd of medieval pottery was recovered from fill (825) and this may indicate that the ditch finally went out of use in the medieval period although it is possible that the

sherd arrived in the upper fill as a result of plough disturbance. The ditch pre-dated feature 1007 (see Group Q).

6.3.9 Group Q linear score marks 1006, 1007

A pair of N-S aligned parallel linear features (1006 and 1007) between 800mm and 1m apart extended through the southern half of Area 3. Each was no greater than 70mm deep and 300mm wide and both appeared to be more representative of a deep ploughscore rather than an intentionally cut ditch. Their date is uncertain although 1007 cut ditch 995; which confirms a medieval or later date.

6.3.10 Group R: post-medieval hedgebank 1009 and 1010

This former field boundary consisted of two N-S aligned parallel ditches set some 2m apart (plate 10). Both ditches were fairly uniform with wide shallow U-shape profiles and measured approximately 1.7m wide and 150mm deep (Fig. 16, section 16). A number of 18th century pottery sherds and clay pipe stems were recovered from the fills of both ditches.

A hedge would have occupied the gap between ditches. The hedgebank was still extant into the 20th century and is shown on the 1839 Tithe map and the 1880 and 1907 OS maps; the 1839 map shows it as a boundary between the fields of *Slips Close* and *Three Stiles* but it was largely removed either prior to or as part of the original school building complex.

7. THE FINDS, by Henrietta Quinnell

7.1 Prehistoric pottery

Abrasion

The following system, broadly based on that set out by Sorenson (1996) is used.

Very fresh 1; freshly broken, hardly ever applicable

Fresh 1/2; colour of core slightly patinated but unaltered surface with sharp

corners and edges

Moderate abrasion 2; core colour patinated, some definition in the sharpness of corners

lost

Abraded 2/3; core colour patinated, slight rounding of corners and very slight

erosion of surfaces

High abrasion 3; core colour patinated, rounding of corners and of sherd outline,

surfaces somewhat eroded

Beaker pottery from pit 865

About 90 sherds weighing c 615 grammes come from fill 866 of pit 865. These represent at least three vessels, all of apparently similar fabrics which may use a mixture of gabbroic and other clays. They are generally moderately abraded. There appears to be considerable potential for finding joins in this assemblage.

Vessel 1 is represented by c 80 sherds weighing 413 grammes; parts of the rim, with a thickened cordon beneath, and most of the base is present. The vessel has comb stamped decoration and is probably of an S-profile. Oxidised fabric.

Vessel 2 is represented by several body sherds which are decorated with paired finger nail decoration. It is unusually thin. Oxidised fabric.

Vessel 3 is represented by a rim sherd with a cordon beneath and by body sherds with paired finger nail decoration. Its sherds are thicker than those of the other vessels and are a little reduced. It appears to have had an S-shaped profile.

Cordoned rims appear to be present from the start of the Beaker tradition in Britain (Clarke 1970, 37) and are not generally present on later, long-necked forms. The S-shaped forms present belong with vessels which predate long-necked forms (Needham 2005) and are generally appropriate for the radiocarbon determination on *Corylus* charcoal from the pit SUERC-30740 3915+35BP calibrating to 2490-2290 BC (95.4% probability): at 68.2% probability this date calibrates to 2470-2370BC. The charcoal was identified by Dana Challinor and a sample selected for radiocarbon dating. Apart from *Coryllys Avellana*, Maloideae (hawthorn type) and *Quercus* (Oak) were also present.

The beaker pottery with its associated date forms one of the earliest assemblages yet known from Cornwall. It has some similarities and a broadly similar date to the material associated with a beaker structure from Sennen (Quinnell in Jones and Taylor forthcoming); the assemblage from Sennen contains vessels with finger nail decoration. It is now becoming clear that in Cornwall beaker pottery first appears in domestic assemblages and as depositions in pits and only becomes associated with burials rather later, possibly around 2000BC (Jones and Quinnell 2006).

Later prehistoric pottery

This is generally of Middle Iron Age date though the presence of at least one probable Late Bronze Age Plain Ware sherd should be noted.

Area 2

(689) with burnt clay of [688]. One sherd, 6g, moderate abrasion, sparse medium inclusions in open fabric, generally reduced, 5 YR 5/1 grey. Fabric of broadly 1st millenium BC type.

(592) fill of ditch [589] part of linear **986**. Two sherds, 3g, gabbroic, moderate abrasion, probably Middle Iron Age as that from (825).

(630) fill of ditch [629] part of linear **985**. One sherd, 3g, abraded, reduced 5 YR 3/1 very dark grey. Probable incised lines. General appearance of sherd suggests South Western Decorated Ware.

(694) fill of ditch [695] part of linear **981**. Three sherds, 8g, gabbroic, moderate abrasion, reduced 5 YR 3/1 very dark grey, probable South Western Decorated Ware affinities.

Area 3

(926) fill of ditch [925] part of linear **981**. One sherd, 3g, fresh, reduced 5 YR 3/1 very dark grey, granitic derived fabric, probably Early Iron Age from general character.

(533) upper fill of ditch [551] part of linear **993**. One sherd, 10g, gabbroic, moderate abrasion, probably Middle Iron Age as that from (825).

(787) in ditch [786] part of linear **995.** One sherd, 13g, abraded, coarse common inclusions, generally reduced, 5 YR 5/1 grey. Simple rounded rim, possibly Late Bronze Age Plain ware. *Petrology.* Note a late medieval sherd comes from (816) fill of [814] and part of linear **995**.

(825) in ditch [826] part of linear **995**. One sherd, 3g, moderate abrasion, fine gabbroic fabric appropriate to Middle Iron Age South Western Decorated ware, well finished surface reduced 5 YR 3/1 very dark grey. Note the presence of a post-medieval sherd.

Three separate unstratified finds were of Middle Iron Age South Western Decorated ware and reduced 5 YR 3/1 very dark grey. Two, gabbroic, 7g, had part of a geometric pattern. Six, 35g, include three adjoining sherds with part of a complex incised pattern, are of xx fabric *petrology*. Another sherd of this fabric, 7g, comes from the area within 170E/140N.

7.2 Baked Clay

Some 25 fragments with many smaller crumbs come from burnt clay feature [688], 1370 grammes. The clay is very poorly prepared and contains stone inclusions up to 50mm in size; there is no sign of any shaping nor of the hollows left by any small timber pieces which would have been used in fashioning an oven.

7.3 Stonework

Part of a muller, for use with a saddlequern, came from (825) fill of ditch [826] part of linear **995**. This was of local granite, probably worked into shape around the edge, with both faces parallel, slightly convex and heavily used. Thickness was 37mm, surviving dimensions 105mm by 100mm.

