



The archaeological investigation of a hexagonal feature at Star Hill, Bridge, near Canterbury, Kent. 2003-6

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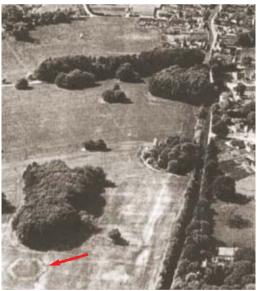
## 1. Summary

In 2003 the Kent Archaeological Field School (KAFS) was invited by the Bridge and District History Society to investigate a crop-mark on top of Star Hill in the shape of a hexagon (Fig. 1). The NMR Monument Report (2003) summarises the feature as an: 'Hexagonal feature with dark centre seen on air photographs, possibly a World War II installation'. Other archaeologists are emphatic that it is a garden feature associated with 18th century landscaping of Bourne Park in which the site is located (Paul Bennett pers. comm.). However, excavation of the fill of the hexagonal ditch in 2003 retrieved 14 sherds (72gms) of flint and grog-tempered ware with a spread of dates from 150BC to AD50. Subsequently each Easter from 2004 to 2006 (Fig. 55) the KAFS carried out a Programme of Assessment and Archaeological Excavation on this area of densely crop-marked land at Star Hill, Bridge, near Canterbury, Kent. The site centre is taken as NGR 618800 153600.

The land is currently in the ownership of Vanessa Mcdonald of Hardres Court Farm and is under pasture. Aerial photographs (Figs. 1, 7, 38, 39) show that the Scheduled Monument burial mounds (KE 71) to the east of the area of investigation by the KAFS had been destroyed by ploughing (Fig. 42). With a possible future change of ownership there could be plans to change the farming regime back from pasture to plough with the consequential further loss of buried archaeology.

Research by the KAFS prior to field work had found a 19th century map drawn by the Rev. F. T. Vine, Vicar of Patrixbourne and published by him in the 2nd edition of his book, 'Caesar in Kent'. Vine thought the hexagonal feature was a Roman fort (Fig. 5, 40), one of two in the grounds of Bourne Park (Vine 1887).





Figs. 1, 2. Aerial photographs of the hexagonal feature on Star Hill, Bridge. The photograph above looks towards Canterbury and shows the village of Bridge with the Roman Watling Street running through it. The photograph (left) shows the area of investigation (study area) by the KAFS in 2005 (blue box) and 2006 (red box). Both areas are to the east of the hexagon. To the left (green arrow) can be seen many more ring ditches of Anglo-Saxon inhumations. An estimate of the number of burials in this part of Star Hill is well over 1000.

An ideal opportunity had therefore arisen to carry out an archaeological training excavation on a cropmark considered to be either a feature of the Park or built as a military installation during World War II. The initial investigation carried out during May Bank Holiday in 2003 by the KAFS of two points of the hexagonal ditched enclosure enabled the students to find the centre of the hexagon where stripping of the turf revealed a circular pit, about three metres in diameter cut into the chalk. The pit had been pillaged some time in the past but sherds of Late Iron Age pottery with burnt bone, and Medieval pottery suggest a cremation deposit of Late Iron Age/ Early Roman period plundered during the Medieval or Antiquarian period. Further stripping of the topsoil in 2004 within the perimeter of the hexagon failed to find any tree-planting pits, indeed the only features revealed were a number of prehistoric post-holes and rubbish pits dug into the chalk during the First and Second World Wars (Fig. 55).

In 2005 further work was undertaken on the south side of the hexagon where almost immediately an east-west orientated grave cut into the chalk was revealed with a number of 7th century Anglo-Saxon coins exposed in the disturbed fill. Investigation revealed a possible family group of 12 graves orientated to the hexagon feature with Graves 3, 4, 4a, and 7 cutting the fill of the hexagon feature ditch (Fig. 56). The graves were an obvious target for treasure hunters and full excavation proceeded with the appropriate Burial Licence obtained. Most of the graves contained artefacts that were Treasure Trove and include a gold pendant, glass palm cup, Frankish pottery vessels, beads, buckles, spears, knives, cowrie shells, loom weights and over 60 silver Anglo-Saxon coins dating to AD680-690 (Appendix I). Worked flint and Iron Age pottery sherds were also retrieved by sieving the topsoil within the excavated area. The worked flint is the subject of a specialist report which dates the assemblage to the Neolithic and suggests that stone tool manufacture was taking place on site (Hardaker 2005 pers comm). The constant retrieval of scattered fresh Iron-age pottery sherds throughout the site did suggest that Iron-Age occupation was a possible feature of the site and investigation of this aspect should form part of the revised 2006 Research Design (Appendix V).

As a result in 2006 further investigation comprising an area excavation of a 50 metre strip was undertaken to the east of the hexagon (Fig. 58). The results were spectacular. Over 90 Anglo-Saxon inhumation graves cut into the chalk were revealed overlaying 5th century Anglo-Saxon cremation deposits which in turn overlay Iron-Age cremations, post-holes, rubbish pits, stake holes, ditches, and hut platforms which in turn overlay Bronze Age and earlier features (Fig. 13, 14, 53, 54). The date of the hexagonal ditched enclosure has now been firmly established as pre-Anglo-Saxon as no fewer than seven Anglo-Saxon inhumations cut into the fill of the ditch (Fig. 23, 56). Pottery sherds were retrieved from the fill of the ditch which give a tentative date from 150BC to AD50. It can only be assumed that the hexagonal feature was short-lived, and is of an early Roman date.





**Figs. 3, 4.** The picture to the left shows students in Graves 3 & 4. The double ditch hexagonal feature can clearly be seen as can Grave 4 cutting into the fill of the earlier feature. Above can be seen Grave 7 which on excavation revealed a complete skeleton with grave goods. The grave had been cut into the fill of the hexagonal feature double ditch (Fig. 23, 56).

## 2. Introduction

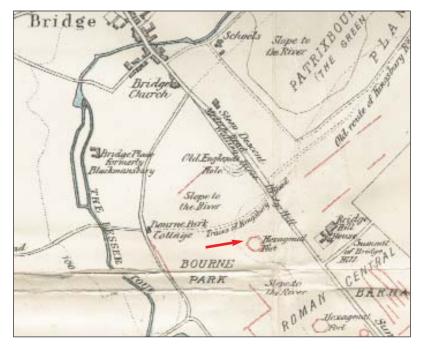
### 2.1 Project Background

In 2003 the KAFS was invited by the Bridge Historical Society to investigate a crop-mark on top of Star Hill in the shape of a hexagon. The NMR Monument Report summarises the feature as: 'Hexagonal feature with dark centre seen on air photo, possibly a World War II military installation'. However, research by the KAFS had uncovered a 19th century map by the Rev. Vine in 'Caesar in Kent' which shows the hexagon feature. Vine thought it was a small Roman fort, one of two in the grounds of Bourne Park (Fig. 40).

An ideal opportunity had therefore arisen to carry out an archaeological training excavation on a crop-mark considered at the best to be a feature associated with the landscaping of Bourne Park or else built as a military installation during World War II. Permission was given initially by the owner of the land, Colonel Richard Neame, and on his death by Vanessa Mcdonald of Hardres Court Farm. The investigation was conducted under the direction of Dr Paul Wilkinson (KAFS) between Easter 2003 and 2006 in accordance with requirements set out in a Project Design (Appendix V) and in discussion with Dr Maurice Raraty of the Bridge and District History Society. The archaeological investigation, carried out by KAFS revealed the presence of Neolithic, Bronze Age, Iron Age, Roman, and Anglo-Saxon features within the extent of the study area (Fig. 53, 54). As a result of this work English Heritage intended to extend the existing Scheduled Area into the area of investigation. Further mitigation measures were considered necessary, and it was agreed with English Heritage that: "Further work by you (KAFS) would assist in helping us define the precise area which should be covered by the new designation. This will in effect involve the extension of the existing scheduled monument KE71 which currently covers a linear area alongside the road.

It is clear that the current scheduled area, and that which is exposed through your excavation is part of a complex multi period site which could be quite extensive. The aerial photographs clearly shows a number of features including some ploughed out barrows and the hexagonal features one of which you partially excavated last year. The position of the current (KAFS) excavation area was located so as to elucidate the relationship between the hexagonal feature and a number of burials which is a cause for some debate" (English Heritage pers comm. 2006).

The programme of works agreed with English Heritage in 2006 was aimed to preserve the material remains of the Anglo-Saxon graves found in KAFS's investigation, and to preserve, by record, some of the archaeological features present within the extent of the study area.





**Figs. 5, 6.** The map by the Rev. F. Vine (left & Fig. 40) shows two hexagonal features, one on Star Hill and the other to the southeast. The map was published in 1887. Above a 20th century OS map shows the burial mounds adjacent to the hexagonal feature on Star Hill.

## 3. Aims and Objectives

Following on from the initial stages of evaluation work in 2003-5, suitable mitigation measures were proposed by the KAFS for the 2006 campaign and agreed with English Heritage. The preferable option for English Heritage of the important archaeological remains at Star Hill was preservation in situ as set out in PPG 16:

'Archaeological remains should be seen as a finite, and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. Appropriate management is therefore essential to ensure they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed.' (Para A6)

However, the KAFS agreed in principal that the Anglo-Saxon graves should only be recorded and not excavated but sample excavation should take place on other features already exposed in the initial strip and map exercise (Fig.13). In undertaking this archaeological work the principles set out by the Institute of Field Archaeologists (IFA) were adhered to. The IFA defines an excavation as being:

"...a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and that results of that study published in detail appropriate to that design' (IFA 1999b:2).

The aims of this archaeological investigation and excavation were therefore (not exclusively):

- 1. To understand the character, form, function and date of any archaeological remains apart from Anglo-Saxon graves in the study area. The work should include analysis of the spatial organisation of activities on the site during the prehistoric, Iron Age, Roman, and Anglo-Saxon periods through examination of the distribution of features, artefactual and environmental assemblages.
- **2.** To assist in the understanding of the archaeological occupation of Star Hill through examination of the date, form and character of the study area in the context of its topographical position and that of other similarly dated findings within the area and beyond.
- **3.** To elucidate the relationship between the hexagonal feature and the Anglo-Saxon burials and other features so that the relationship could be clearly resolved.
- **4.** To undertake a Level 3 topographical survey of Star Hill including that which is currently scheduled which would provide a positive contribution to the proposed scheduling process.

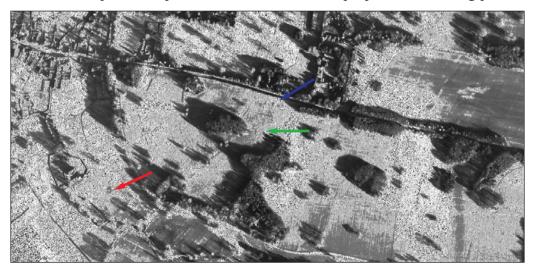


Fig. 7. A vertical aerial photograph taken on 12th January 1946 by the RAF (Film No. 4085 1069/UK/1112). It shows the surviving round barrows (blue arrow). The hexagonal feature (green arrow), and a large formal probably 18th century garden (red arrow). Also shown are relict field systems, droveways and the dry river bed of the stream called the Nailbourne.

## 4. Methodology

### 4.1 Archaeological Excavation

Excavation in 2006 was carried out using a 360° mechanical excavator fitted with a toothless ditching bucket, removing the overburden to the top of the first recognisable archaeological horizon, under the constant supervision of an experienced archaeologist. Exposed surfaces were subsequently hand-cleaned to reveal features in plan and carefully selected cross-sections through the features were excavated to enable sufficient information about form, development date and stratigraphic relationships to be recorded without prejudice to more extensive investigations, should these prove to be necessary. All archaeological work was carried out in accordance with the updated Method Statement (Appendix V).

The KAFS single context recording system was used to record the deposits. A full list will be provided in the final report. Layers and fills are recorded (100). The cut of the feature is shown [100]. Context numbers were assigned to all deposits for recording purposes and detailed on pro-forma KAFS context sheets. Plans of all features were made using a scale of 1:20, with sections recorded at 1:10. A full photographic record of all stages of the excavation was kept, which included working shots showing working constraints and conditions.

Upon completion of mechanical excavation, a 10m grid was established and a pre-excavation plan generated using global positioning satellite (GPS) technology recording three dimensional points every 0.10m. For ease of reference the site was subsequently divided into 4 distinct areas.

Table 1 provides an area by area summary of the site at Star Hill, as well as detailing the frequency of archaeological features encountered and investigated.

	Location (Fig. 43)	Archaeological features			
Area		Total	Investigated (No.)	In situ (No.)	Excavated (Approx %)
Area 1	Eastern area/2006	73	15	58	12%
Area 2	Central area/2006	87	27	60	30%
Area 3	Western area/2006	51	19	32	30%
Area 4	South-west area/2006	27	19	8	74%
Previous work	Hexagonal feature areas/2003-5	18	18	0	100%

**Table 1.** Location and frequency of archaeological features encountered (Note: Linear features have been included, where present, within individual areas)

## 5. Archaeological & Historical Background

## 5.1. Archaeological Evaluation

The study area has been the subject of archaeological evaluation by the KAFS (Site Codes B03, 5, BR04, 05, 06) during campaigns undertaken in 2003, 2004, and 2005. Excavation took place in 2006. During May Bank Holiday in 2003 investigation by the KAFS of three points of the hexagon enabled the students to find the centre of the hexagon where stripping of the turf and subsoil revealed a circular pit, about three metres in diameter cut into the chalk. The pit had been pillaged some time in the past but sherds of Late Iron Age pottery, burnt bone, and Medieval pottery may suggest a cremation deposit of Late Iron Age/ Early Roman period plundered during the Medieval period (Figs. 55, 56, 58).

The hexagon was seen to have been cut as a decorative feature with the sides curved and terraced, (Figs. 8, 9, 55). The fill comprised chalk granules and larger pieces of chalk mixed with some soil. There was no evidence remaining of an internal bank that can be seen in some air photographs. The internal measurement of the hexagon sides was 15m 40cm (50ft 7") in length (Fig. 55). It is of interest that the hexagon was built to Roman measurements, the length of the internal sides at 15.40m is 52pM (Roman feet, the Roman pes Monetalis of 296mm length).

Further stripping of the topsoil in 2004 within the perimeter of the hexagon failed to find any treeplanting pits, indeed the only features revealed were a number of prehistoric post-holes, together with rubbish pits dug into the chalk during the First and Second World Wars (Fig. 55).

In 2005 further work was undertaken on the south side of the hexagon where almost immediately an east-west orientated grave cut into the chalk was revealed with a number of seventh century Anglo-Saxon coins exposed in the disturbed fill. Further work revealed a possible family group of 12 graves orientated to the hexagon feature, with Graves 3, 4 and 4a cutting the fill of the hexagon feature ditch.

The graves were an obvious target for treasure hunters and full excavation proceeded with the (Fig. 56) appropriate licence obtained. Most of the graves contained artefacts that were Treasure Trove and included a gold pendant, glass palm cup, Frankish pottery vessels, beads, spears, knives, cowrie shells, loom weights and over 60 silver coins (Appendix I).





**Figs. 8, 9.** The two pictures show the complexity of the ditch of the hexagonal feature. The ditch has been terraced (above, Trench A) into a monumental feature whilst the 2005 excavation (left) revealed an even more complex feature with a double ditch with curved profiles. It seems, given the complexity of the design, that the ditch was a feature designed to be seen or can just be a ditch recut (Figs. 55, 56, 57).

Worked flint and Iron Age pottery sherds were also retrieved by sieving the topsoil and subsoil within the excavated area. The worked flint is the subject of a specialist report (see Appendix IV) which dates the assemblage to the Neolithic and suggests that stone tool manufacture was taking place on site.

The constant retrieval of scattered fresh Iron-age pottery sherds throughout the site did suggest that Iron-Age occupation was a possible feature of the site and investigation of this aspect would form part of the 2006 Research Design (Appendix V).

The land at Star Hill has a complex mass of crop-marks revealed by air photographs (Figs. 38, 39). They cover an area of approximately 5 hectares to the west of the A2 (Watling Street). The crop-marks are reported in the RCHME Mapping Project No. 1077099 dated 01 October to 1986-01 October 1987. The crop-marks show a large number of ploughed-out round barrows sitting astride the course of the Roman Watling Street within the Scheduled Monument area (Fig. 7) whilst to the north-west are a large number of smaller ditched barrows. To the south-west there are a number of possible rectangular enclosures and droveways.

The field in question is adjacent to the Scheduled Monument KE71 which currently covers a linear area alongside the A2 road but will be extended to cover most of the study area (Figs. 2, 41).

The Star Hill crop-mark site has been provisionally identified as a probable Early Roman hexagonal sacred feature which seems to be unique and is of a type of site not identified elsewhere in Britain.

However, there is at least one example of an Early Bronze Age barrow that, though essentially round, did appear as though it had been originally dug in a series of short straight sections (Lord-of-the-Manor 1977, Site 2B, Thanet). However, the hexagonality of the present ditch is markedly different, with a formal precision that would indicate a later, Roman date.