7.4 Flint

There are three hard hammer flakes made from poor quality material, from (533) ditch [551], from (714) in [713] (eroded nodular cortex) and (784) in [783]. These are likely to be residual.

Beaker pit [865] produced a single chunk, with an eroded nodular cortex, from very poor quality material, similar to that which occurs on Haldon in Devon (Newberry 2002, 14); this appears to have been struck in the process of making a core.

The sieving of sample <322> from pit [865] produced 43 tiny pieces, between 14mm and 3mm in size, mostly towards the smaller end of this range. Several of the pieces have pebble flint cortex, some are soft hammer thinning flakes and others the product of retouch. These pieces indicate flint working on the site using both cortical and pebble flint.

8. ASSESSMENT OF THE WOOD CHARCOAL, by Dana Challinor

Three samples of charcoal from ditches (fills 810 and 926) and a posthole (fill 866) were examined to provide some identification of wood taxa and to isolate suitable material for radiocarbon dating.

The two ditch samples were extremely poor, with few fragments of identifiable charcoal, and heavily covered with sediment. Some *Quercus* (oak) of indeterminate maturity was identified in both samples, and a fragment of *Ulex/Cytisus* (gorse/broom) was selected for dating from context 810. Context 926 also contained several fragments of clinker type material and coal.

The posthole sample (context 866), in contrast, produced a large quantity of well preserved charcoal. Three taxa were identified; *Corylus avellana* (hazel), Maloideae (hawthorn type), and *Quercus* (oak). The mixed nature of the assemblage confirms that the charcoal does not represent the remains of a post, but was presumably from some domestic or industrial fire which entered the feature with the large quantity of pottery. Thirty of the larger fragments of hazel charcoal were confirmed at high magnification, with a view to using this charcoal for radiometric dating. However, the weight of this charcoal (c6g) fell very short of the requirements (25g), so a single fragment of roundwood was selected for AMS dating. The identification of the Maloideae was not confirmed at high magnification.

Sample	Context	Feature	Quantity	Identification	Notes	C14
306	810	ditch	+	Quercus, Ulex/Cytisus rw	Very small frags, covered in sediment	Ulex/Cytisus rw x 1
349	926	ditch	+	Quercus, indet.	Several frags clinker and coal	Nil
322	866	posthole	++++	Alnus/Corylus, Quercus, Maloideae	Mixed assemblage, lots hazel, incl rw	Corylus avellana rw x 1

+=up to 5 frags; ++++= >100 frags; rw=roundwood

Table 1: Charcoal and C14 identifications

Further analysis: Only the posthole sample offers any potential for further analysis in terms of the intrinsic assemblage of the charcoal. However, it would be limited to a single sample and of negligible interpretative value, unless the dating or context is deemed of especial significance.

9. DISCUSSION

It had been established by way of an archaeological watching brief that the topsoil across the site was ploughsoil formed by generations of agricultural activity (Lawson-Jones, 2009, 11). This cultivation in relatively recent times has resulted in extensive and substantial damage to underlying archaeological deposits. The apparent truncated nature of many of the features has meant that in many cases the opportunity for finds retrieval, or the recovery of sufficient material for sampling, has been restricted. However despite these limitations it may be concluded that the excavation has demonstrated the presence of different and successive phases of prehistoric and later activity.

The earliest recognised prehistoric feature was an isolated pit (865 within Area 3) which produced Beaker pottery sherds from at least two vessels of the Early Bronze Age with an associated radiocarbon determination of 2490-2290 cal BC (95.4% probability). Whilst an isolated pit of this nature could, in certain circumstances, be interpreted as a burial pit within a ploughed-out round barrow such an interpretation is unlikely in this case. The pit has no surrounding ring-ditch suggestive of the presence of a former barrow mound nor was any evidence of cremated bone found within the pit. The fragments of multiple vessels are typical of the pits with domestic refuse now being found across Cornwall and it is now known that broadly domestic contexts provide the earliest Beaker material in the county: it would be unlikely that a Beaker burial would occur at the early date associated with this pit (Jones and Quinnell 2006).

Both Areas 2 and 3 have presented evidence the provisional interpretation of which suggests that the recorded remains represent boundaries of successive field systems of one kind or another which may date at least from the Iron-Age if not earlier. The scrappy finds of pottery would be consistent with some activity in the Late Bronze Age and the Early Iron Age but with most of the field system ditches belonging to the Middle Iron Age. No conclusive settlement evidence in the form for example of roundhouses was observed although settlement associated with the field systems must presumably have lain in reasonably close proximity. The closest known prehistoric settlement to the Brannel School site is that of the Middle to Late Bronze Age (which appears to have a continuity into the Romano-British period) excavated at Scarcewater, 2.5km to the northwest (Taylor, 2005: Jones and Taylor 2010) whilst the closest known Iron Age or Romano-British round (enclosed settlement) is that at Gwindra Round 400m east (Lawson-Jones, 2008, 11).

The earliest field systems recorded in both Areas 2 and 3 were evidenced by broadly parallel linear and curvilinear boundary ditches, the earth produced from their digging presumably used to construct associated banks alongside them. Group A in Area 2 was representative of this arrangement. The ditches were clearly related by their commonality of alignment although they were not all necessarily contemporary. Although it was not possible to determine their period of use, the evidence for recutting of the ditches and some evidence of replacement provided by stratigraphic relationships demonstrates a longevity beyond perhaps just one season and the labour required for the creation of these boundaries suggests that they may have been communal endeavours with a long history of use.

A major shift of alignment from NW-SE to N-S suggests a break in continuity or the imposition of a new field system in Area 2 (see Group C). Parallel linear or curvilinear ditches were again employed to delineate boundaries (but at right angles to the earlier

sequence) and evidence of recutting was once again recorded. Two sides of what appears to be rectangular enclosure possibly of Romano-British origin were seen in the south of Area 2 (Group E) but too little of this enclosure was excavated to be sure of its function or date.

Area 3 produced a complex of boundary ditches similar to those in Area 2 with two parallel ditches (Group H), perhaps representing a trackway or field entrance, being the earliest stratigraphically. The majority of the features, which are clustered in the north of the site, do however seem to be boundary ditches of an E-W aligned field system with what appears to be an entranceway evidenced by the apparent inturning of successive boundary ditches to the north at the same focal point (see Groups J and K); the earlier putative trackway/entrance was also located here.

Imposed upon the landscape and overlying the earlier features was a large field system created by very long straight boundary ditches (Group N). This field system is of a different nature and magnitude to its predecessors and is likely from known comparisons to be Romano-British or medieval in date. No artefactual material of the Roman period was however found. The ditches of the system are clearly defined on the geophysical survey (Adcock, 2008).