Further excavation of the study area was necessary to elucidate the relationship between the hexagonal feature and the 7th century burials and prove beyond reasonable doubt that at the very least the 7th century graves post-date the hexagonal feature.

As a result of the 2006 excavations it is clear that the hexagon feature cuts the Late Bronze Age (LBA) or Early Iron Age (EIA) ditch 014/018 and is in turn cut by at least seven Anglo-Saxon graves. A Roman date is therefore realistic. The burnt bone and 'Belgic' sherds found in the central pit is probably contemporary with its construction and the Medieval and later elements intrusive.

The recorded stratigraphic evidence means that the ditch of the hexagonal feature definitely post-dates the LBA/EIA enclosure ditch 014/018 (together with any associated Early Iron Age activity) and definitely pre-dates the Anglo-Saxon cemetery.

The sherd evidence from both the hexagon's ditch, and its central pit, is not sufficient to be conclusive — no absolute firm date can be applied on the basis of the pottery data recovered to date. Most man-made activities produce some artefactual by-products of that activity. Here, and using the inter-period ceramic evidence, this technically means the hexagon was constructed during either the Late Iron Age or Roman periods.

As a putatively indigenous pre-Roman enterprise the hexagon could have been constructed during the increased phase of 'Belgic'-period activity, ie.sometime after c.50/25 BC. Its neatly straight sides and Roman measurement, though, imply a Roman level of planning or design logic. It could therefore be a Caesarian or Claudian, possibly sacred, imposition into native farmland.

### 5.2 Previous Archaeological Assessments within the Area

The site lies on a hill within a rich archaeological landscape overlooking the southern edge of Bridge village. A number of sites have been investigated in the vicinity, mainly archaeological works on the Bridge By-pass by the Canterbury Archaeological Society in 1966-1974.

Although the work was funded by grants from the Department of the Environment and an interim report published by Nigel Macpherson-Grant with an emphasis on the prehistoric pottery in *Archaeologia Cantiana* Vol. XCVI, 1980, no full report has been published.

It is understood that the report was to be published in two parts. Part 1, Prehistoric, and Part 2 which would have covered the later Roman and Anglo-Saxon cemeteries. It would also have included a section on settlement and land-use at Bridge including synthesising the evidence presented in both parts of the reports.

In 1961 Dr Mary Watson undertook field work just to the east of the current study area. The area of Watson's interest was being developed as a housing estate and the site lay in the path of a road which was being prepared. Two rubbish pits which were excavated yielded pre-Roman pottery, including a Swarling type pedestal base and a handle from a Mediterranean type imported in Belgic times, a pre-Roman bronze fibula and other bronze fragments, a broken speculum coin, Allen Class I, and domestic animal bones. The area has now been completely developed, but the excavator, Dr. Mary Watson, who retains the finds has not, as yet, published a report.

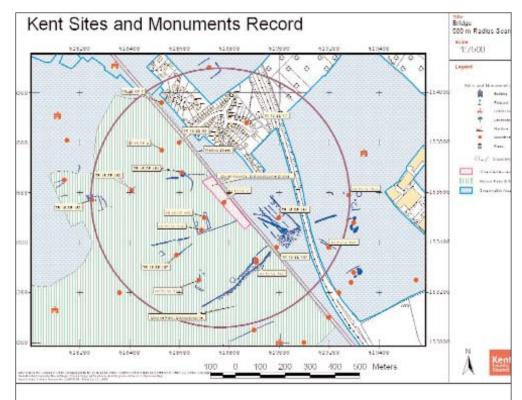
### 5.3 Archaeological Sites and Monuments Record

In addition to the assessment of previous archaeological investigations in the area, it is recognised that the Sites and Monuments Record (SMR) held at Kent County Council contains sufficient data to provide an accurate insight into catalogued sites and finds within the study area and the surrounding landscape. As a result a search was carried out within a 500m radius of the study area in March 2003.

Extensive cropmarks are recorded within the surrounding landscape (Figs. 7, 38, 39). These include linear droveways, enclosures, ploughed out round barrows, and over 50 small barrows with penannular and ring ditches. A full description of SMR features within the study area is itemised below:

### TR 15 SE 2 Description

[TR 18685368] Tumuli [NR]. Faussett in 1771 mentions over 100 tumuli on Hanging Hill, in front of and between Bourne Place,



**Fig. 10.** Mapping of known archaeological features within 500m of the Study Area (Courtesy of KCC).

Bishopsbourne, and the Roman road (some parallel to the road); others had been ploughed down. Wright opened three and found them to be Saxon. This grave mound cluster is partly in woodland and partly under the plough; only eleven mounds survive and these, in general, are in a poor condition (No report).

### **TR 15 SE 7 Description**

[TR 18595388] Romano-British urns and other vessels, (some in Liverpool Museum) with skeletons and fragments of weapons, were found c.1833 about half-way up Bridge Hill during alterations to the Canterbury - Dover road. Three more burials under the pavement on the north side of the road were found with 4th c. pottery in 1956. The 1956 burials were found when a G.P.O. cable was laid at the junction of Beech Hill and Bridge Hill at TR 18535396: the pottery, which included two 4th c. jugs, has been retained by Mr. Jenkins (No report).

#### **TR 15 SE 17 Description**

[TR 18938] An Late Iron Age site was found in May 1961 on Bridge Hill above the 200 ft. contour near the summit of the hill (and adjacent to the Study Area) where it slopes to the north-west. The area was being developed as a housing estate and the site lay in the path of a road which was being prepared. Two rubbish pits which were excavated yielded pre-Roman pottery, including a Swarling type pedestal base and a handle from a Mediterranean type imported in Belgic times, a pre-Roman bronze fibula and other bronze fragments, a broken speculum coin, Allen Class I, and domestic animal bones. The area has been completely developed, but the excavator, Dr. Mary Watson, who retains the finds, indicated the approximate find spot at TR 18875388 (No report).

#### TR 15 SE 154 Description

Hexagonal feature with dark centre, probable WW2 military installation.

## TR 15 SE 155 Description

Rectilinear enclosure with probable building foundation against its west side.

#### TR 15 SE 164 Description

Complex of linear features parallel to Roman Road, with "castellated" WW2 slit trenches, possible trackways etc.

## **5.4 Documentary Evidence**

The most important historical information has come from the Rev. F. Vine who was aware of the hexagonal feature on Star Hill and in 1887 wrote in his book 'Caesar in Kent':

"On the brow of the hill, in Bourne Park, there are what appear to be the remains of two [Roman] outposts, 400 yards apart, surrounded each by a ditch. They are of the same dimensions, and form almost perfect hexagons, each side being about 50 feet in length. They are situated in commanding positions on a hill, called locally 'Star Hill,' and would afford excellent stations for the guards placed before the gates of the camp, whence they could view the position and movement of the enemy. They are known traditionally as 'the Forts.' They are now bare of trees but have the appearance of having been planted at some comparatively recent period "(Vine 1887: 197).

In Vine's book 'Caesar in Kent' there are also some excellent maps which show the location of not one but two similar hexagonal features (Figs. 5, 40).

A critique of Vine's work by Matthew Bell has been located. Bell, a local landowner, bought Bourne House in 1845 and wrote in the Bourne Book:

"The two hexagonal enclosures, p191, surrounded by a bank, there is no 'ditch', and supposed to be 'outposts', are easily recognised: he says 'they are known traditionally as the Forts': this is another instance of a tradition known to hardly anyone. I have never heard it mentioned. But, whatever else

they may have been, they were certainly once plantations, as the trees (Scotch firs) still existed forty years ago in one of them, and a few stumps were visible in the other: the bank of the N. W. hexagon is still perfect, but after making ample allowance for the levelling effects of time and weather, it seems to me far too insignificant in its dimensions to have ever been the embankment of a Roman 'outpost' while it is exactly what one might expect to find as a bank thrown up to assist in protecting a plantation made perhaps less than 100 years ago" (Raraty M. M. pers comm 2008).

## 5.5 Geology and Topography

The British Geological Society shows that the North Downs consists of Upper Chalk, although geologically the Downs consist of the Lower, Middle and Upper Chalks. Most of the Downland in the Bridge area is underlain by the Upper Chalk, with the lower strata (Lower Chalk) outcropping on the scarp and valley slopes. The Lower Chalk has a high clay content, qualifying almost as Marl. The Middle Chalk is more pure and whiter, and being harder resists erosion better. Upper Chalk is purer still, and contains large quantities of flint which on erosion turns into Clay-with-Flints.

Water is scarce today on the Downs although it is thought there was a higher water table during the first millennium. The only river close to the study area is called the Nailbourne which runs intermittently in the valley below Star Hill flowing north-west until it becomes the Little Stour in the vicinity of Wingham. The soil on the Downs is poor, shallow and calcareous, and given the lack of water it is not surprising that the Downs have seen sparser settlement than the valleys below. Star Hill is located just some 900m south-east of Bridge between Canterbury and Dover, all of which are connected by the Roman Watling Street. The study area is situated on the south-western side of Star Hill which is the western spur of Bridge Hill, and is centred on NGR 618800 153600 (Fig. 41). The site measures about six hectares in area and is situated on sloping ground with OD heights varying between 62m AOD in the west to 65m AOD in the east (Fig. 41).





Figs. 11, 12. Four Anglo-Saxon graves cutting into the slope of the hexagon ditch. The three on the left. Graves 3, 4, 4a are running parallel with the profile of the ditch whilst Graves 4 & 4a have slightly cut into it. Indeed Grave 4a (red arrow) is unexcavated and shows that this grave was cut later than the ditch. Grave 7 (above) shows the Anglo-Saxon grave cut into the fill and base of the hexagonal ditch with the inhumation still intact in the backfill (Fig. 23).

## 6. Review of the Archaeological Fieldwork

## 6.1 Stratigraphical Deposit Model (SDM)

A common stratigraphic sequence was recognised across the site comprising topsoil/overburden (001) overlying a thin subsoil (002) and the natural Upper Chalk. The topsoil/overburden consisted of relatively loose dark brown sandy loam with frequent to moderate inclusions of sub-rounded – angular flints and fragments of chalk. The subsoil comprised moderately dense mid-brown sandy loam that not only sealed all archaeological deposits recorded on site, but also contained fragments of friable abraded pottery and charcoal. A clear line of horizon gave way to regular natural deposits of Upper Chalk where mechanical excavation ceased immediately above the chalk leaving a 15mm zone of subsoil to be removed by hand. This zone was carefully trowelled off and a careful examination and investigation for truncated features was carried out. The depth of the overlying layer varied, with the average depth of the natural geology being located between 0.40m (east) 0.60m (west) below the existing ground level. Archaeological deposits were recorded between 64.44m and 65.03m AOD. Each group of features will be looked at separately, in conjunction with the full context list set out in the final report. The Areas about to be described were investigated during Easter 2006. Earlier work is itemised in 6.6 to 6.9.

## **6.2 Area 1** (Figs. 45, 49)

Area 1 measured 15m x 10m and was located at the east end of the 2006 strip and map area (Figs 45, 49, 53). Two ring ditches, 12 inhumation graves, four pits, three cremations, 51 post holes, and a flint floor/surface were present within this area. A description of each feature is provided below, with a phased site narrative included within Section 7 of this report.

#### **Pits**

Four pits were excavated in Area 1. In the northern area of Area 1 two large pits 012/013, and 016/017 were similar in size and both contained fills comprising mid-dark grey-brown silty clay with occasional sub-angular flints, charcoal flecks, burnt daub, and bone fragments. Dating evidence from the ceramic finds is Late Bronze-Early Iron Age transition (c.750-550 BC).

Two smaller pits were located near to the centre of Area 1. These two smaller pits, with similar infill as the two larger pits were numbered 180/023 and 195/196. Both of these pits can also be dated by ceramic finds to the Late Bronze-Early Iron Age transition.





Figs. 13, 14. A view (left) of the stripped Area 1 (2006). Visible are Anglo-Saxon ring ditches and numerous post and rubbish pits. The area is on top of Star Hill with good views over the Nailbourne River valley, and to the east Watling Street. The initial stripping of topsoil by hand in Area 1 (above) revealed numerous graves and post holes.

### Post-pits and post holes

The post holes and post-pits within Area 1 formed two main clusters. Located within the northern extent of this area and to the north-east of a flint cobbled floor which is on its south-west side were a series of post-holes of a post-built structure dated by pottery typical of the Early Iron Age. The four large storage pits (page 14) were clustered close to this building as are post holes 203/204, 201/202, 195/196, 035, 200/199. The pottery types retrieved from these features which are obviously grouped together suggest a farmstead dated to the Late Bronze-Early Iron Age transition. For further hypothesis of this phase of activity on the site see the Archaeological Narrative (pages 20-5).

#### Graves

There are 13 grave cuts located within Area 1, G.36, G.37, G.38, G.39, G.40, G.41, G.42, G.43, G.44, G.45, G.46, G.47, G.58. None were excavated. Two of the graves (G.40, G.58) cut into the earlier storage pits (012/013, 016/017) dated by pottery evidence to the Late Bronze-Early Iron Age transition. Two south-west to north-east aligned barrow ring ditches 205/206 and 188/189 were found in Area 1. Ring ditch 188/189 can be dated by pottery to c.375-450AD. Inside ring ditch 188/189 were two cremations 207/208 and 020/021, again dated to the same period. For the orientation of the graves see Appendix I. The ring ditch to the north (205/206) seems not to have a grave cut. The ring-ditch 205/206 was not excavated.

### **Cremation pits**

Three Anglo-Saxon cremation pits were identified in Area 1. The Anglo-Saxon cremation pits 020/021, 181/182, 185/186 can be dated by ceramic finds to the fifth-sixth century. All were similar in size (Fig. 16) but unfortunately all had been badly damaged by ploughing. The remains of the large ceramic bowls found in all three cremations had been set slightly into the chalk surface enabling the base and part of the pot to survive. The burnt, calcified bone that did remain was retrieved as a 100% sample for future analysis. The possible cremation pits 211/212, 209/210, cannot be precisely dated but were similar in size and configuration but the ceramic evidence had been totally destroyed by ploughing. Adjacent to one of the ring-ditches was a cremation containing the remains of a small angle-shouldered bowl with horizontal grooved above shoulder decoration. Its decoration and form suggest it may be a devolved version of the early faceted carinated bowls found in East Anglia and related to similar types from the Elbe river area of northern Germany, and dated there to between c.375-450AD. Within the ring-ditch was another cremation, this time in a large globular urn decorated with 'Stehende Bogen' or 'standing arches'. The date of this cremation, which may be verified by Carbon 14 dating, is unlikely to be later than c.450-475AD.

## **6.3 Area 2** (Figs. 46, 50)

Area 2 measured 15m x 20m and was located at the east end of the 2006 strip and map area (Figs. 46, 50, 53). One ring ditch, 38 inhumation graves, three pits, two cremations, 42 post pits and holes, and a split-post palisade trench with an associated concentration of Late Neolithic-Early Bronze Age type flints were present within this area. A description of each feature is provided below, with a phased site narrative included within Section 7 of this report.

#### **Pits**

Three pits were excavated in Area 2. In the northern area of Area 2 two large pits 022/021 & 224/225, were similar in size and both contained fills comprising mid-dark grey-brown silty clay with occasional sub-angular flints, charcoal flecks, burnt daub, and bone fragments. Dating evidence from the ceramic finds is Late Bronze-Early Iron Age transition (c.750-550BC).

One pit was located near to the centre of Area 2. The smaller pit, with similar infill as the two larger pits was numbered 066/065. These pits can also be dated by ceramic finds to the Late Bronze-Early Iron Age transition.

### Post-pits and post holes

A total of 42 postholes and pits were recognised within Area 2. Seven on excavation provided no dating evidence, but of the remainder, nine can be dated by ceramic evidence to the Late Bronze Age-Early Iron Age transition. A further five can be dated, again by ceramic evidence, to the Late Iron Age to Early Roman transition; 21 were not excavated.

#### Linear features

A north-south thin curving split-post palisade trench, 107/108, 105/220, 106/221, 109/110, can be dated by the associated concentration of flint flakes to the Late Neolithic-Early Bronze Age. The construction of the palisade is worthy of note. A curving slot about 180mm wide and 110mm deep had been cut into the chalk and slots cut through the base of this trench about 60mm wide and 240mm long. These slots were where the split timber was slotted in vertically to build the solid palisade fence. To keep the timbers upright the slots were packed with clay.

#### Graves

There are 38 grave cuts located within Area 2, G.55, G.65, G.48, G.85, G.79, G.75, G.78, G.77, G.86, G.87, G.88, G.69, G.53, G.54, G.52, G.12, G.82, G.83, G.73, G.76, G.50, G.51, G.68, G.17, G.18, G.66, G.71, G.80, G.67, G.49, G.19, G.84, G.89, G.64, G.32, G.33, G.35, G.34. Five of the graves (G.54, G.50, G.66, G.67, G.89) cut the palisade trench, and three (G.12, G.82, G.49) cut Late Iron Age pits (125/126, 121/187, 149/150). For the orientation of the graves see Appendix I. None were excavated. The ring ditch (217) and grave (G.84) to the south were also not excavated.