10. CONCLUSIONS AND PROPOSALS FOR FURTHER WORK

The investigations have revealed extensive evidence for prehistoric and later land use within the site, primarily in the form of boundary ditches associated with a succession of field systems. Although no direct evidence for settlement was exposed, the apparent re-cutting of a number of the earliest ditches in the sequence indicates an intensity of use which is suggestive of settlement nearby.

The pit with Beaker pottery is particularly important because of its early radiocarbon date and its recovery from a non-funerary or ritual context. A recent study (Jones and Quinnell 2008) has demonstrated the importance of pit groups early in the Beaker period (c 2,400 -1,900 cal BC), probably pre-dating Beakers in funerary/ritual contexts. The C14 date obtained for the pit at St Stephen is 2,490-2,290 cal BC (95.4% probability). Two of the three vessels of which sherds have been identified in the pit have finger nail decoration, a tradition commonly described as 'domestic' and generally considered to have been introduced rather later than traditional cord and comb stamped vessels. Further study of the Beaker vessels would demonstrate clearly details of these vessels and also of the comb-stamped vessel also represented.

It is proposed that a short note based on the text of this report is prepared for the county archaeological journal *Cornish Archaeology*. This would highlight the key findings of the project and would provide detailed descriptions of the pottery, illustrations of the principal vessels and their petrology. It is generally known that Beaker ceramics tended to make use of clays close to the source of their deposition. The apparent presence of gabbroic clays at St Stephen at this date early in the Beaker period would provide useful data on the use of this clay source, in frequent use in Cornwall from the introduction of pottery in the Early Neolithic period.

11. THE SITE ARCHIVE AND OASIS ENTRY

The site records have been compiled into a fully integrated site archive which is currently held at Exeter Archaeology's offices under project number 7149 pending deposition at Truro museum (accession number TRURI:2010.7). Details of the investigations including a pdf copy of this report have been submitted to the on-line archaeological database OASIS under identifier exeterar1-116077.

ACKNOWLEGEMENTS

The project was commissioned by Kier Western, and administered by Steve Lee (Kier) and Peter Stead (EA). The fieldwork was supervised by Paul Jones and the report illustrations were prepared by Sarnia. Blackmore. The finds were processed by Charlotte Coles and the pottery report prepared by Henrietta Quinnell. Additional material for the report and discussion was provided by John Pamment Salvatore.

BIBLIOGRAPHY

Adcock, J. 2008 St Stephen in Brannel School: Geophysical Survey. Report 2008/71

Clarke, D.L. 1970 Beaker pottery of Great Britain and Ireland. Cambridge University Press

Countryside Commission, 1996 Cornwall Landscape Assessment 1994, Cornwall County Council, DETR

Jones, A. M. and Quinnell, H. 2006 Cornish Beakers: new discoveries and perspectives, *Cornish Archaeol.* **45**, 31-71.

Jones, A. M. and Taylor, S.R. 2010 Scarcewater, Pennance, Cornwall, archaeological excavation of a Bronze Age and Roman landscape, Brit Arch. Repts, Briet Ser 516, Oxford.

Jones, A. M., Taylor, S. R., and Sturgess, J., forthcoming. A Beaker associated structure and other discoveries along the Sennon to Porthcurno SWW pipeline, *Cornish Archaeol*.

Lawson-Jones, A. 2008 St. Stephen in Brannel School, Cornwall: Archaeological Assessment.

Lawson-Jones, A. 2009 St. Stephen in Brannel School Geotechnical Test Pits, Cornwall: Archaeological Watching Brief.

Ratcliffe, S. 2010 Brannel School, St Stephen in Brannel, Cornwall: Brief for archaeological recording (CCHES)

Soil Survey of England and Wales. 1983 *Soils of England and Wales: Sheet 5 South West England.* Ordnance Survey, Southampton.

Sorenson, M.-L. S. 1996 Sherds and pot groups as keys to site formation process, in Needham, S. and Spense, T. *Runneymede Bridge Research Excavations Volume 2 Refuse and Disposal at Area 16 East*, 1-74. British Museum.

Needham, S. 2005 Transforming Beaker Culture in Europe, *Proc. Prehist. Soc.* 71, 171-219

Newberry, J. 2002 Inland Flint in Prehistoric Devon Sources, Tool-making Quality and Use, *Proc. Devon Archaeol. Soc.* **60**, 1-38.

Taylor, S.R., 2005 Scarcewater Tip, Cornwall Cornwall HES Report 2005R045

Stead, P. 2009 Project Design for 'strip, map and sample' excavation on land at St. Stephen in Brannel School, St Stephen in Brannel, Cornwall. Unpublished document.

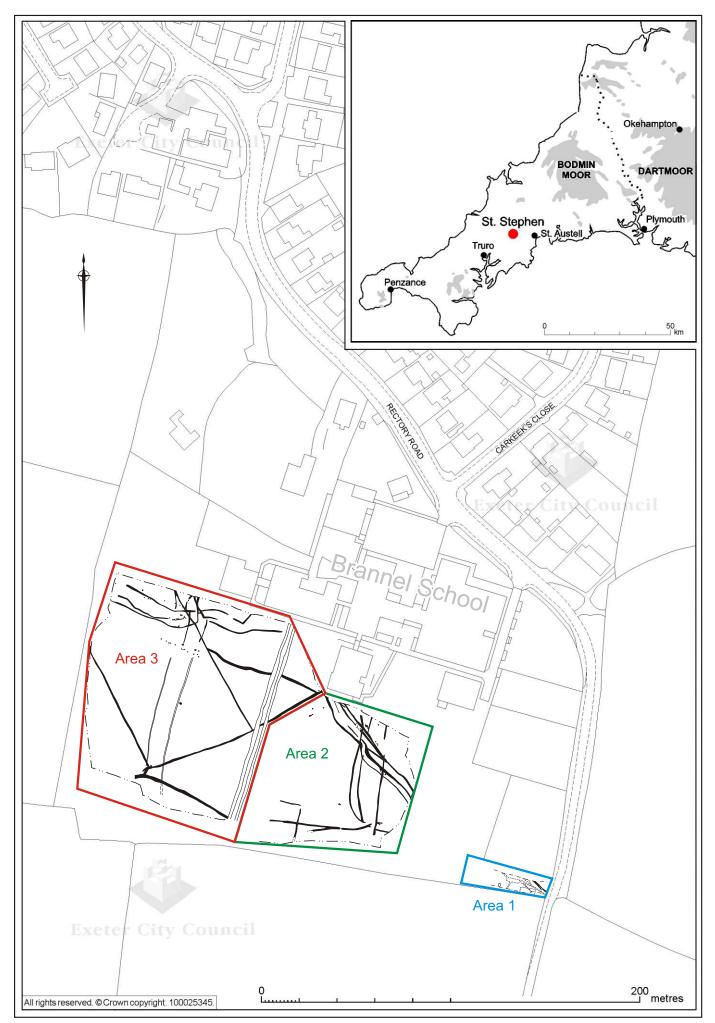


Fig. 1 Location of site.