### **Cremation pits**

Two Anglo-Saxon cremation pits were identified in Area 2. The Anglo-Saxon cremation pits 083/084, 045/046 can be dated by ceramic finds to the fifth century. Both were similar in size (Fig. 16) but unfortunately had been badly damaged by ploughing. The remains of the large ceramic bowls found in both cremations had been set slightly into the chalk surface enabling the base and part of the pot to survive. The burnt, calcified bone that did remain was retrieved as a 100% sample for future analysis. The cremation 083/084 provided 11 sherds of sand and marl-tempered ware weighing 71gms. This fabric is broadly similar to the Canterbury Saxon EMS 2 with a date range from c.450AD, but more likely c.475AD and lasting to c.625/650AD.





**Figs. 15, 16.** Excavation of the hexagonal feature and associated Anglo-Saxon graves during 2005 (left). Above an Anglo-Saxon cremation urn (046) was retrieved in Area 2 in 2006. Dating by ceramic specialists suggest from the mid 5th century.

#### **6.4 Area 3** (Figs. 47, 51)

Area 3 measured 15m x 15m and was located at the west end of the 2006 strip and map area (Figs. 47, 51, 53). Features include 27 inhumation graves, two pits, no cremations, 21 post pits and holes, and a ditch dated to the Late Bronze Age-Early Iron Age. A description of each feature is provided below, with a phased site narrative included within Section 7 of this report.

#### Pits

Two pits were excavated in Area 3. In the northern area of Area 3 one small pit (024/025), contained a fill comprising mid-dark grey-brown silty clay with occasional sub-angular and worked flint, charcoal flecks, and burnt daub with carbonised grain. Dating evidence from the lithic finds indicates Late Neolithic-Early Bronze Age.

The other pit (223/019) was located near to the centre of Area 3, and adjacent to the ditch and was cut by Grave 25. The fill of the pit comprising mid-dark grey-brown silty clay with occasional subangular flint, bone and charcoal pieces contained 22 sherds of Late Bronze Age-Early Iron Age flint-tempered ware dating from c.900-600BC.

## Post-pits and post holes

A total of 21 postholes and pits were recognised within Area 3. 16 were clustered in the vicinity of Grave 63. Nine on excavation provided no dating evidence, but of the remainder, four can be dated by ceramic evidence to the Late Bronze Age-Early Iron Age transition. A further three can be dated, again by ceramic evidence to the Late Iron Age to Early Roman transition, five were not excavated.

#### Graves

There are 27 grave cuts located within Area 3, G.29. G28, G.26, G.25, G.13, G.16, G.30, G.27, G.24, G.23, G.22, G.21, G.14, G.15, G.31, G.90, G.66, G.61, G.62, G.63, G.81, G.74, G.59, G.60, G.72, G.56, and G.57. One of the graves (G.25) cuts the prehistoric ditch, and also cuts a Late Bronze Age-Early Iron Age pit (019/223). For the orientation of the graves see Appendix I. Four graves (G.16, G.15, G.14, G.62) were excavated. The prehistoric ditch (015, 018, 014, 015) was also completely excavated.

#### Linear features

A northwest-southeast orientated shallow pre-Roman ditch was completely excavated. The fill (015, 120) comprised mid orange-brown silty clay, with dark brown clay mottling. Occasional rounded stones and charcoal flecks were present throughout the fill, which also produced flint-tempered pottery dating to the Late Bronze Age-Early Iron Age (c.900-600BC) It probably represents the Late Bronze Age-Early Iron Age farmstead's enclosure ditch which is located at the eastern end of the site.

#### **Cremation pits**

No Anglo-Saxon cremation pits were identified in Area 3.

### **6.5 Area 4** (Figs. 48, 52)

Area 4 measured 15m x 10m and was located at the west end of the 2006 strip and map area (Figs. 48, 52, 53). The area included 15 inhumation graves, three pits, one cremation, six post pits and holes, and two linear features were present within this area, which are detailed below. A description of each feature is provided, with a phased site narrative included within Section 7 of this report.

## **Linear Features**

Two linear features were recorded within Area 4. Both are of some importance. The prehistoric linear ditch had a maximum width of 1.08m, whilst the hexagonal feature was slightly larger at 1.97m at its maximum extent. The prehistoric ditch is dated by pottery retrieved from the sieved infill to the Late Bronze-Early Iron Age transition, and is likely to be the farmstead's enclosure ditch.

The building which is associated with the ditch is the rectangular post-built structure, probably a Late Bronze-Early Iron Age farmstead and is located at the eastern end of the strip and map area. The ditch of the hexagonal feature cuts the prehistoric ditch and in turn seven Anglo-Saxon graves cut the hexagon's ditch. An unusual cremation burial (174/173), enclosed within a substantial four-post structure is likely to have been positioned deliberately in the area where the two ditches cross. The hexagonal feature is unique, and for that reason is a dilemma. Further discussion on this feature is to be found on page 25.

#### Post pits and postholes

Six post pits and postholes were recognised with Area 4, two were not excavated whilst the four that were are part of a four-post structure enclosing a cremation dating to about c.475/500-625AD. The four-post structure was about 1.60m square with a central cremation urn partly cut into the chalk and reduced by ploughing to 26 sherds weighing 220gms. At the Anglo-Saxon cemetery at Apple Down in Sussex the excavators (Down & Welch 1990: 25-32) reconstructed the structure over cremation 146 as having corner posts supporting a pitched thatched roof with perhaps side walls of planking or wattle and daub to protect the inside and to brace the structure. Comparable structures are also known from earlier and contemporary sites on the continent (Lucy, S.J. 2000).

#### Graves

There are 15 grave cuts located within Area 4, they are G.1, G.2, G.3, G.4, G.5, G.6, G.7, G.8, G.9, G.10, G.11, G.70, G.96, G.95, G.4a. Twelve were excavated and the results of the excavation and their impact on the hexagonal feature can be found on page 22. Two graves G.96 and G.95 cut the fill of the ditch of the hexagon but were not excavated (Fig. 55).

#### **Cremation pits**

See 'Post pits and postholes' (above) for discussion of the one cremation burial found in this area.

#### **6.6 The 2003 investigation** (Fig. 55)

An area 10m x 6m (Trench A) was excavated in the north-east corner of the hexagonal feature. Depth of topsoil above the natural chalk was about 0.25m. The topsoil (001) was a dark brown humic soil progressively getting grey/white with numerous chalk nodules, flint pieces and chalk fleck inclusions. Two probable Anglo-Saxon graves were found in the north-west corner, but not excavated. A single post-hole (03/2008) was sectioned and dated by flint fragments to the Neolithic/Bronze Age. The surface of the chalk was scarred with a number of plough-marks. Worked flint was retrieved on the surface of the chalk and again dated to the Neolithic/Bronze Age. The specialist report suggests that the manufacture of working blanks to make axes- termed a "Factory Site" could have been taking place at this location (Hardaker & MacRae pers. comm). Trench B (4x3m) was excavated and found to be overlaying the western corner of the hexagonal feature exposing- as in Trench A the ditch of the hexagonal feature. The ditch in this trench is a double ditch whereas the ditch in Trench A is a single ditch. However, the fill of the ditches is comparable with white/grey chalk earth mix (102), some flint, and chalk granules leading to the lower infill of the ditch (104) of a chalk/soil mix with inclusions of chalk pieces and granules. No organic material or soil was found in or at the bottom of the ditch. Six sherds of pottery (45gms) were retrieved from the chalk surfaces adjacent to the ditch in Trench B and are flint-tempered and can be dated to 150-50BC. One sherd of Early Medieval pot was retrieved from the topsoil and can be dated to c.1075-1100AD. In the ditch 14 sherds (72gms) of flint and grog-tempered ware were retrieved with a spread of dates from 150BC to AD50. One sherd of Medieval pot was found in the lower levels of the turf above the ditch and can be dated to c.1200-1250/75 AD.

With two points of the hexagon located it was a simple matter to locate the centre of the hexagonal

feature and where stripping of the turf revealed a circular pit about three metres in diameter cut into the chalk. Five sherds (40gms) of pottery dating from 150BC to AD1525 were recovered from the feature.

### 6.7 The 2004 investigation (Fig. 55)

An area 7m x 7.5m (Trench D) was excavated in the north area of the hexagonal feature. The reason for investigating this area was to see if any archaeological activity had taken place within the perimeter of the hexagonal ditch. Depth of topsoil above the natural chalk was about 0.26m. The topsoil (001) was a dark brown humic soil progressively getting grey/white with numerous chalk nodules, flint pieces and chalk fleck inclusions. Five post-holes or pits were revealed. All were excavated, one post-hole (04/010) contained prehistoric datable material. The 37 sherds (470gms) were flint-tempered ware from the Late Bronze/Early Iron Age and dating from c.900-600BC. Most of the sherds were conjoining shoulder sherds from a fairly large-diameter coarseware storage-jar or cooking pot. Three other pits had dateable material from both World Wars.

## **6.8 The 2005 investigation** (Fig. 56)

Further work was undertaken in 2005 on the south side of the hexagonal feature where almost immediately an east-west orientated grave cut into the chalk was revealed with a number of silver Anglo-Saxon 7th century coins exposed in the grave fill. Further work revealed a possible family group of twelve graves orientated to the hexagonal feature with the fill of graves G.3, G.4, G.4a, and G.7 cutting the fill of the ditch of the hexagonal feature (Fig. 23). Just to the east a further row of six graves were found. The graves were an obvious target for treasure hunters and full excavation proceeded with the appropriate licence obtained. For a catalogue of finds see Appendix I.

### 6.9 The Roman road investigation

The Roman road from Canterbury to Dover was investigated in the summer of 2004-2005. The road runs parallel to the main road from Canterbury to Dover and forms the eastern limit of the study area. A full report is forthcoming on the Roman roads in Kent of which this road will be part.





Figs. 17, 18. The 2005 investigation revealed a number of Anglo-Saxon graves (left). Some contained grave goods including a gold scutiform disc pendant (above) and over 60 silver pennies. The coins have been dated by the British Museum to the late 7th century and the gold pendant is of the same period.

## 7. Archaeological Narrative

The purpose of this archaeological narrative is to draw the various strands of evidence together into a coherent picture. The presence of archaeological features, their characteristics and contents enable us to propose a provisional chronological matrix for the site, although it should be mentioned at this point that this may be subject to revision following the preparation of additional specialist assessments. Section 7 was written from data provided by Nigel MacPherson-Grant and Gareth Williams.

The original intention of the research excavation was to examine the nature, and determine the date of, a previously un-examined hexagonal ditched enclosure recorded via aerial photography. In addition to the hexagon, the site produced evidence of multi-period activity, earlier prehistoric and up to post-Roman activity. Overall, 11 phases were recorded – 5 implied (represented by residual or intrusive material only) and 6 site-phases (represented by archaeological features). The latter are: Late Neolithic-Early Bronze Age, Late Bronze-Early Iron Age, Late Iron Age-Early Roman, Mid Roman (the hexagon), Early-Mid Anglo-Saxon and Late Post-Medieval.

## 7.1 Phase 1- Late Neolithic/Early Bronze Age (Fig. 53)

Though earlier Neolithic activity may be represented in the flint scatter and one or two possible sherds collected during the excavation, the first firm evidence is two pits containing Late Neolithic/Early Bronze Age type flints (Site-Phase 1). Possibly contemporary with this is a thin curving split-post palisade trench and an associated concentration of flint flakes. In view of the frequent regional occurrence of Bronze Age burial ring-ditches associated with earlier, Neolithic, activity and, here, in view of the nearby concentration of MBA and possibly earlier BA barrows, it is not entirely unrealistic to assume that this concentration could have been preceded here by some sort of non-secular later Neolithic activity. However, this possibility requires greater confirmation.

#### 7.2. Phase 2- Late Bronze/Early Iron Age (Fig. 53)

If the above potential is correct, the area may have remained marginal and reserved for burial and any other non-secular activities throughout the rest of the second millennium BC. Only at some time in the earlier first millennium, during the Late Bronze/Early Iron Age transition, was there any further structural activity, with the establishment of a farmstead (Site Phase 2). Other broadly contemporary regional examples are enclosed – and a single lightweight pre-Roman ditch towards





**Figs. 19, 20.** The split-post palisade fence/ditch feature dating from the Late Neolithic-Early Bronze Age can be seen snaking across the site in Area 1, and is cut by Anglo-Saxon graves (left). Above a Late Bronze Age/Early Iron Age post hole with the post-packing and sherds of pottery still in situ.

the western end of the site may represent the farmstead's enclosure ditch. Irrespective, within the area selected for occupation, at least one rectangular post-built structure was built and provided with an area of flint cobble paying on its south-west side. Whether this paying was in front of a lived-in building or formed part of a vard surface associated with animal byres, is uncertain. Sherds from well-paralleled fineware bowl types were found in some of the building's post-pits. Four large storage-type pits were clustered close to this building – and at least some of the postholes and smaller pits scattered across the site are contemporary. Interestingly, one or two of these pits, and a small quantity of features and residual material, also produced pottery typical of the Early Iron Age. The conjunction of both pottery types, from among a series of pits that are obviously grouped together, in the same part of the site, sharing the same size and therefore likely function, and with broadly similar wear patterns, implies contemporary usage. The quantities of definite EIA-type pottery are comparatively low and there are no indicators implying later longterm EIA activity - at least from the excavated area. It is not possible, with the available range of evidence, to determine how long the LBA/EIA settlement had been in existence prior to the arrival of IA-type pottery – but the above does imply that, towards the end of the LBA/EIA occupation, continental-style EIA ceramic types were adopted and used for a short time before the site was abandoned. It is not present in the material from the LBA/EIA settlement sited on the Kingston Downs further south along the chalk trackway (Bridge By-pass Site 5; Macpherson-Grant 1980, Fig.1). It is not obviously present, but may be implied, at the dual- or multi-phase settlement at Coldharbour Lane (op.cit, Site 8) – on slightly higher ground only three-quarters of a mile north-east of Star Hill. Elements from Coldharbour suggest it was partly contemporary with Star Hill. It may have either replaced it or been concurrent – and a chronology-and land-use based assessment of these three sites is now required. In the interim, a reliable settlement start-date for Star Hill is difficult to determine, but cessation around c.550 BC or shortly after is likely, and a tentative date between c.750-550 BC is suggested for this site-phase.

### 7.3 Phase 3- Late Iron Age/Early Roman (Fig. 54)

There is no further activity until the Late Iron Age. A few small pits and some tentative residual material may be of indigenous (pre-'Belgic') LIA date (Site-Phase 3). This likelihood is strengthened by the recovery of an early-style grog-tempered 'Belgic'-style storage jar rim - formally related to similar types made in the indigenous flint-tempered tradition. By comparison with material from Bigbury, near Canterbury, this indicates a date within the first half of the first century BC. The nearby Bridge Hill LIA settlement (a relatively short distance east around the spur of Bridge Hill) produced both indigenous LIA and 'Belgic'-style LIA pottery, together with an early Dr1A amphora and a potin coin. The currency of that settlement appears to be from c.150/100 BC through until the Early Roman period. Star Hill also produced a small number of 'Belgic'-style sherds and 2 Gallo-Belgic imported sherds – but insufficient to suggest occupation in the immediate locale. Though most of these sherds represent small intrusive or residual elements, a few are relatively large and fresh enough to still suggest discard not too far from a settlement, or at least within its periphery. The Star Hill evidence suggests no obvious activity before c.75 BC - and possibly later than Bridge Hill. With Bridge Hill so close, it is a little unlikely that another farmstead would be established just round the corner. It is more realistic to see the Bridge Hill settlement establishing itself, growing in relative wealth, and taking in more adjacent land – in this case the Star Hill area. The recovered ceramic from Bridge Hill indicates cessation (or settlement shift) by the earlier second century AD. The same trend appears to apply at Star Hill – strengthening the possibility that both sites could be part of the same settlement and sharing the same basic history. At Star Hill, to date, there is little or no Roman pottery dated later than c.125/150 AD – despite its proximity to the Roman road between Dover and Canterbury.

## **7.4. Phase 4- Mid Roman** (Fig. 55)

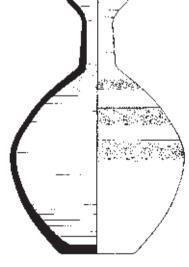
The creation and use of the hexagon-shaped enclosure is represented by Site-Phase 4.

It post-dates the potentially LBA/EIA ditch at the western end of the site. In addition, its neat rational form suggests it is unlikely to be of pre-Roman Iron Age date. It could be Caesarian, but that would mean imposition into land possibly farmed by the Bridge Hill LIA settlement. Not impossible - but its form does not automatically suggest a military function - the only realistic explanation for its presence during that phase of Roman activity. Since it clearly pre-dates the Anglo-Saxon graves that cut into its ditch, its construction has to be of Roman date. Although the stripped area was only sampled, not completely excavated, there are very few features that can be reasonably (not absolutely) allocated to this phase. Of the pottery, the few sherds that suggest onsite activity, are exclusively of first century BC date. The remaining Conquest-period and Early Roman sherds are all small and abraded. Their low quantities and condition suggests derivation from manure spreads and implying that the immediate locale was maintained solely as arable land throughout most of the first century AD. With only a few sherds of specifically Early Roman or Mid Roman pottery, and none apparently later than c.125/150 AD – a change in land-use is indicated, a change that appears to have remained virtually constant until the Early-Anglo Saxon use of the locale as a cemetery. It is strongly suggested that it is within this temporal space that the hexagon was constructed sometime after c.150 AD. It was not entirely excavated so it is not certain whether it contained any internal structures, but its shape does not suggest a utilitarian function – more certainly a non-secular, perhaps memorial or cremation-type use on reserved or marginal land.

## 7.5. Phase 5- Early/Mid Anglo-Saxon (Fig. 54)

The topographic conjunction of the hexagon and the Anglo-Saxon cemetery (Site-Phase 5) is unlikely to be coincidental – though the fact that Saxon graves cut the hexagon's ditch confirms that by the mid or later fifth century AD any visible traces of the ditch were probably slight. Several of the graves are almost exactly aligned with its south-eastern side, reinforcing the likelihood that their positioning was influenced by a still visible bank. An unusual cremation burial, enclosed within a substantial 4-post structure, were almost certainly similarly influenced – as may be a thin scatter of other graves from the main cemetery area. Overall, and including the latter graves, there are at least 4 main alignment trends. Of these, three can only be placed broadly within the fifth-earlier seventh centuries (Site-Phase 5A). A fourth, represented by a closely-clustered group partially cutting the hexagon and neatly aligned east-west, is of late seventh century date (Site-Phase 5B). For 5A – there are obvious family or necessity grave groups that include mixed-age and child clusters and, towards the east end of the stripped area a string of three south-





**Figs. 21, 22.** Students of the KAFS recording features as part of their course work. A student's drawing (above) of one of the 7th century pots (Grave 11. Fig. 79)).

west to north-east aligned barrow ring-ditches. Interspersed amongst all these are a scatter of heavily plough-damaged urned cremation burials. Without further excavation it is not possible to say which are the earliest graves – but there are indications. Adjacent to one ring-ditch was a cremation contained in a small angle-shouldered bowl with horizontal grooved above-shoulder decoration. Its decoration and form suggest it may be a devolved version of the early faceted carinated bowls found in East Anglia and related to similar types from the Elbe river area of northern Germany – and dated there to between c.375-450AD.

The implication is that some East Anglian Saxon villages pre-date c.450AD. Such a claim is not made for Star Hill, but the basic similarity of type does suggest an early date – around AD450 or shortly after. Within the same ring-ditch, and probably pre-dating it, was another cremation, this time in a large globular urn decorated with *'Stehende Bogen'* or 'standing arches'. The type of decoration is not unusual but the fabric is profusely coarsely sanded, more so than most Star Hill cremation pots and very similar to the fabrics of some of the earliest Saxon pottery from the Canterbury sequence which, if not close to c.450AD, are unlikely to be later than c.450-475 AD. The likelihood that the Star Hill cemetery began around c.450AD, or shortly after, is quite strong. Site Phase 5B is at the other end of the cemetery's currency. Four female graves all produced Anglo-Saxon silver pennies datable to AD675-690. One of these contained a Frankish-style wheel-thrown roulette-decorated bottle, possibly from a Kent workshop. In addition, at least two of the graves were dug at the same time. Both contained deliberately placed deposits of prehistoric sherds, with a conjoin linking both graves – presumably derived from disturbing an earlier feature and re-buried as an act of ancestor honoration or pacification.

### 7.6. Phase 6 Late Post-Medieval (Fig. 55)

Site-Phase 6 is antiquarian, represented by a Roman phase central pit excavated within the hexagon, and containing a mixture of residual and contemporary finds, pottery, tile, coal – and presumably a by-product of antiquarian inquisitiveness during the late 18th/19th centuries.



**Fig. 23.** Conclusive evidence that the hexagonal feature pre-dates the Anglo-Saxon graves. Here Grave 7 has been cut into the fill of the earlier hexagonal feature ditch. The grave cut is just below the base of the ditch (Fig. 57), but the skeleton and grave goods are above the base of the ditch and in the fill of the ditch. They have survived intact.

## 8. The hexagonal feature

The NMR Monument Report (TR 15 SE 154) states that at OSGB Grid Reference TR 1861 5368 (centre point) a "Hexagonal feature with dark centre seen on air photograph. Possibly a World War II military installation". (File Number AF1077575 RCHME: Kent Mapping Project, TR 15 SE).

However, the Rev. F. Vine was aware of the hexagonal feature in 1887, and wrote in his book 'Caesar in Kent':

On the brow of the hill, in Bourne Park, there are what appear to be the remains of two [Roman] outposts, 400 yards apart, surrounded each by a ditch. They are of the same dimensions, and form almost perfect hexagons, each side being about 50 feet in length. (Vine 1887: 197).

Excavation of the adjacent Anglo-Saxon graves in 2005 showed that at least seven graves are cut into the ditch fill of the hexagonal feature (Figs. 23, 55, 56) and that the feature pre-dates the cutting of these graves in the 7th century AD.

Vine measured the sides of the hexagonal feature and found they were "about 50 [Imperial] feet". On measuring the hexagonal feature in 2004-5 with an Electromagnetic Distance Measurer (EDM) it was found that the outer sides of the ditch were 18.10m long which is about 60 pM (Roman feet, the pes Monetalis of 296mm length). There are six sides and six angles of 60 degrees making 360 degrees. The width of the ditch is 1.97m which is 6.66 pM, and the



**Fig. 24.** A vertical aerial photograph of Star Hill taken on 5th Feb 1982 (NMR 2101/179: TR 1853/8). The hexagonal feature can easily be seen. It is thought that it may have had an internal bank but excavation failed to reveal any evidence. To the left (north) can be seen numerous Anglo-Saxon ring-ditches with internal burials whilst at the top of the photograph (east) are the remains of at least 12 ploughed-out round barrows.

internal length is 15.40m which is about 52 pM, and for whatever reason is one of the classic lengths of measurement used in Roman building projects (Wilkinson 2008). The hexagon has been laid out on the sloping sides of Star Hill and the surveyors compensated for the slope to produce an almost perfect hexagon (Fig.24). The hexagon side is orientated at 351 degrees, nine degrees west of True North and could reflect movement of True North over time, thought to be about 230 years a degree giving a postulated date of about 62BC-AD50 for the construction of the hexagonal feature. Euclid, the famous Greek mathematician wrote in his *Euclid's Elements Book IV Proposition 15* that to inscribe a hexagon you need to construct a regular hexagon in a circle using a compass and straightedge. To start you need to draw an initial circle A. Picking up

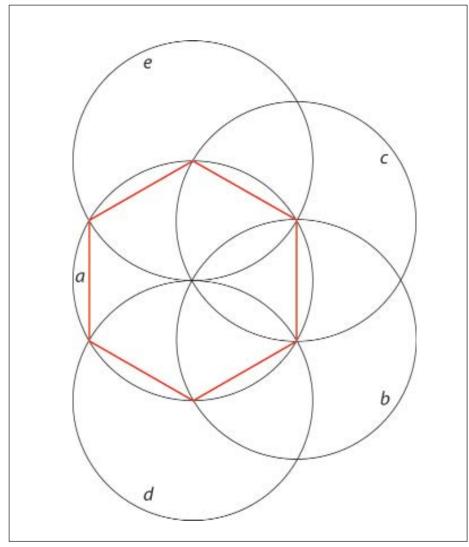


Fig. 25. A hexagon can be described as: a closed two-dimensional polygon bounded by six straight line segments. The area of an equilateral hexagon is 2.5981 times the length of one side squared. Euclid's exact text on how to construct a hexagon is: "To inscribe an equilateral equiangular hexagon in a given circle. To start you need to draw an initial circle A. Picking up any point on the circle as the centre, draw another circle B of the same radius. From the two points of intersection, draw circles C and D. Finally draw circle E centered on the intersection of circles A and C. The six circle-circle intersections then determine the vertices of a regular hexagon.

any point on the circle as the centre, draw another circle B of the same radius. From the two points of intersection, draw circles C and D. Finally draw circle E centered on the intersection of circles A and C. The six circle-circle intersections then determine the vertices of a regular hexagon. It can be seen from Euclid's formula that to construct a hexagon in the field is a difficult proposition and can only be undertaken by a surveyor with ability. Note that the measurements of the hexagonal feature at Star Hill are Roman (Fig.55).

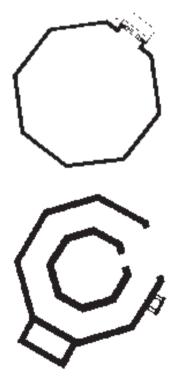
The use of the hexagon as a sacred feature is not unknown from the Roman world. The Sanctuary of Jupiter Heliopolitan at Baalbek in Syria has a Hexagonal Court in front of the Temple of Jupiter of which the sides of the internal hexagon measure 52 *pM* (Roman feet), the same as the internal measurements of the hexagonal feature at Star Hill. Its worth noting the observations of Friedrich Ragette, Professor of Architecture at the American University of Beirut. Writing in 1980 he says of the Hexagonal Court at Baalbek: "Next to the circle or octagon, the hexagon is the most balanced and centred space configuration" (Ragette 1980).

The Temple of Vespasian and Titus in Rome has a hexagonal plan, and was built as close as you could get to the Temple of Jupiter. The mausoleum of Diocletian in the Palace of Diocletian at Split is a sacred hexagonal building sitting on a slightly larger hexagonal plinth, and opposite and facing the mausoleum is a temple dedicated to Jupiter which again measures 52pM (Roman feet) in length (Sear 1982). In France at the Roman villa of Montmaurin Hte-Garonne a smaller hexagonal building is thought by the excavator Fouet to have been a sacred water feature just outside the main entrance of the palatial villa (Fouet 1969). The Roman villa at Keynsham had an exotic hexagonal chamber, the function of which is unknown. In Sussex at Bignor Roman villa a large internal public area (Room 7) contains a large hexagonal stone water basin with fountain. The surrounding mosaic shows Jupiter as an eagle abducting Ganymede, a Prince of Troy (Russell 2006). The connection between hexagonal structures and the cult of Jupiter is shown by these examples to be worthy of note.

Polygonal shrines in the Roman period in Britain fall into three groups: simple irregular polygons, simple regular polygons, usually hexagons or octagons, and polygonal buildings with two concentric spaces- the polygonal form of the ubiquitous Romano-Celtic temple. Examples include the hexagonal Romano-Celtic temples at Collyweston and Brigstock (Rodwell 1980), and the octagonal tomb/temple recently found at Colchester.

Sam Lucy in her book 'The Anglo-Saxon Way of Death' notes that around a quarter of all known Anglo-Saxon burial sites have a relationship with an ancient monument, mostly Bronze Age round barrows, but Neolithic, Iron Age and Roman were also made use of. Lucy also notes that this practice gained in popularity during the 7th Century. The hexagonal feature on top of Star Hill, with its commanding view of the Nailbourne valley was probably undateable by the Anglo-Saxons, but obviously important enough to utilise as a focus for burial. At Star Hill the hexagonal earthwork was clearly a focus for the 7th century Anglo-Saxon burials which respected the ditch of the hexagonal feature and were arranged around the periphery of this earlier feature.

It may be that some Roman sites were already considered sacred and a viable explanation could be the 'strategic' burial of the Saxon dead in order to legitimise an existing social order or consolidate a claim for that particular territory (Bell 2005).





**Fig. 26.** Sacred polygonal features dating from the Roman period are found throughout north-west Europe. Hexagonal temples are found at both Collyweston and Brigstock whilst in mainland Europe there are over fifty known polygonal temple sites, some hexagonal and others octagonal. Here at Alesia in France is a sanctuary to Apollo (above) whilst at Alise-Sainte-Reine (left, below) and Niederbronn (left, above) are other polygonal structures.

## 9. Archaeological Finds

#### 9.1 Artefact finds

This report on the artefacts was compiled by Gareth Williams from the British Museum. It is understood that a full report on the small finds from Star Hill will be undertaken by the staff of the British Museum for the final report.

A total of eleven Anglo-Saxon graves were discovered in the fill of the ditch of a hexagonal feature believed to be of Roman date. All of the burials were oriented east-west with the head at the west end, and most had grave goods. Four of these graves (graves, 1, 5, 6 and 9) contained coins. In each case the coins came from female burials, in which the grouping of the coins suggested that they had been contained in a bag, which had been placed at the woman's feet along with other grave goods. One of the graves (Grave 5) which contained coins also contained a scutiform disc pendant. A variety of other material was found in these four graves, as well as in those graves which contained no precious metal objects. In the opinion of the excavators, this group of graves represent a distinct group within the cemetery.

Each of the four graves containing coins, each a separate Treasure case, has been assigned a separate sub-number within the overall administrative number 2005 T115, as T115 a-d.

All of the coins were early Anglo-Saxon pennies (sometimes misleadingly known as *sceattas*), and each grave contained a mixture of coins of Series A and B. These represent the primary phase of the Anglo-Saxon penny coinage, from c. AD680-690. The metal content of these particular coins has not been tested, since a large enough sample of similar material has previously been tested that we can be certain that the coins will have a very high silver content, well in excess of the 10% threshold required by the Treasure Act. In each case, there are more than 2 coins, as required by the terms of the Act. In the case of Grave 5 (T2005 115b), the scutiform pendant would constitute a case of potential Treasure in its own right, since it has a precious metal content of around 95% (see attached report). This type of pendant can also be dated to the 7th century, consistent with the date of the coins, and in each case the remaining objects are of the same date, leaving no doubt that they should be associated.

There is no surviving evidence through which the original ownership of the objects can be traced, and since the coins in all four cases, and the brooch in case T2005 115b, exceed the threshold of 10% precious metal and are more than 300 years old, it is therefore my opinion that each of these cases represents a *prima facie* case of Treasure under the terms of the Treasure Act (1996). The other non-precious material listed in each case should also be considered as Treasure by association under the terms of the Act.

#### 9.2 Coins

All of the coins were early Anglo-Saxon pennies (sometimes misleadingly known as *sceattas*), and each grave contained a mixture of coins of Series A and B. These represent the primary phase of the Anglo-Saxon penny coinage, from c. AD675-690. Series A is attributed to the kingdom of Kent, and Metcalf (1993, 85-6) suggests that it most plausibly dates from the reign of King Hlothere (673-85). Series B is also well-known from Kentish graves, and is sometimes found alongside Series A, but the distribution of single finds suggests that this series is more likely to have been issued north of the Thames, either in Essex or East Anglia. The series subdivides into four main groups, which again subdivide, but all of the coins from Bridge which can be certainly identified fall into group BI, which appears to be broadly contemporary with Series A, although it may extend a little later (Metcalf 1993, 94-102). The established classification within Series B (Rigold 1960-61) is overly complicated. Metcalf (1993, 94) notes the existence of over

150 recorded examples across the whole of Series B, from an estimated total of 150 obverse and 300 reverse dies. The 33 (actually 64 were delivered to the British Museum-PW) examples from Bridge, all apparently within group BI, represent a substantial addition to the corpus (especially as other single finds have emerged since Metcalf's study), and prompt a re-examination of the series and its internal classification, and this work is currently ongoing, and will be presented in full at a later date. For now it is sufficient to note that there are few if any die links within each of the grave assemblages, or between the different graves. This reinforces the impression given by Metcalf's figures that this is a very substantial coinage, and implies fairly extensive use and circulation of coinage in the region at the time that the coins were deposited. The similarity of the composition of the groups of coins from all four graves suggest that the burials took place within a fairly short space of time.

## 9.3 Disc-pendant

In addition to coins, grave finds also contained a base-gold scutiform pendant, weighing 3.68g. Non-destructive X-ray fluorescence analysis of the surface carried out at the British Museum by Susan La Niece and Antony Simpson, indicated a gold content of 46-48%, a silver content of 47-49%, with a little copper.

Scutiform disc-pendants are known from Anglo-Saxon graves from the sixth and seventh centuries. Hines (1984, 221-35) has suggested that there may have been a gap in production and use from c. AD560-650, but Geake (1997, 38) has questioned this. However, a pendant of this type is certainly consistent with the late seventh-century date suggested by the coins, and the use of base-gold also has parallels with the general reduction in the gold content of the coinage in the course of the century although pendants which can be firmly dated as late as this are rare. Scutiform pendants are typically associated with female burials, and may have had an amuletic function as 'symbolic shields' (Meaney 1981, 159-62; Geake 1997, 38-9).

#### 9.4 Lithic assemblage

Quantification and analysis of flint artefacts has been completed by Chris Butler, Terry Hardaker, and R J MacRae. An interim assessment can be found in the Appendix IV.

### 9.5 Ceramic assemblage

A full assessment of the ceramic assemblage by Nigel MacPherson-Grant is with the Site Archive. Synthesis of this material is provided in Appendix III. Pottery drawings are nearing completion- see Fig. 79.