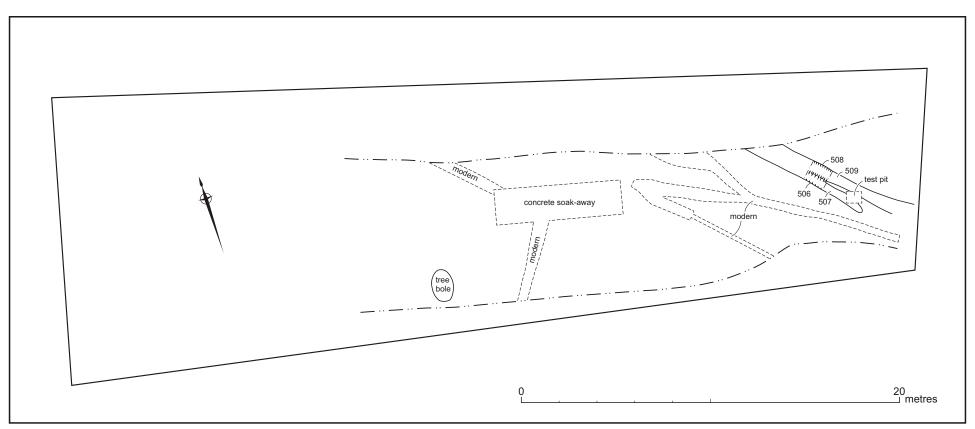


Fig. 2 Area 1: plan.

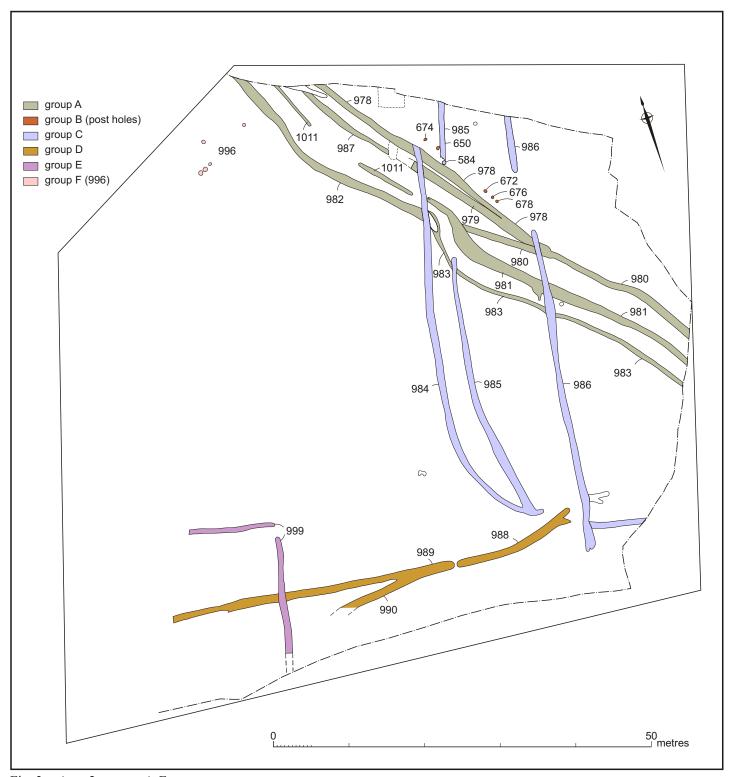


Fig. 3 Area 2: groups A-F.

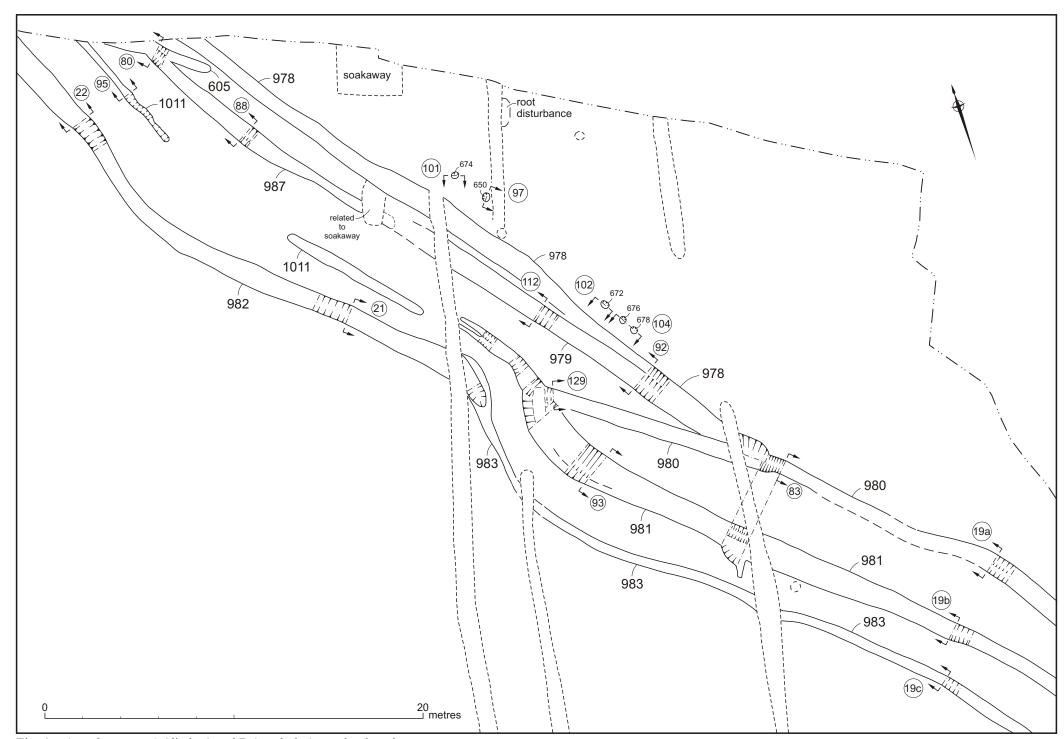


Fig. 4 Area 2, groups A (ditches) and B (postholes): section locations.