#### 9.6 Environmental evidence

Quantification and analysis of the environmental evidence has been disappointing due to the alkaline nature of the deposits, but good results may be forthcoming from the prehistoric pits.

## 9.7 Grave goods, discussion of types

Grave goods are in the care of the British Museum and a full assessment of all findings will form part of the final report. A full list of grave goods and small finds is provided in Appendix I.

#### 9.8 Human and animal bones

Few bones were retrieved from the chalk matrix of the graves, but information on the sex and age, including isotope studies, based on the surviving bones will form part of the final report.

## 9.9 Summary of the Site Archive

In addition to the artefact assemblages mentioned above, the Site Archive includes: Correspondence, 546 digital photographs, 128 35mm colour slides, 79 A3 permatrace site drawings of plans, and sections. Context register. A full archive catalogue will be prepared for publication pending receipt of final specialist reports.

## 10. Recommendations for further archaeological assessment

## 10.1 Statement of potential

The archaeological excavations at Star Hill, Bridge have confirmed the presence of numerous 5th-7th century Anglo-Saxon graves impacting on an earlier Roman hexagonal feature. Also revealed was an extensive multiphase site of some magnitude. If an opportunity offers itself it would be productive to carry out ( with the permission of English Heritage and the landowner) a Level 3 survey including a full geophysical survey on Star Hill and its environs.

It was not unusual for the Anglo-Saxons of the 5th to 7th centuries to seek the proximity of earlier monuments when burying their dead. But the 5th century cremation burials retrieved from Star Hill are unusual in East Kent and need further study. The form and decoration of the surviving cremation urns, grave goods and stray finds can be dated to the 5th-7th centuries and are of importance given how scarce such material is in Kent. Furthermore the un-excavated areas of Star Hill have enormous potential to shed more light on the as yet poorly understood transition from Late Roman Britain to Early Anglo-Saxon England.

It has been noted from work undertaken for the Research Design (Appendix V) that the Nailbourne valley has the potential to reveal other areas of archaeological activity including Anglo-Saxon settlements, some of which have been discovered in recent KAFS field-walking exercises. However, before further work is undertaken in the Nailbourne environs it is essential that all of the various local archaeological factions agree to a regional Research Design monitored by Canterbury City Council, and English Heritage.

#### 10.2 Preparation of Full Report & Publication

A full report will be produced within five years of this post-excavation assessment. Within this time the Kent Archaeological Field School and English Heritage will discuss and agree with the Canterbury City Archaeologist the scope of the final report, the format and destination of subsequent publications arising from excavation and post-excavation work on the study site.

## 10.3 Conclusions

The archaeological excavations at Star Hill, Bridge have been carried out in accordance with a written Project & Research Design (Appendix V). Archaeological remains present within the study site have been assessed and reported, enabling preservation by Scheduling (Fig. 41) and by record. A wealth of important data on the formation of human activity in the landscape has been retrieved, and an opportunity realised to teach a future generation of archaeologists the importance of landscape interpretation and Anglo-Saxon cemetery studies.

## 10.4 Acknowledgments

The Kent Archaeological Field School would like to thank Vanessa McDonald and her family for unstinting support, for Maurice Raraty of the Bridge and District History Society, and to Peter Kendall and Judith Roebuck of English Heritage. Thanks are also extended to Ges Moody and Emma Boast for site survey and illustrations, to Chris Fern, Fern Archaeology, and James Madden for illustrations, and to the staff and students of the KAFS and various universities, both here and abroad, who carried out the archaeological fieldwork. The fieldwork was directed by Paul Wilkinson aided by Ronnie Jenkins, Louise Cooke, Andy Stephney, Catherine Wilkinson, Mick Butler and Mike Robson.

Dr Paul Wilkinson June 2008

## 11. References

Bell T. 2005 The Religious Reuse of Roman Structures in Early Medieval England.

Down A. & Welch M. 1990 Chichester Excavations VII: Apple Down and the Mardens.

Fouet G. 1969 La villa gallo-romaine de Montmaurin.

Lucy S. 2000 The Anglo-Saxon way of Death.

Macpherson-Grant N. 1980 Archaeologia Cantiana Vol. XCVI.

Percival J. 1976 The Roman Villa.

Ragette F. 1980 Baalbek.

Rodwell W. 1980 Temples, Churches and Religion: Recent Research in Roman Britain.

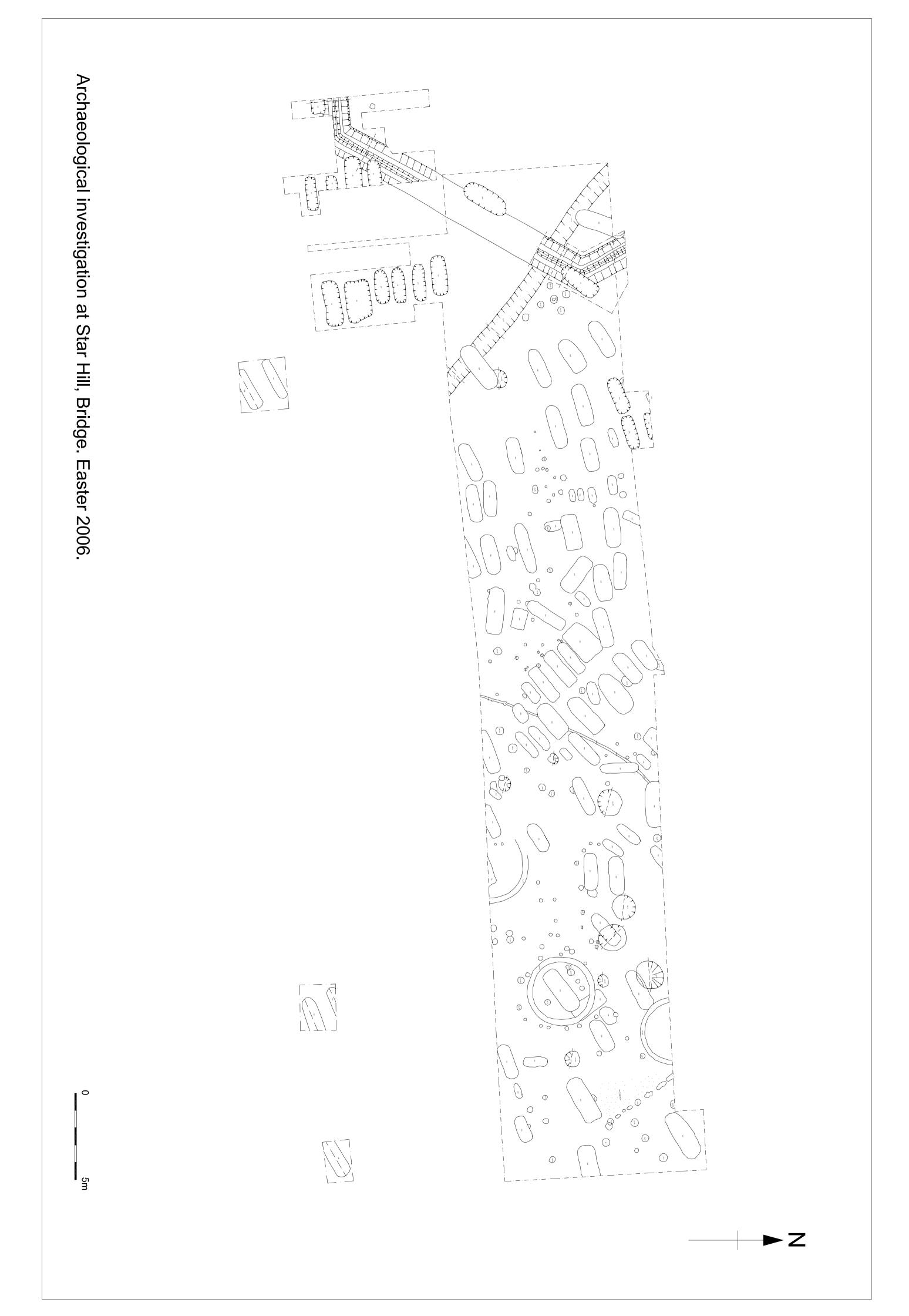
Russell M. 2006 Roman Sussex.

Sear F. 1982 Roman Architecture.

Vine F. (Rev) 1887 Caesar in Kent.

Wilkinson P. 2006-8 Kent Archaeological Field School Newsletters.

Wilkinson P. 2008 Investigation of the Roman Barn at Hog Brook, Teynham, Kent.



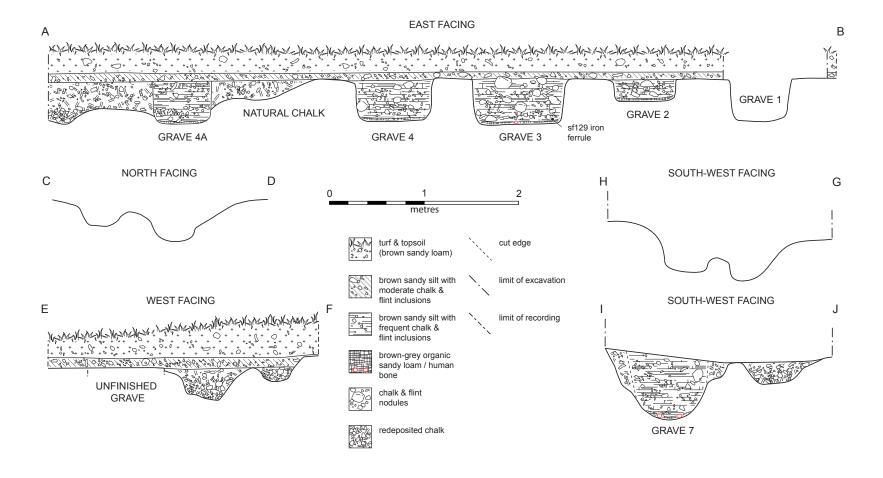


Figure 57. Sections from 2005 Investigation

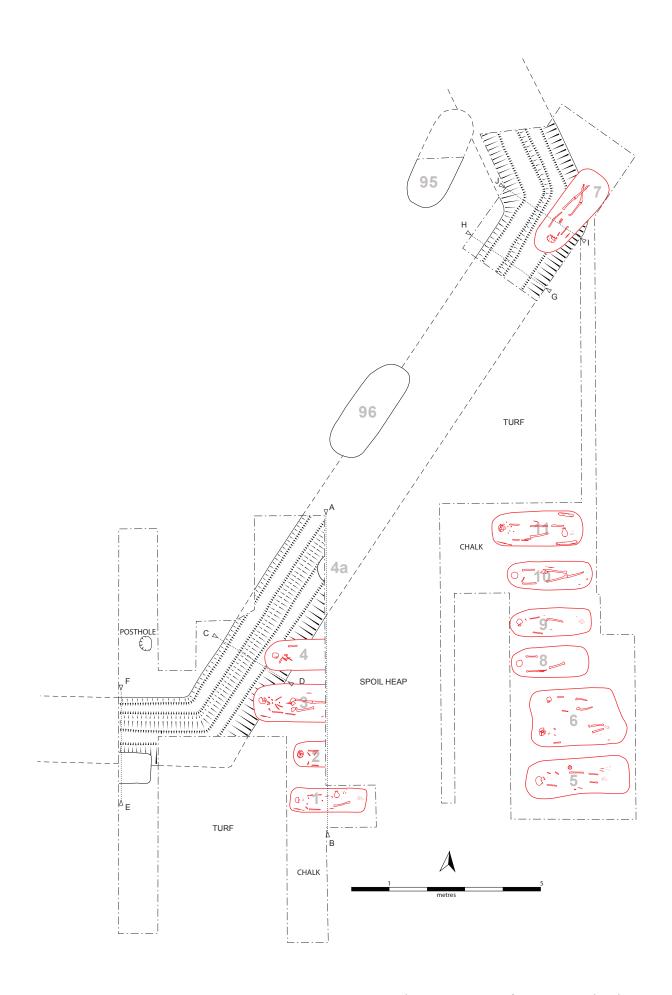


Figure 56. Area of 2005 Investigation

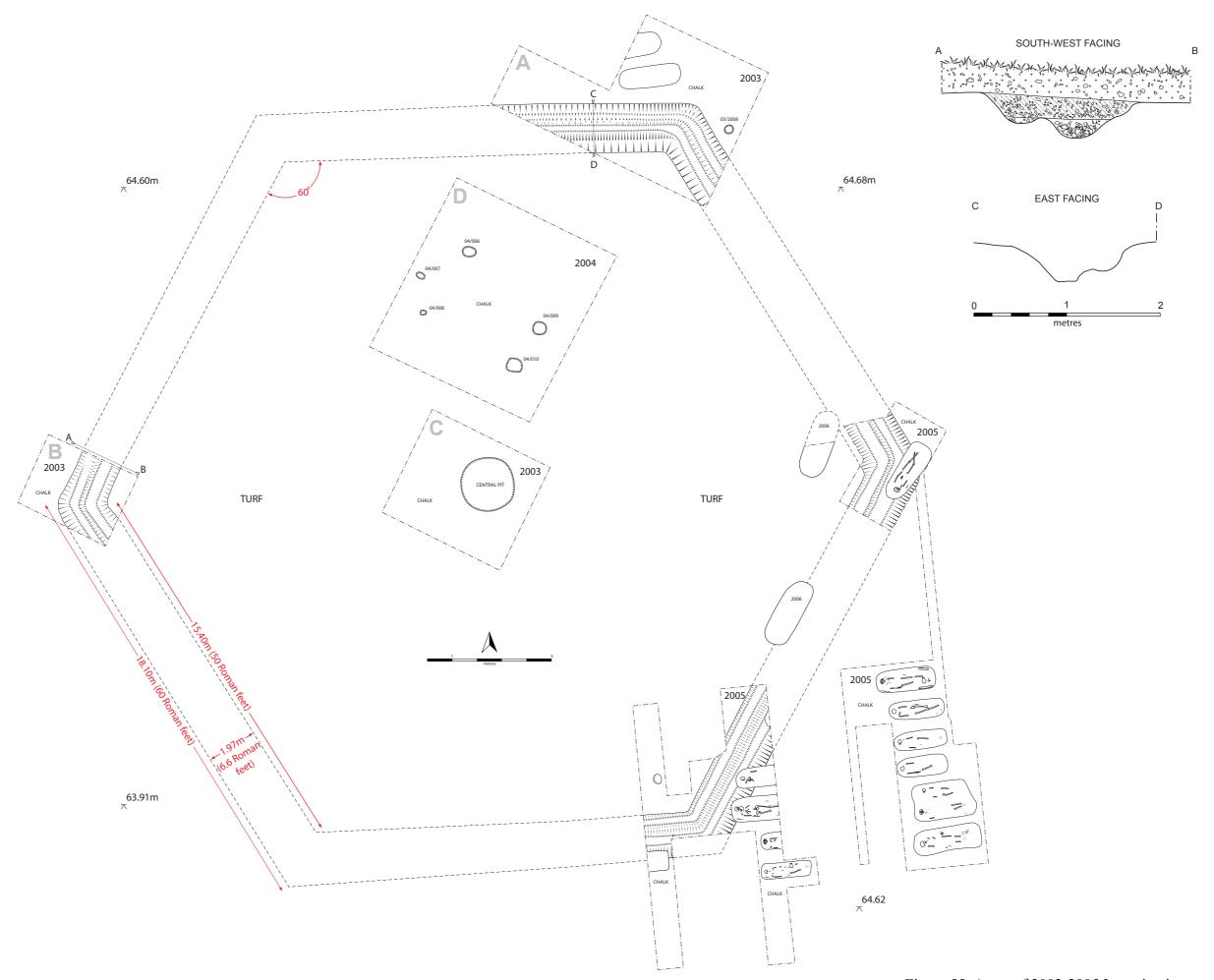


Figure 55. Areas of 2003-2005 Investigation

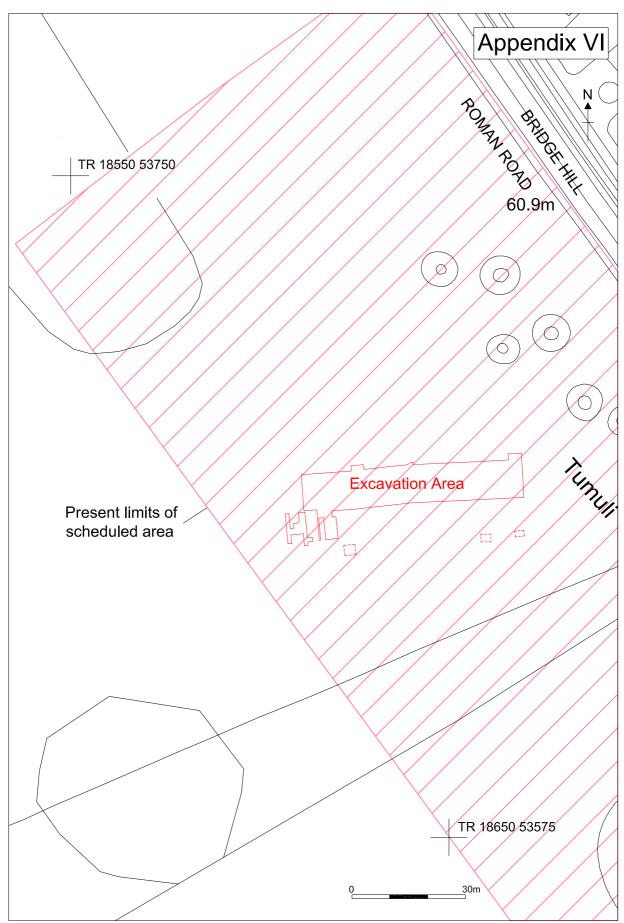


Figure 41. Trench location plan



G56 G57 Cut)117 Late Iron Age-Early Roman. c.100 BC-50 AD Late Neolithic-Early Bronze Age. c. 2500-1800 BC Mid Roman. c. 125/100 AD G77 G75 G78 G79 G55  $\bigcirc$ G48 G85 G86 0 Cut 111 G12 G82 Cut 192 Cut 187 G83 G53 G73 G76 G50 Cut 85 G71 Area 2 899 G52 Cut 45 G67 Out 47 G89 7 65.08 m G17 G32 G19 0 0 0 0 G64 Cut 213 G34 G35 0 65.07 m Cut 217 0 0 0 G40

Figure 46. Area 2, Phase 1-4. 1:80

Late Iron Age-Early Roman. c.100 BC-50 AD Late Bronze-Early Iron Age Transition Mid Roman. c. 125/100 AD Late Neolithic-Early Bronze Age. c. 2500-1800 BC Cut 173 64.68 m G29 64.49 m G28 G25 G26 G30 64.74 m G27 0 64.69 m G90 Out 36 G24 Area 3 G23 O Cut 183 0 G62 G63 G21  $\bigcirc$ G22 0 G74 G59 64.88 M 64.89 m G56 Cut 117 G57 G77 G75 G78 G79 Out 143 ∐ 2m G55 0 G48 G85

Figure 47. Area 3, Phase 1-4. 1.80

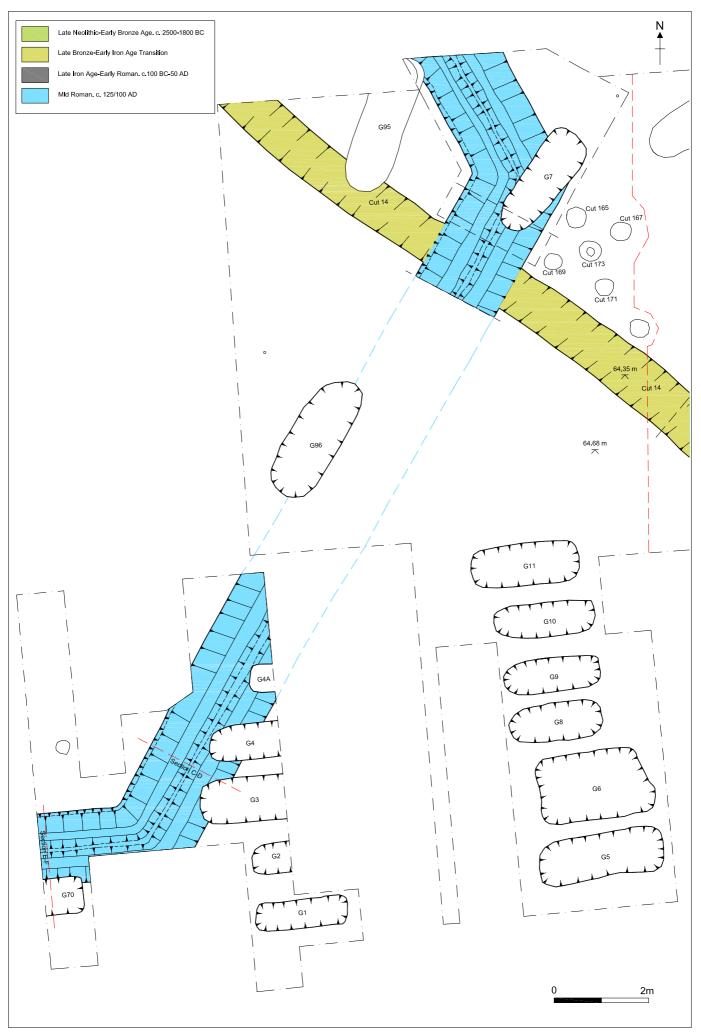


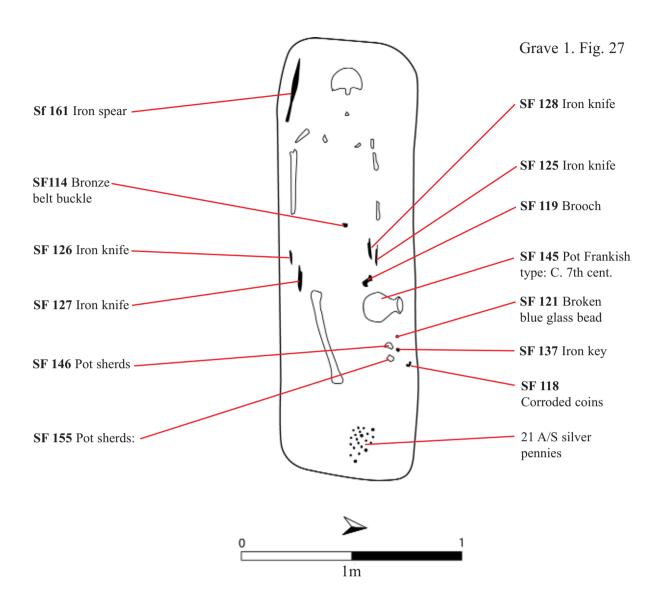
Figure 48. Area 4, Phase 1-4. 1:80

Figure 51. Area 3, Phase 5A-C. 1:80 Phase 5B - C6-C7 AD Phase 5C - C7 AD only Phase 5A - C5-C6 AD 64.68 m G29 64.49 m G25 G26 64/217 Cut 223 64.75 m G30 64.74 m G27 0 64.69 m Cut 36 G24 Area 3 G23 O cut 183 0 0 G21  $\bigcirc$ G22 0 G74 G59 64.88 m Cut 117 G77 G78 G79 Out 143 ∐ 2m G55 0 G48



Figure 52. Area 4, Phase 5A-C. 1:80

# Appendix I. The grave catalogue and small finds



# **Grave 1. Inhumation** (Fig. 27)

Undisturbed, length 2.10m., width 0.76m., max. depth 0.32m. (excluding topsoil). Orientated 88 degrees, head to the west. A large sub-rectangular grave cut into the chalk. Fill; chalk nodules mixed with earth. Skeleton fragmentary.

Iron spear (SF 161) to right of head and two knives (SF 126, 127) by right waist. Two further knives (SF 125, 128) by left hip. Decorated pot (SF 145) to the left of waist with a group of pot sherds (SF 146, 155) presumed to come from

grave fill. Brooch (SF 119) by left waist; copper alloy buckle (SF 114) by right waist; one bead (SF 121) and iron key (SF 137) by left knee. Lump of corroded coins (SF 118) by left knee and 21 Anglo-Saxon pennies in a textile bag between the feet.

# **Grave 2. Inhumation** (Fig. 28)

Undisturbed, length unknown, width 0.55m., max. depth 0.14m. (excluding topsoil). Orientated 088 degrees, head to the west. A large sub-rectangular grave cut into the chalk. Fill; chalk nodules mixed with earth. Skeleton fragmentary. No grave goods.

# **Grave 3. Inhumation** (Fig. 29)

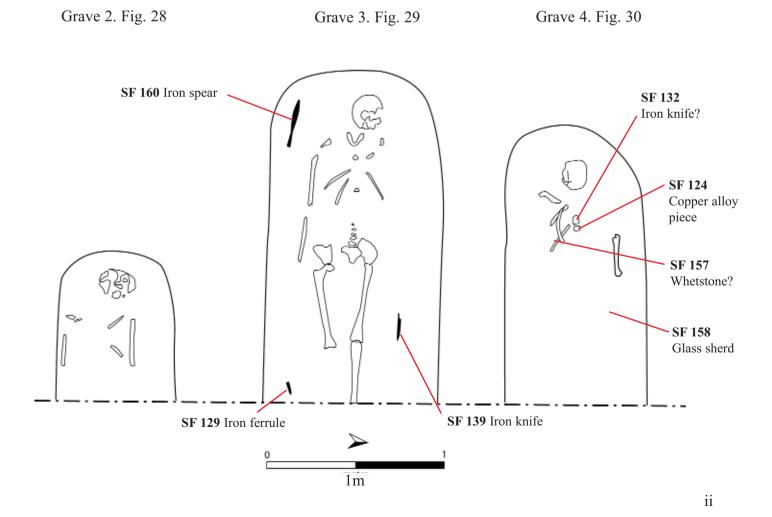
Undisturbed, length unknown, width 0.95m., max. depth 0.45m. (excluding topsoil). Orientated 088 degrees, head to the west. A large sub-rectangular grave cut into the chalk. Fill; chalk nodules mixed with earth. Skeleton fragmentary.

Iron spear (SF 160) to right of head and a iron knife (SF 139) by the left knee. Iron ferrule (SF 129) by right ankle.

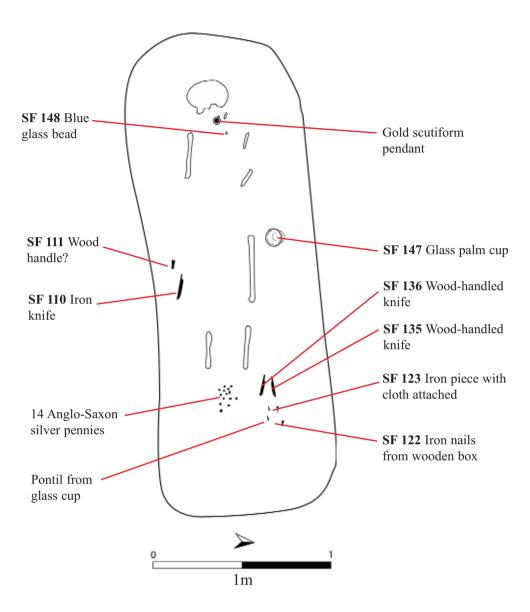
# **Grave 4. Inhumation** (Fig. 30)

Undisturbed, length unknown, width 0.75m., max. depth 0.30m. (excluding topsoil). Orientated 089 degrees, head to the west. A large sub-rectangular grave cut into the chalk. Fill; chalk nodules mixed with earth. Grave cut into chalk and at the east end had cut through the outer slope of hexagon ditch and cut into the base of the ditch itself (Fig, 00). Skeleton fragmentary.

Iron knife (SF 132) on right chest; copperalloy segment(SF 124) approximately where right wrist would have been with whetstone? (SF 167). A/S glass sherd by left hip.



Grave 5. Fig. 31



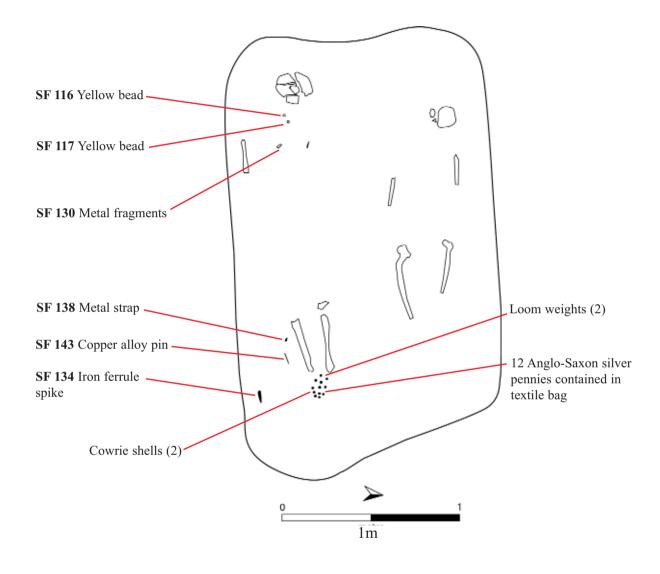
# **Grave 5. Inhumation** (Fig. 31)

Undisturbed, length 2.65m., width 0.98m., max. depth 0.47m. (excluding topsoil). Orientated 087 degrees, head to the west. A large subrectangular grave cut into the chalk. Fill; chalk nodules mixed with earth. Skeleton fragmentary.

A gold scutiform pendant around neck; blue

glass bead (SF 148) around neck; glass palm cup (SF 147) by left hand; iron knife (SF 110) and wood handle? (SF 111) by right waist. Two more wood-handled knives by left foot near iron piece (SF 123) with cloth attached. Close by the remains of a wooden box with iron nails (SF 122). A broken glass pontil from a cup in the vicinity of the feet.

Grave 6. Fig. 32



# Grave 6. Double Inhumation (Fig. 32) Undisturbed, length 2.25m., width 1.52m., max. depth 0.30m. (excluding topsoil). Orientated 88 degrees, heads to the west. A large sub-rectangular double grave cut into the chalk. Fill; chalk nodules mixed with earth. Skeletons fragmentary.

Two glass yellow beads around neck

(SF 116, 117); metal fragments (SF 130) by right shoulder; metal strap (SF 143) by right knee; copper alloy pin (SF 143) by right knee; iron ferrule spike (SF 134) by right foot; two cowrie shells between feet; two loom weights between feet; 12 Anglo-Saxon silver pennies contained in textile bag between feet.

# **Grave 7. Inhumation** (Fig. 33)

Undisturbed, length 2.45m., width 0.85m., max. depth 0.56m. (excluding topsoil). Orientated 149 degrees, head to the south-west. A large subrectangular grave cut 0.12m into the natural chalk and through the slope and base of the hexagon ditch and fill. Fill; chalk nodules mixed with earth. Skeleton fragmentary.

An iron knife or small spear (SF 140) by right shoulder

# **Grave 8. Inhumation** (Fig. 34)

Undisturbed, length 2.00m., width 0.76m., max. depth 0.35m. (excluding topsoil). Orientated 89 degrees, head to the west. A large sub-rectangular grave cut into the natural chalk.

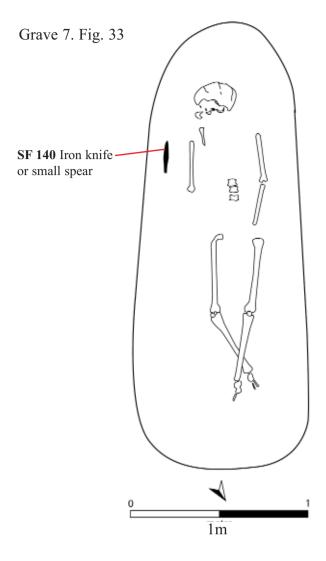
Fill; chalk nodules mixed with earth. Skeleton fragmentary. No grave goods.

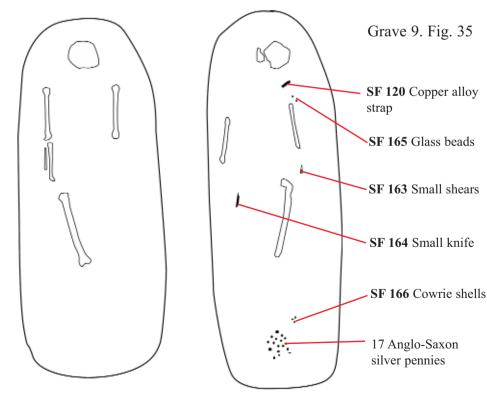
# **Grave 9. Inhumation** (Fig. 35)

Undisturbed, length 2.18m., width 0.68m., max. depth 0.50m. (excluding topsoil). Orientated 88 degrees, head to the west. A large sub-rectangular grave cut into the natural chalk.

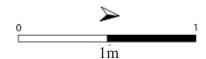
Fill; chalk nodules mixed with earth. Skeleton fragmentary.

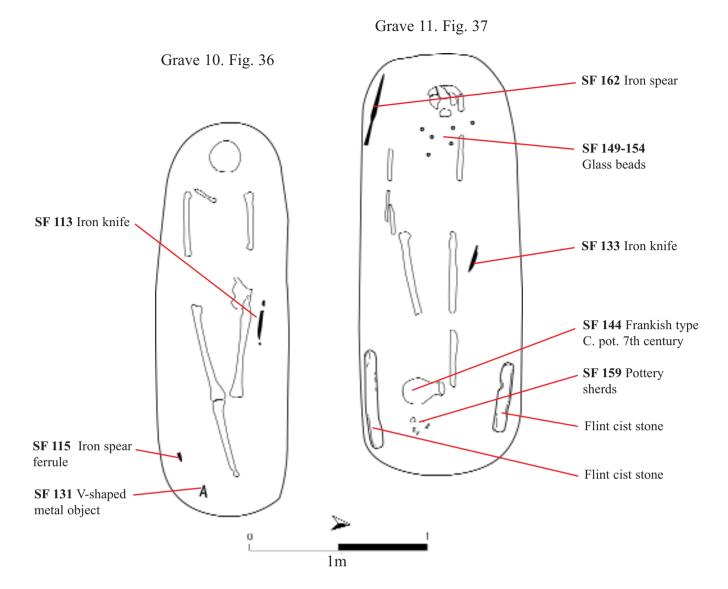
Copper alloy strap by right shoulder (SF 120); 17 Anglo-Saxon silver pennies between feet.