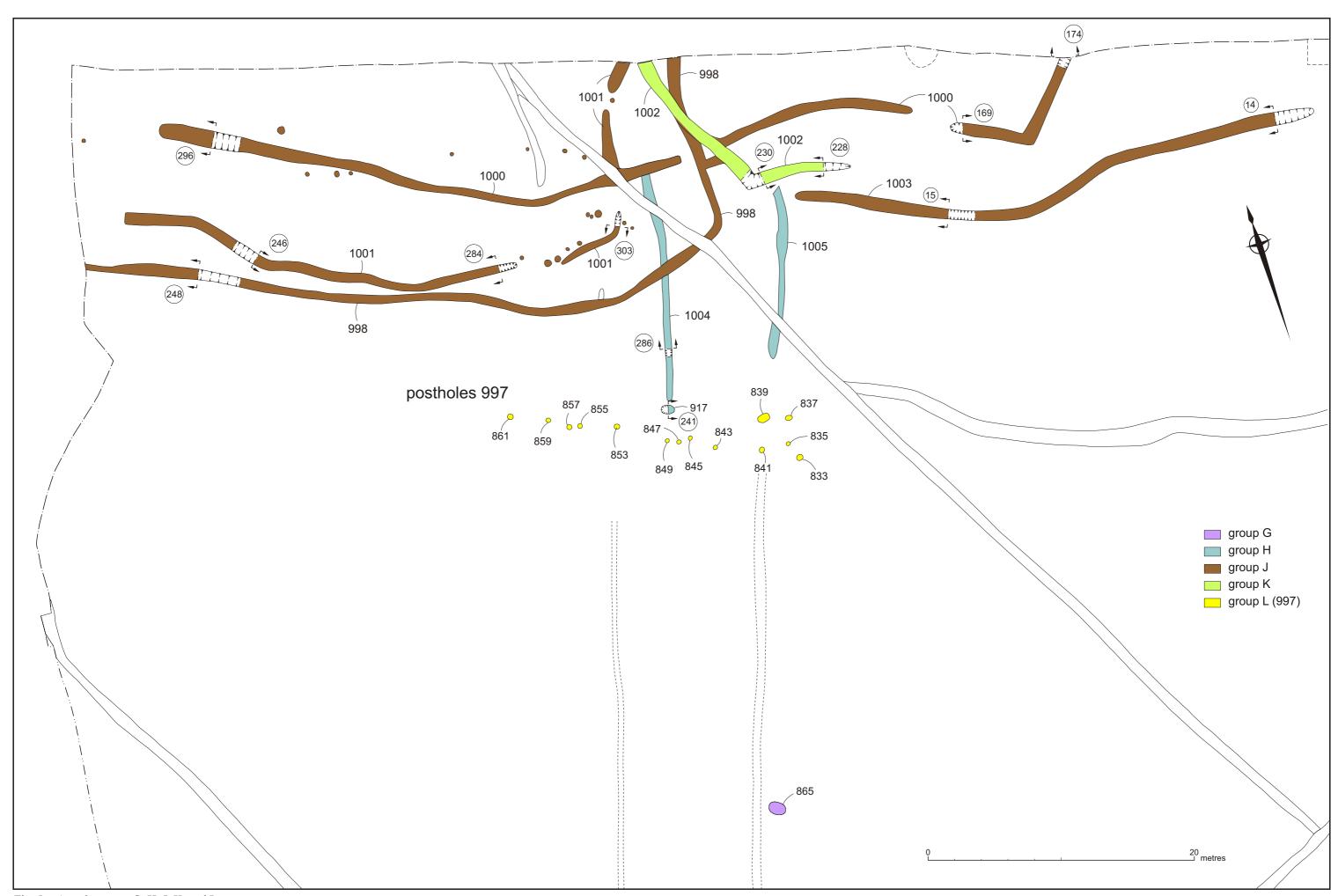


Fig. 5 Area 3, groups G, H, J, K, and L.

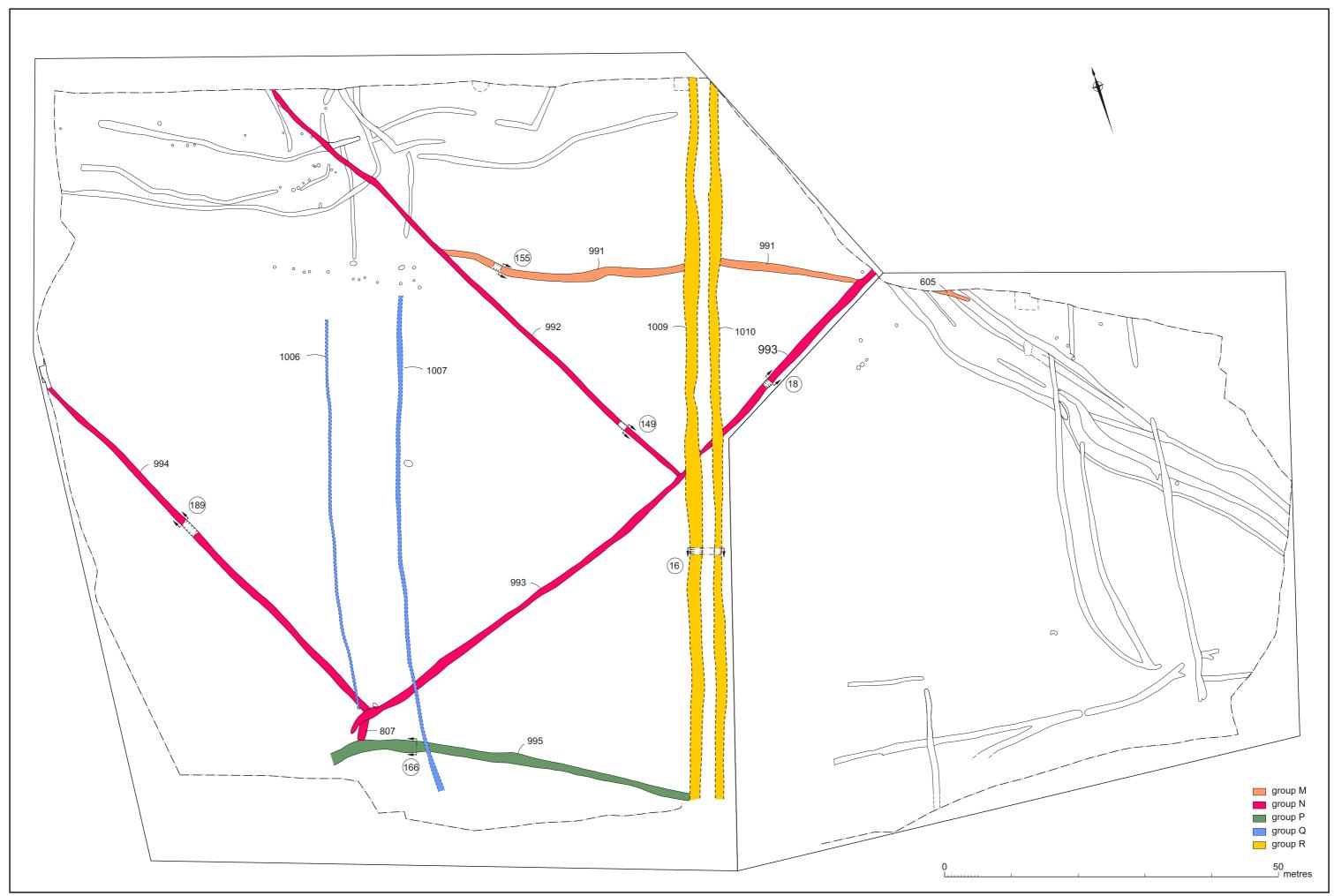


Fig. 6 Areas 2 and 3, groups M, N, P, Q, and R.

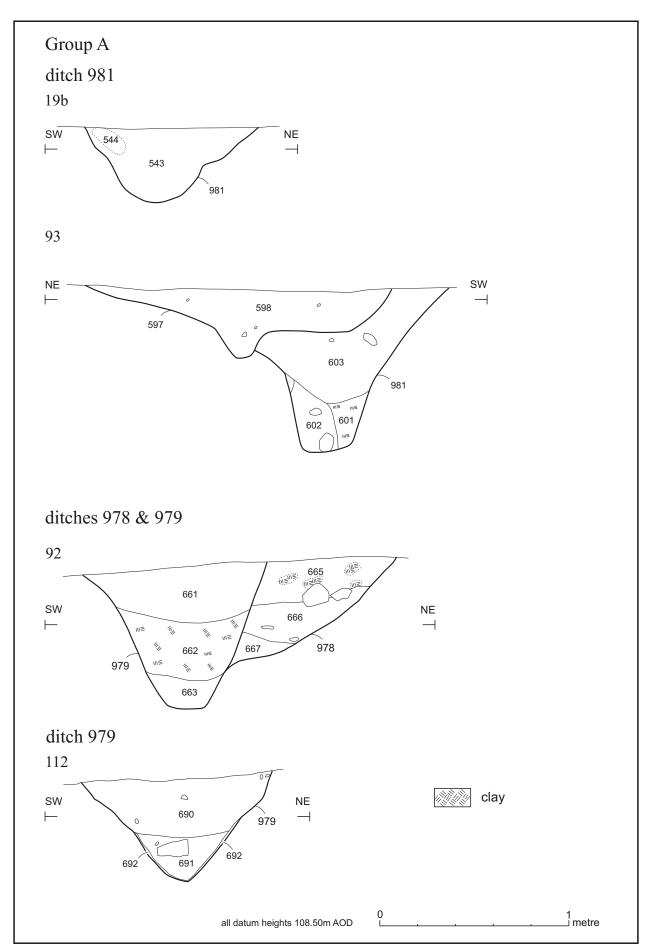


Fig. 7 Area 2, group A: sections.

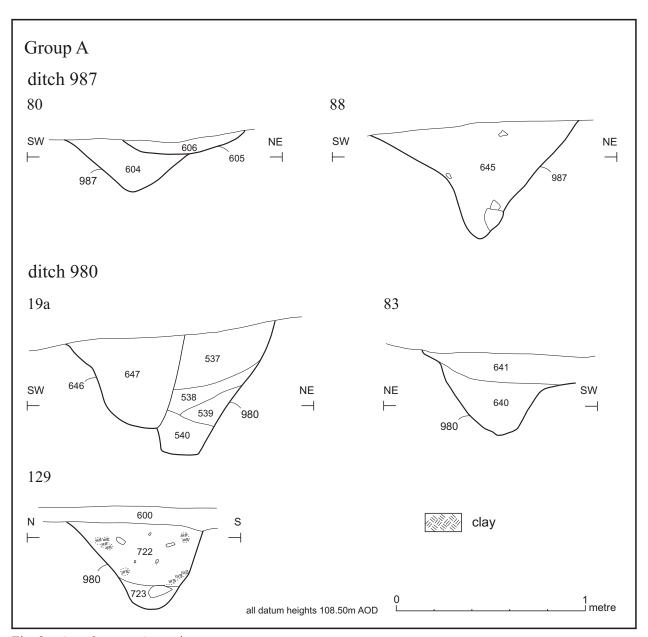


Fig. 8 Area 2, group A: sections.

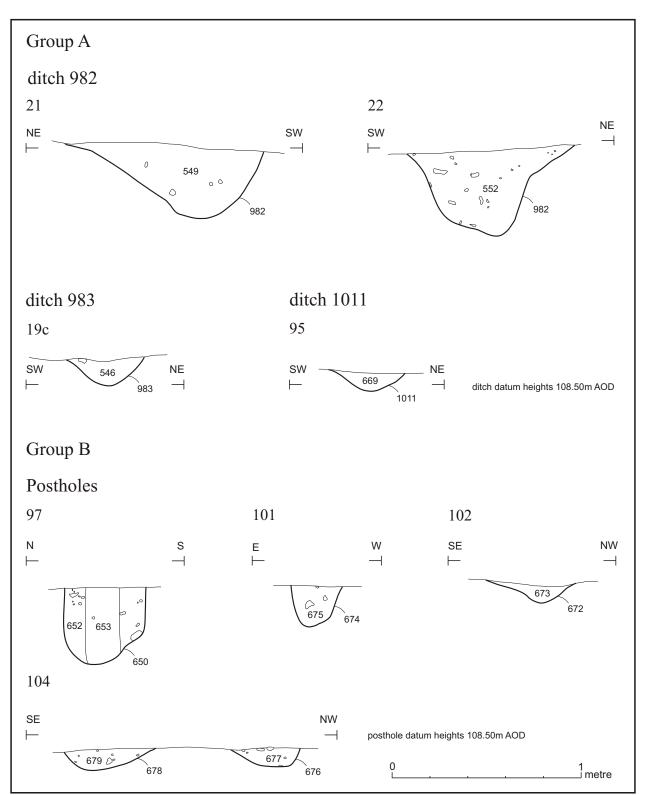


Fig. 9 Area 2, groups A and B: sections

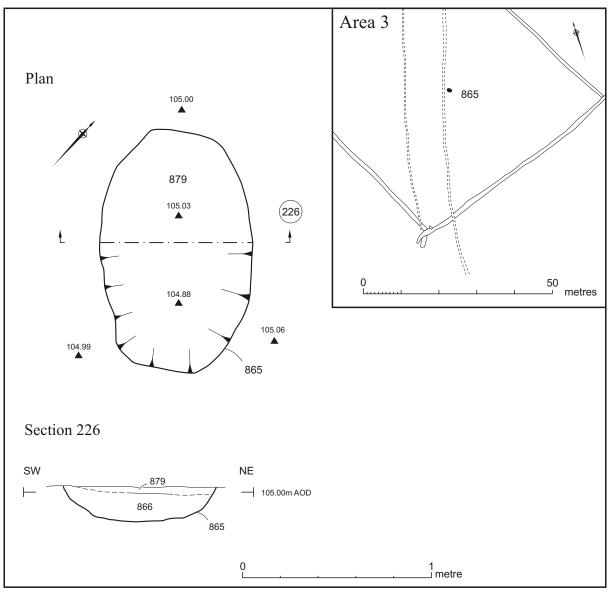


Fig. 10 Area 3, group G, pit 865: plans and section.