Grave 8. Fig. 34





# **Grave 10. Inhumation** (Fig. 36)

Undisturbed, length 2.10m., width 0.60m., max. depth 0.46m. (excluding topsoil). Orientated 92 degrees, head to the west. A large sub-rectangular grave cut into the natural chalk.

Fill; chalk nodules mixed with earth. Skeleton fragmentary.

An iron knife (SF 113) by left hip; iron spear ferrule (SF 115) by right foot; V-shaped metal object (SF 131) below right foot.

# **Grave 11. Inhumation** (Fig. 37)

Undisturbed, length 2.40m., width 0.85m., max. depth 0.62m. (excluding topsoil). Orientated 91 degrees, head to the west. A large sub-rectangular grave cut into the natural chalk with two large flints utilised as cists. Fill; chalk nodules mixed with earth. Skeleton fragmentary.

An iron spear (SF 162) by right shoulder; six glass beads (SF 149-154) around neck; iron knife (SF 133) by left waist; large Frankish type C. pot (SF 159) between feet; group of pottery sherds (SF 159) adjacent pot.

# **Appendix III**

# Star Hill, Bridge, Kent: 2003 and 2005-6. Interim Report The Pottery

Nigel Macpherson-Grant, July 2008.

#### I. INTRODUCTION

An overall total of 1092 sherds (weight: 10kgs.103gms) were recovered from the four research excavations. The overall assemblage was multi-period, containing both prehistoric and historic material. During pre-report analysis all individual fabric types were identified, quantified and dated on a context basis. These were accompanied by notes on inter-context joins, sherd sizes and an assessment of the implications any differences in wear pattern might have for the likely final dating of individual contexts. Contexts were then re-grouped on a period basis by site phase and further assessed for any implications that might modify final phase dating, and estimates of inter-phase longevity and likely land-use represented. In addition the pottery was analysed according to manufacturing, form and decorative characteristics, researched for available inter-assemblage parallels and assessed in terms of the relative value individual period components had for regional ceramic studies. All this detailed information is contained in an illustrated Available Archive report held with the Site Records and available from the Kent Archaeological Field School. **No.** refer to pottery drawings which will appear in the final report.

A recent joint project associated with the Channel Tunnel Rail Link, between the Oxford and Wessex Archaeological units, produced a number of sites providing a good sequence of radiocarbon dates. The latter have allowed for a useful modification of the existing period terminology and dating conventionally used for the mid second-late first millenniums BC – and bringing the previous terminologies more into line with metalwork and ceramic typologies associated with the earlier phases of the Later Prehistoric period (from c.1550 BC onwards; Morris 2006, Fig.3.2). This modification is used in this report. *Table 1* summarises the overall range of periods recorded, their associated sherd quantities and dating, and any likely land-use implications.

PERIODS	SHERD QUANTITY	IMPLICATIONS				
MODERN						
LPM	1	As below upto EC 20 AD				
PM	3	As below upto C18-C19 AD = Site-phase 6				
LM	14	As below, but pottery content thinning after c.1500 AD				
M	21	As below				
EM	13	Manuring scatters from c.1075/1100 AD				
LS	-	•				
MLS	1	Manuring scatter between c.750-850 AD				
EMS	421	A/S cemetery, cremation and inhumation rites between				
later C5-C7 A	$\mathbf{D} = Site-phases\ 5A-B$	•				
LR	- -	-				
MR	2	As below, ceramic-related activity ending between				
c.75-150 AD =	Site-phase 4					
ER	13	As below, field-manuring scatters or associated with				
construction/u	se of hexagon					
B/ER	4	<b>Reduction settlement-fringe activity</b> = <i>Site Phase 3</i>				
LIA 'Belgic'	59	Continuation settlement-fringe activity from c.100/75				
$\mathbf{BC} = Site-phas$	se 3					
M-LIA	2	<b>Settlement-fringe activity from ? c.150/100 BC = </b> <i>Site-</i>				
phase 3						
MIA	-	-				
E-MIA	190	Continuation of settlement, end-date between? c.600-				
550 BC = Site	phase 2					
EIA	291	Settlement, start-date? between c.750-700 BC = Site-				
phase 2						
LBA	-	-				

EBA ?1 As below

LN - Flints indicate secular or ceremonial activity = Site-

phase 1

Table 1. Star Hill, Bridge, Kent 2002-2006: Summary of likely land-use implications.

Other than obviously being of prehistoric date, a further 67 sherds were either too small and abraded, or had insufficient manufacturing characteristics, to confidently allocate them to a specific period. Though the majority of these probably derive from the earlier-mid first millennium BC phase of activity, a few scrappy and worn coarsely flint-tempered sherds *may* be of Earlier-Mid Neolithic or Middle Bronze Age Deverel-Rimbury date. One small unstratified sherd has manufacturing characteristics more typical of Early Bronze Age Beaker or Urn fabrics and *may* be contemporary with the flints recorded from *Context 024*). Claims for Bronze Age fabrics are justified on the basis of previous finds from the locale, but a claim for Neolithic activity requires greater confirmation. The Late Iron Age-Roman and post-Saxon elements all stem from either settlement-fringe or agricultural manuring activities. Though the Late Iron Age material is probably broadly contemporary with the nearby indigenous and 'Belgic'-period LIA settlement at Bridge Hill, recorded by Watson in 1956, a detailed review of any implications requires a separate report. Other than these notes, none of this pottery is examined any further – and only the unexpected Earliest Iron Age and Early-Mid Saxon assemblages have been isolated for more detailed presentation below.

# II. SITE-PHASE 2 – POTTERY FROM THE EARLIEST IRON AGE SETTLEMENT

# Assemblage condition and-contextual associations

Up to 481 sherds can be confidently allocated to this phase, with an internal sub-division between those sherds with regionally well-recognised Earliest Iron Age (EIA), and Early-Mid Iron Age (EIA-MIA), manufacturing characteristics. From the site area examined, the first period is numerically dominant with fresh undisturbed sometimes fairly large conjoining sherds from 2003 Posthole 01 (No.10), 2006 Storage-pit 012/013, Pit 018/019, Post-pits 002/004, 02/035, together with worn residual sherds in mixed-period assemblages from other contexts. In particular, some of this material comes from post-holes apparently forming a rectangular structure containing, or adjacent to, a rectangular area of flint cobbles (Post-pits 002/004 (Nos.1-2), 011/194, 02/035). Typical Early-Mid Iron Age material included continental-style rusticated coarseware bodysherds recovered from Post-pit 011, Pit 016/017 and residual contexts, and the angle-shouldered fineware bowl No.12, also from Pit 017.

Whilst there is no doubt that both periods are definitely represented, the data was recovered from a relatively narrow sample of stripped land, with the later prehistoric horizons of activity severely disturbed by the Phase 5 Anglo-Saxon cemetery and subsequently modern, if not earlier, ploughing. This has made it uncertain as to what degree the definitely prehistoric contexts recorded represent separate phases of EIA and EIA-MIA activity, or just one continuous one. Despite this point, it is fairly certain that most of the *in situ* prehistoric material comes from clusters of pits and post-holes apparently within the, possibly enclosing, settlement boundary-ditch 014/018. It is stressed however, that allocation of this ditch to this period is not categorical (it contained mostly small and worn sherds), but is based on the similarity of its alignment with the probable rectangular post-built structure and associated rectangular flint-cobble floor in Area 1.

# **Fabrics**

Fabric types have been classified according to their dominant macroscopic ingredients (eg. here *Flint-tempered*). Any further sub-divisions have been identified using a x10 hands-lens. These have been broadly equated with recognised regional fabric types on the basis of main deliberate and/or naturally occurring elements (eg. *Flint and grog-tempered* and *Flint-tempered sandy* wares). In addition, most handmade prehistoric fabrics have silt-grade matrices or contain sparse-moderate quantities of natural organic and ferrous-oxide inclusions. These are not normally catalogued unless they indicate potentially significant different clay sources than the normal site range (eg. here, fabrics containing profuse inclusions of iron-oxide).

 PERIOD	FABRIC DESCRIPTION	QUANTITY		
 EIA	Flint-tempered	279		
	Flint and organic-tempered	1		
	Flint and grog-tempered	5		
	Flint-tempered with fairly profuse FeO incls.	5		
	Sandy	? 1		
EIA-MIA	Flint-tempered	188		
	Flint and organic-tempered	1		
	Flint-tempered sandy	1		

Table 2. Star Hill, Bridge, Kent 2002-2006: Summary of Phase 2 fabric types and associated sherd frequencies

# Earliest Iron Age fabrics:

Principally flint-tempered fabrics predominate but there are also two minority types – *flint and grog-tempered* and *flint and organic-tempered*. Amongst these fabrics, an apparent majority were made using a *fine sandy clay*, with a smaller quantity using a *fine silty clay* and two examples with *fairly profuse FeO inclusions*. This indicates the use of at least **three** different local clay sources. An additional sherd *may* belong in this period – possibly representing a non-local import made in a purely *sandy clay*.

# Early-Mid Iron Age fabrics:

For this period the same basic trend applies but with only two apparent minority fabric types – *flint and organic-tempered* and *flint-tempered sandy*. These are again mostly made using both fine sandy and fine silty clays, with the former, again, predominating. If the implications of the contextual data for these two periods is correct (see below), then the same 2 main clay sources continued to be used as in the previous period.

The nature of the excavation has made it impossible to determine to what degree flint-tempered fabrics, isolated into separate period groups on the basis of well-recognised regional manufacturing characteristics, actually stem from separate phases of EIA and EIA-MIA occupation or whether, as is suggested by the mixed-period contents of some pit groups, that the recorded occupational activity stems from a cultural interface embracing both ceramic traditions. As a result, the fabric trends noted above may need some modification with a larger site sample.

# Other manufacturing characteristics

# ${\it EIA-type\ pottery}:$

Regionally, pottery assemblages of this period are characterised by the frequent presence of fairly thinwalled vessels, including the impressively competent production of 'bronzework simulates' - tall, largediameter, high-shouldered storage jars ultimately copying imported sheet-bronze situlas. Though fragmentary, the coarseware rim 11 (and inset) and a large bodysherd from Pit 02/035 are examples of such vessels from Star Hill. Pots are frequently, though not ubiquitously, made using clays tempered with profuse finely crushed (often almost dust-grade for some finewares) or medium-sized flint temper – as here in the decorated fineware bowl and jar sherds 3 and 5. Another general characteristic introduced during this period is the use of red-brown iron-oxide powder applied as a slip to the surfaces of fineware bowls which, when fired, provides red, red-brown or red-maroon finishes. Again the intention was to simulate the appearance of metalwork originals, and here, at least one of the two red-finished fineware sherds recovered (Contexts 013, 017) is of this type and should be contemporary with this phase. Among coarsewares, roughly wiped frequently slightly slurried surface finishes are typical, as on jar 10. In terms of degrees of decorative and finishing competence - the fineware bowl and jar sherds 1 and 4 are wellmade but their decoration rather roughly applied. Conversely, the cup, bowl and jar sherds 2, 3 and 5 are carefully and evenly decorated and burnished, though the decoration on the lip of 2 is only just visible. The two handle fragments are variably finished - 8 with fairly neat squared sides, 9 unevenly - and both smoothed rather than burnished.

# EIA-MIA-type pottery:

Elements representing this ceramic phase are too fragmentary to allow much comment – other than that the presence of coarseware jar sherds with rusticated exterior surfaces (via the deliberate roughening or application of additional clay) is a key period attribute. Also, in keeping with general regional productional trends for this period, many sherds are rather more thick-walled and frequently have sparser, slightly coarser flint tempering. The fineware bowl sherd 12 and the comb-decorated jar sherd are from well-made vessels.

# Vessel and decoration types (Figs.00-00)

Again, the sample-size is too small, too fragmentary and, to some degree, too culturally-mixed to statistically assess fineware and coarseware percentages. Overall, though, coarseware sherds predominate and there is a higher quantity of finewares representing the EIA than for the EIA-MIA.

#### EIA types:

Amongst the *finewares*, the little hemispherical cup 2 is regionally unique. Other bowl forms, eg. 1 and 3, are larger - and of these the internally-cupped rim of the deep shouldered bowl 1 is unusual. Also included in this class are the jars 4 and 5. All these vessels are decorated, with the decoration on the cup consisting of minute close-set lightly-applied ovoid impressions – made with the tip of the little finger or, more probably, the shaft of a thin twig or dry plant stem. Most of the others have linear decoration – broad tooled grooves (4) or groups of multiple incised (1) or combed (3, 5) horizontal lines. The decoration of the excellently-made jar 5 is complex, with combed diagonal lines as either an around-body series of spaced groups or as part of a chevron design above a horizontal band of above-shoulder combing. The decoration combination on 1 is regionally unusual, with its shoulder additionally decorated with irregular fine knife or finger-nail impressions, possibly interleaved with wide-spaced ovoid horizontal impressions. In addition at least one haematite-coated (red-finished) bowl belongs in this phase, as does the simple rather roughly finished hemispherical bowl 7. The site produced a number of fine ware rim scraps all of which, including 6, could occur in assemblages of this date.

Handled vessels for this period, and region, are relatively uncommon. The rather poor surface-treatment of both **8-9** suggests that they are rather down the scale from well-finished feast-day vessels. The relative thinness and the rod form of **9** implies it may be from a bowl-form, the sturdier thickness and strap form of **8** and the fairly thick associated body wall indicates it is from a larger, jar, vessel type.

For the *coarsewares*, **11** (along with other scrappy rim fragments) is from a large-diameter tall high-shouldered sub-situlate jar **No.10** is from a medium-large diameter soot-encrusted cooking-pot or jar. Other than one unstratified scrap, which had traces of finger-tip decoration but was in a coarse flint-tempered fabric that could well be MBA, signs of typical applied cordons (on large storage-jars) or horizontal finger-tipped decoration on rims and shoulders are notably absent - though this may be solely due to sample size.

#### EIA-MIA types:

Only one definite *fineware* form represents this ceramic phase - the angle-shouldered bowl **12**, and only one coarseware - the closed-form jar **13**. The latter is from a fairly high-shouldered jar with a burnished shoulder-neck panel above, possibly, a deliberately rusticated lower-body finish and, as already indicated in the Introduction, coarseware cooking-pot or jar sherds with this type of finish were recorded from a number of contexts. The only decorated sherd that is likely to belong in this phase is Plate..., a sherd from a fairly large diameter jar with probably below-shoulder decoration, either all-over or in vertical zones, of fine combed lines.

# **Parallels**

#### EIA elements:

There are no known regional parallels for the neatly made little bowl-form cup **No.2**, although it is similar in general type and flaring everted mouth to an even smaller cup from Runnymede Bridge (Needham 1980, Fig.5, 2) with associated radiocarbon dates of between 820-650 cal.bc.(*Table 3* below). Conversely, examples of deep medium-diameter fineware bowls like **1** and **3**, with single or double bands of horizontally-incised multiple-line decoration, are well-known from the region and

elsewhere in south-east England. A few of these have C-14 associated dating - Mucking South Rings, Essex (930-750 cal.bc.; Jones and Bond 1980, Fig.3) and Swalecliffe, Kent (1020-800 cal.bc.; Couldrey 2003, Fig. 28)), whilst the majority are typologically-dated to between c.900-600 BC, with a few from Highstead, Kent apparently occurring as late as c.550 BC. However, the combination of simple upright rim with an exaggerated deeply cupped inner-rim 'bevel' on 1 has not been noted before from Kentish assemblages although, as a formal characteristic only, it does occur on a coarseware jar from Mucking North Rings and associated with a radiocarbon date of 930-710 cal.bc. This site also provides a very general, technique-only, parallel for another regional unknown - the broad horizontal shoulder grooves on No.4, although the forms differ considerably (Barrett and Bond 1988, Fig. 20, 9). No.4 comes from the same feature as bowl 3, Pit 019, ensuring that they are of broadly similar date. For No.5, although the sherd is small, it is from a well-made and carefully decorated fineware jar. Its multiple-line incised design is almost certainly related to two fairly large-diameter fineware vessels from Highstead Period 2 and Monkton (Couldrey 2007, Fig. 59, 33 and Macpherson-Grant 1994, Fig. 5, 3), both basically dateable to between c.900-600 BC. The same dating can be applied to the subfineware hemispherical bowl No.7, the large-diameter cooking- or storage-jars No. 10 and the rim scrap 11, and also the two handles 8-9, which are reasonably-well paralleled as a type from contemporary Essex and Kentish sites.