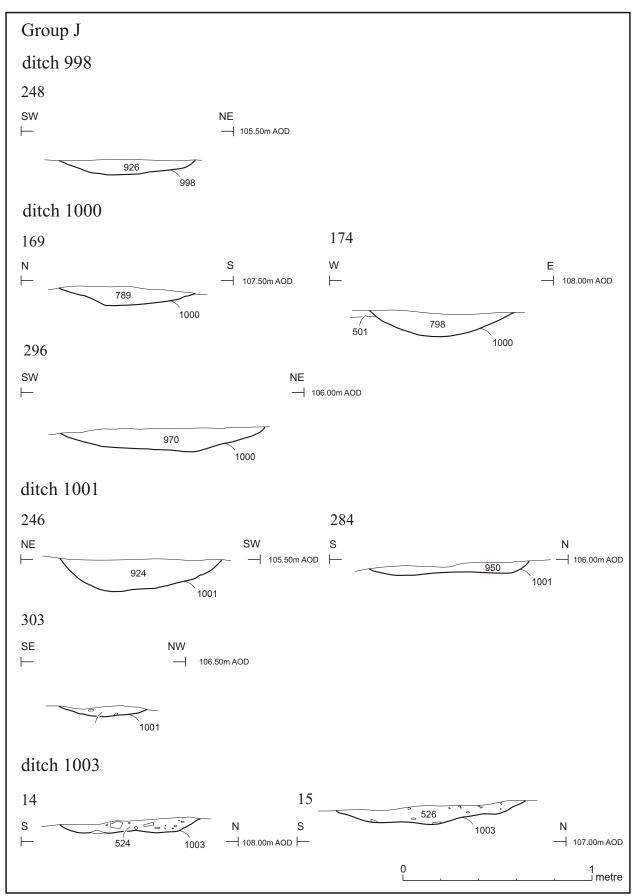


Fig. 11 Area 3, Group J: Sections.

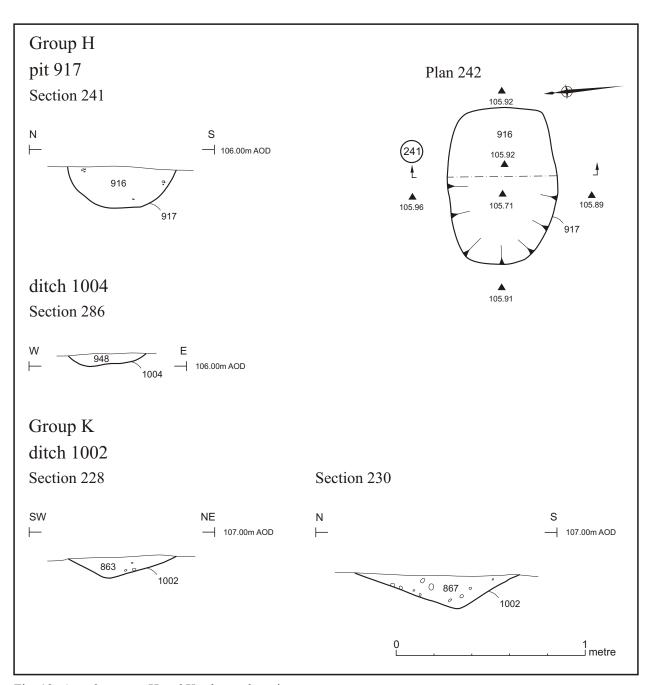


Fig. 12 Area 3: groups H and K: plan and sections.

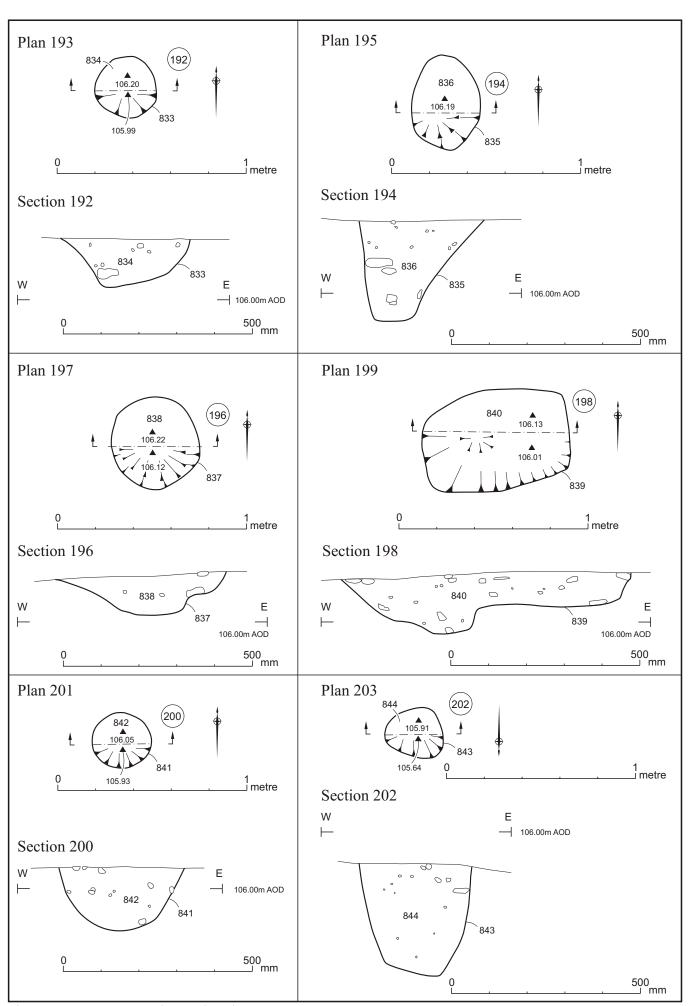


Fig. 13 Area 3, group L: plans and sections.

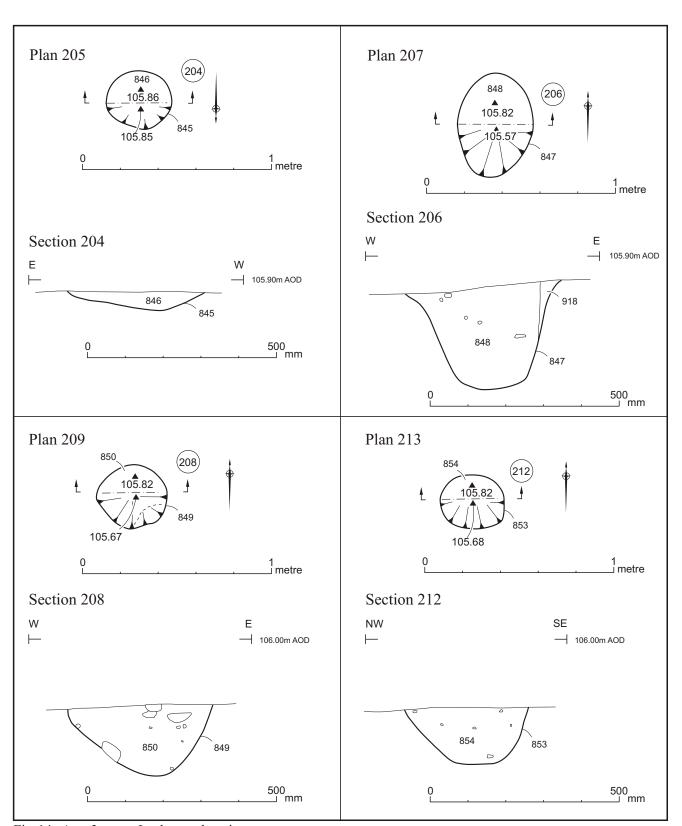


Fig. 14 Area 3, group L: plans and sections.

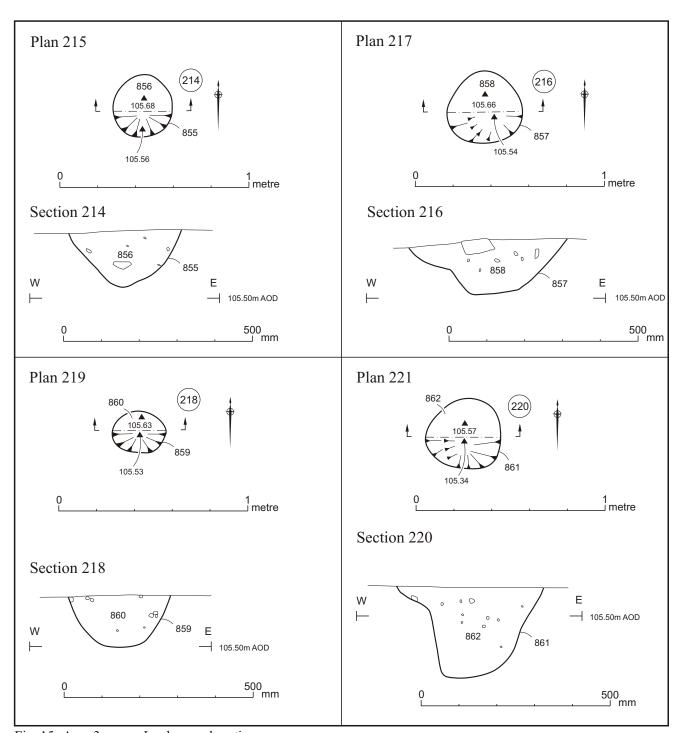


Fig. 15 Area 3, group L: plans and sections.

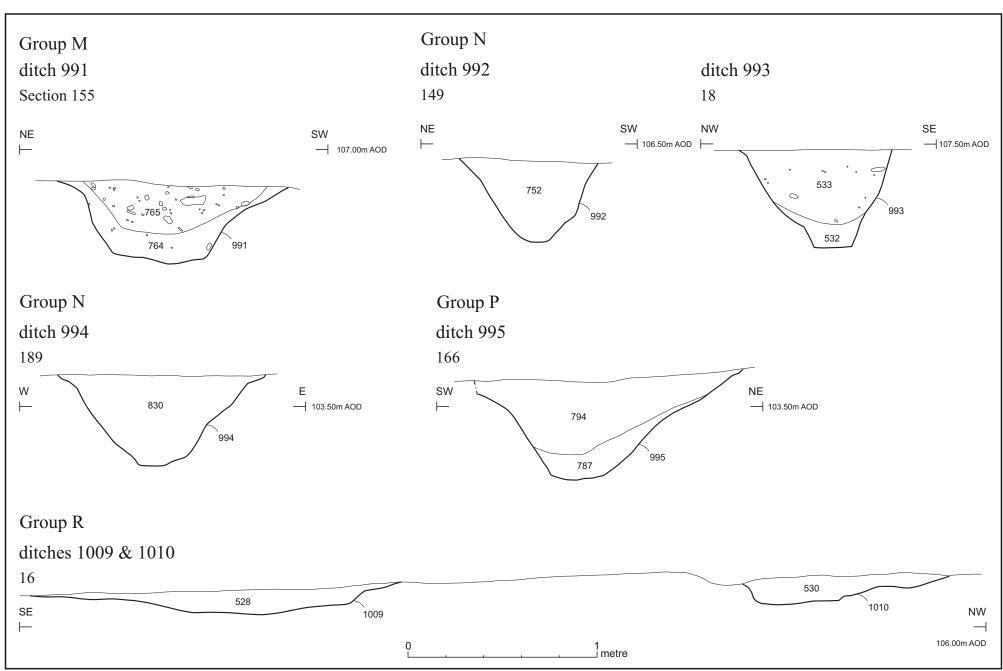


Fig. 16 Area 3, groups M, N, P, and R: sections



Plate 1 General view of Area 1. Looking east.



Plate 2 General view of Area 2 during stripping. Looking southwest.



Plate 3 Ditch 982 (group A). Section 21. Scales 1m and 0.25m. Looking east.



Plate 4 Ditch 981 (group A). Section 93. Scale 2m. Looking southeast.



Plate 5 View of inter-cutting group A ditches in NW corner of Area 2. Scale 2m. Looking southeast.



Plate 6 Enclosure 999 (group E). Scale 2m. Looking south.



Plate 7 Ditch 103 (group J). Section 15. Scale 1m. Looking west.



Plate 8 Group N ditches 992 (right of scale) and 993 (foreground). Scale 2m. Looking northwest.



Plate 9 General view of Area 3. Looking northwest.



Plate 10 Post-medieval double ditched hedgebank (group R). Looking south.