# EIA-MIA elements:

The simple rim of **13** is typical of closed-form fairly high-shouldered coarseware jars of the eastern Kentish Early-Mid Iron Age, many of them with continental-style deliberate roughening or 'rustication' of the lower body. Though this sherd is not rusticated, a number of rusticated coarseware bodysherds were recovered from various contexts. Two published parallels for **13** are from Bridge Site 8 (Macpherson-Grant 1980, Fig.17, 105) and from Highstead Period 3B (*op.cit*. Figs 118, 120), the latter dated to between c.550-400 BC. The best parallel for the near-upright upper-body wall of the fineware bowl **12** is from the continent - Haute-Normandie, at la Houssaye-Beranger, and dated to the late Halstatt-La Tene Ancienne, c.530-450 BC (1996, Blancquaert and Desfosses, Fig.3C). There are other fairly close continental parallels – from the Departements Nord (at Hornaing - Hurtrelle 1990 p.148), Pas-de-Calais (at Bailleul-Sire-Berthoult - Hurtrelle 1990, p.41; at Coqulles – Blancquaert 1998, Fig.8) and L'Oise (at Le Fond Pernant – Malrain *et.al.* 1996, Fig.6). All of these have been dated to between c.500-400 BC. In addition, there is a further fairly close English example from Highstead Period 3B.and dated as above.

CHRONOLOGY 550	BC: 500	1000 450	950 400	900 350	850	800	750	700	650	600
PARALLELS :	•	•	•	•	•	•	•	•	•	٠
				STAR	HILL P	OTTERY				
<i>EIA</i> :										
East Kent:										
Swalecliffe (1) C-1	14 -				D-4 2					
Bridge Site 5 (6)					Pot 3					
Bridge Bite 3 (0)					Pots 1	, 5, 7				
Highstead Period	2 (4)									
 Monlyton (7)					Pots 3	3, 5, 10-1				
Monkton (7)			Pots 1	, 3, 5, 10-						
South-east England		~								
Mucking North Ri	ngs (2) (	C-14			Pot 1					
Mucking South Ri	ngs (1)	C-14								
					Pots 1	, 3, 8				
Runnymede Bridge	e Site 2	(1) C-14			Pot 2					

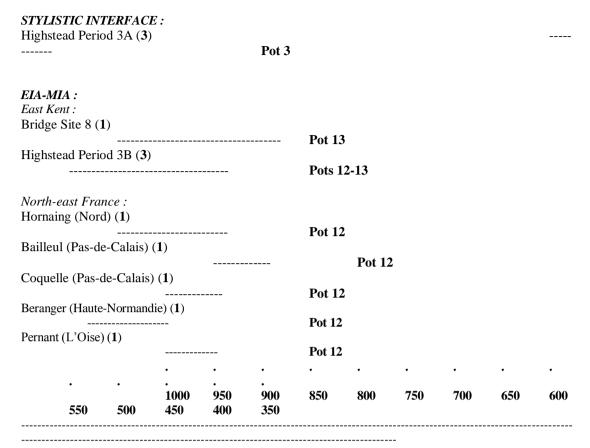


Table 3. Numbers of parallels per site, associated dating and suggested date range (shaded) for the illustrated pottery from the transitional Earliest to Early-Mid Iron Age settlement at Star Hill, Bridge, Kent 2002-2006 (C-14 = with radiocarbon dates)

# Dating and settlement longevity (Table 3)

Even without a comprehensive trawl it is clear that there are a reasonable number of mostly well-dated parallels for the Star Hill prehistoric pottery, so that there is no doubt that both the Earliest Iron Age and EIA-MIA periods are represented. By reference to the published sequence from Highstead, this initially means that the EIA pottery can be dated to between c.900-600 BC, and the EIA-MIA pottery to c.550-400 BC, perhaps even to c.350 BC. Can this be modified?

# The EIA phase of occupation.

The forms of both 1 and 3 are standard types across the whole region, but a date quite as early as 1020 BC is not considered likely here (cf. the general Swalecliffe equivalent for bowl 3). Within the region the commencement of Barrett's 'Decorated' tradition is not firmly fixed, although it is unlikely to be much earlier than c.1000/950 BC. Anything earlier still, at least back to c.1100 BC, ought to contain post-Deverel-Rimbury plainware types – again a style that is still not well-represented within Kent. So a date after c.950 BC is probably more realistic for the Swalecliffe bowl, and within the radiocarbon-dated range for the similarly decorated bowls from Mucking South Rings. Bowls 1 and 3 and the rest of the Star Hill EIA assemblage *could*, therefore, be as early. Equally though - on the basis of the good typological dating applied to Highstead Periods 2-3A - this material, particularly bowl 3, could occur as late as c.600, or even 550 BC. This represents a period of upto 400 years for the currency of this type and its associated style of decoration – and to place Star Hill within.

# The stylistic interface:

Table 3 makes it very clear that the quoted dates for these two periods bunch into two discrete clusters, bridged only by a set of further parallels for the fineware bowl **No.3** from Highstead Period 3A. There, the label 'Period 3A' was reasonably introduced to account for a relatively small number of contexts producing both ceramic styles but occurring in similar condition and sufficient quantity to imply contemporary usage. This apparently peaceful cultural interface has been initially dated to c.600-550 BC. Interestingly, this transition period *may* also be present at Star Hill. A cluster of three fairly large

storage-type pits were recorded in Areas 1-2. One, Pit 013, appears to contain pottery with principally EIA manufacturing characteristics. Another close to it, Pit 017, although cut by the Period 5 grave G40 contained definite fresh EIA material including bowl **No. 12**. The evidence from the third pit 021/022 is slightly ambiguous but its coincidental location close to the other two should mean they form part of a temporally-close group. This group of close-spaced and similarly-sized pits indicates the likelihood that two at least, if not all three, had a similar function and were broadly contemporary with each other. This, in turn, implies that the two associated ceramic styles occurred close together in time. However, the evidence is not entirely conclusive – it is a reasonable likelihood.

# The EIA-MIA phase of occupation:

The number of datable elements for this phase are small. Although the coarseware jar **No.13** is typical of regional Early Iron Age assemblages, on its own, its rim form is too simple and long-lived to be a useful chronological indicator. Even the continental-style rusticated sherds, although they are utterly typical of c.550-400 BC Kentish assemblages east of the river Medway, can only be used as confirmation of an IA presence. In the specific sense of deliberately roughened, or the deliberate application of additional clay to roughen the surfaces of coarseware jars, this style continues well into the fourth century. Only the fineware bowl **No. 2** can be used here. The French evidence could suggest that this bowl is quite early - its near-upright shoulder-neck panel is close to one from Haute-Normandie dated to between c.530-450 BC and to another from the Nord dated slightly later, c.500-400 BC. The other more general parallels quoted are all more inwardly angled and dated to La Tene Ancienne Ib, c.450-400 BC but, since both near-upright and more inwardly-angled upper-body panels can occur together, this aspect is not necessarily a sign of earliness or lateness.

#### Summary:

It is safe to say that the Star Hill farmstead began life somewhere between c.950-600 BC. Although it is possible that it might be as early as the later tenth or ninth centuries - the evidence is slim. As excavated, the numeric dominance of sherds and features of confirmed EIA date does suggest that the latter was of some duration - of up to two, possibly three, generations length, and a point possibly reinforced by the renewal post-pit 011/194 cut at the south-east corner of the cobbled zone in Area 1. It is also safe to say that there was a subsequent phase of Early-Mid Iron Age activity that could be dated to between c.550-400 BC. In addition, there is some evidence that could suggest that both the EIA and EIA-MIA ceramic traditions were in contemporary usage at the beginning of the sixth century BC with, perhaps, the later pottery being introduced or adopted relatively late within the life of the settlement and followed by only a relatively short-term EIA-MIA phase. This scenario assumes that the cluster of pits mentioned above (012/013, 016/017, 0212/022) were contemporary with the occupation of the post-built EIA structure at the eastern end of Area 1. However, the equation is dependant upon the likely function of the cobbled area attached to this building. Cobbling on the top of a hill with a well-drained chalk sub-soil is a little unexpected and presupposes either a 'quality'-style entrance area or a mucky yard associated with a cattle byre. If the former, the siting of storage or rubbish pits so close to a potential main approach-way could be inconvenient – in which case the building is significantly earlier. If the latter explanation applies - there is no real problem and both pits and building are broadly contemporary. Again, the evidence is not conclusive. For the time being, and accommodating all aspects, the construction and life of the farmstead is initially placed to between c.750-500 BC.

# III. SITE-PHASES 5A-B: POTTERY FROM THE EARLY-MID SAXON CEMETERY

# Assemblage condition and contextual associations

A total of 421 sherds of Early-Mid Saxon pottery was recovered. Of these, the majority collectively represent 8 cremation burial jars (020/021, 046, 083/084, 085/086, 117/118, 173/174, 181/182 and 185/186) and 2 inhumation-burial accessory vessels, with a small quantity of residual or intrusive sherds presumably all from plough-damaged cremations (a sherd from Cremation 185/186 (**No.14**) was found 15 metres away in the top fill of a Phase 2 pit, 065/066). Although too little of the cemetery was excavated to definitively phase its burials on a century basis, sufficient was recovered to indicate that it had been in use for a considerable period. Partly to emphasise this apparent longevity and partly to provide an initial foundation for any future work, the material and associated contexts has been placed into two broad phases – Phases 5A and 5B. So that, on the basis of existing general and regional data for the period, and

by associated context type, fabric, available form and decoration, 328 generally sandy ware sherds have been allocated to Phase 5A (broadly fifth-sixth century AD), and 2 imported wheel-thrown vessels and 7 organic-tempered sherds to Phase 5B (broadly sixth-seventh century AD). In addition, a single sherd of eighth-ninth century Mid-Late Saxon pottery was recorded. This last was unstratified and, on conventional dating, is unlikely to be derived from an actual burial – and is dealt with separately.

# Site-Phase 5A:

Most of the cremation vessels are extremely fragmentary and heavily damaged. Only Cremation 020/121 (**No. 15**) is relatively complete and reconstructable. All the others are only partially, or even barely, represented – mostly with some shoulder and body and occasional rim sherds surviving. Base sherds are mostly missing except for **Nos. 15-16** and, possibly, Cremation 173/174. Cremation 085/086 is solely represented by 2 bodysherds. The virtually unique Cremation 173/174, within its 4-post structure, is sadly devoid of any definitive formal or decorative sherds. Inevitably, intrusive or residual sherds derived from cremation pots are mostly small and variably worn.

#### Site-Phase 5B:

Not unexpectedly the vessels from Graves 1 and 11 are virtually intact. Conversely, the 5 organic-tempered sherds recovered are all fairly worn and small and presumably derived from plough-disturbed or robbed graves.

# **Fabrics**

The fabrics of the imported wares are described in a separate section below. The local fabrics have been identified via the same analytical means and criteria indicated in Section II above and, in order to distinguish them from other regional fabric types referred to, are given their own fabric coding.

PERIOD FABRIC CONTEXTS, I			QUANTITY	NO. POTS,
Early-Mid Sax	on :			
Phase 5A:				
Fabric S1 :	Silty with moderate sand		76	3 –
Cremations 18	1, 046, 186 - <b>Nos.14, 16, 19</b>			
Fabric S2A:	Coarse sandy with mod-profuse FeO inclusion	ns	159	1 –
Cremation 020	- No.15			
Fabric S2B:	Sandy with mod-profuse FeO inclusions		2	2 – residual -
Nos.21, 25				
Fabric S2C:	Sundy with spurse, in 1 co merusions	14	12 – C	remation 117
	sidual sherds incl.No.20			
Fabric S3:	Fine sandy		2	2 – residual
incl. No.22	0 1 11 1 11 1 1 1		24	
Fabric S4:	Sandy with chalk/marl inclusions		34	<b>5</b> – Cremation
	all sherds incl.Nos.23-24	11	1 0	
Fabric S5 : <b>No.17</b>	Sandy with calc.aggregate and FeO inclusions 1	ıı	1 – Cr	emation 083 -
N0.17				
Phase 5B:				
Fabric S6A :	Organic-tempered sandy		2	1 - residual
Fabric S6B :	Organic-tempered sparse sandy		1	1 - residual
Fabric S6C :	Organic-tempered silty		3	3 – residual
incl. No.26	- •			
Fabric S6D:	Organic- and chalk-tempered		1	1 - intrusive
Post-cemetery	:			
Mid-Late Saxo				
Ipswich-type w	vare		1	1 - residual

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Table 4. Star Hill, Bridge 2002-2006: Summary of Phases 5A-5B and later fabric types and associated sherd frequencies

#### Site-Phase 5A:

Overall, there is a preference for either obviously silty or obviously sandy clay matrices, with the latter predominating. Fabrics S2A-C form a group united by the use of sandy clays with profuse—moderately profuse rounded/sub-rounded milky quartz grains. In Fabric S2A the grains are noticeably larger than in Fabrics S2B-2C and for the latter two, the only real difference between them is the presence of either profuse, or very sparse, iron-oxide inclusions. Fabric S4 is a sub-group of Fabric S2 using a clay(s) containing a fine marl or chalk content. Overall **five** different local clay sources are indicated - the Fabric S2 sub-divisions probably representing only minor shifts in source area. Most of these are minority fabric types, with only Fabrics S2C, and possibly S4, representing preferred clay sources.

By comparison with the good Canterbury sequence, it is becoming likely that rural eastern Kentish Saxon potting traditions adhered to fairly consistent fabric recipes – albeit with inevitable minor variations in clay types used and, possibly, chronological currencies. The sample size is still too small to be absolutely certain, but the present assemblage appears to broadly confirm this likelihood. *Fabric S2*, particularly *Fabric S2A*, are similar to Canterbury Fabric EMS 1A – a profusely sandy fabric that appears early in that sequence. *Fabrics S1* and *3* are similar to Canterbury Fabric EMS 1B and *Fabric S4*, dependant upon the amount of marl/chalk inclusions, could be seen as an amalgam of Canterbury Fabrics EMS 2-3.

Fabric S5 is a little unusual since, at the current level of regional study, this type of fabric, with its inclusions of calcareous aggregate, has only been recognised from the Folkestone area (Folkestone Fabric CT, Canterbury Archaeological Trust archive for Channel Tunnel sites). However since there is, so far, no reason to suspect that any of the handmade pottery from this cemetery stems from anywhere other than local sources, this inclusion type may well occur locally. In which case, this fabric would be similar to Canterbury Fabric EMS 2.

## Site-Phase 5B:

The Fabric S6 group are obviously united by their use of organic-temper - but use differing clay types. Fabric S6B is a sub-group of S6A, using a clay containing fine marl (and different from the heavy chalk content of Fabric S6D). For this phase **four** main sources of clay appear to have been used. Other than that no heavily sanded clays are being used, and that Fabric S6D may represent a new source, there is no reason to suspect a radical shift in clay source locales from those used in Period 5A.

# Other manufacturing characteristics

Site-Phase 5A:

Potting is mostly fairly competent with, in terms of basic body structure, the production of (at girth) mostly large- and medium diameter pots (eg. Nos. 15, 19 for the first, Nos. 16, 18 for the second); smalldiameter vessels, at rim or girth, are represented by jars Nos.14, 20, 24. Mostly, body wall thicknesses and general shaping of the pots is consistently even, although the above- and below-shoulder wall-thickness of 19 and the shoulder of the thin-walled 18, vary considerably. With surface treatments, the degree of finish given a pot may vary dependant upon the relative visual importance of the surface area involved ie, whether it is decorated or not. No.15 is the most extant vessel for assessing general finishing trends. Its inner and outer lip and external neck surfaces have been given a good shiny burnish. Thereafter, downward to the base, the degree of burnishing decreases - matt shiny on the upper body and shoulder, light and patchy over primary smoothing on the lower body. Internally, it has been smoothed, more roughly towards the base. The marked grit-drag streaks on the underside of the base confirm that it was knife-trimmed. Other than that its base was only smoothed, the same basic trend also applies to No.16, though nominally - with parts of its lower exterior body only patchily burnished and still retaining much of its original rough diagonal knife-trimming or smoothing. No.19 had its exterior smoothed and lightly burnished prior to decoration, and its interior given a good-quality light even burnish. The undecorated jar, 18, has been evenly smoothed overall and given a light superficial burnish externally. The few bodysherds belonging to No.17 appear to have been only roughly smoothed.

The decoration on the three vessels **14-15**, **19** is fairly deeply tooled, appearing sharply-defined and superficially neat. However the finishing of any horizontal grooves, although generally regular in

alignment, is uneven or overrun. Equally, there is no consistent follow-through between the thin primary outlining of the twin arcades of **15**'s *stehende bogen* and their final broadly grooved form. Again, on **19**, the tops of the shoulder chevrons meet roughly, with a considerable degree of overlap – and it is unlikely that they were regularly spaced around the body. With **16**, the decoration is crude, inconsistent and irregular and, like its surface finish, very 'rough-and-ready'.

With few exceptions - the oxidised orange-brown interiors of **15** and **21** - the firing colours of all vessels are a varied set of greys and dark grey-browns with, on **16** most noticeably, the differential colour-blotching typical of bonfire-kiln firings. The post-firing hardness of fabrics varies too, harder for the sandier fabrics and marginally softer for the finer siltier ones.

#### Site Phase 5B:

The majority of the organic-tempered sherds are highly abraded. None appear to be decorated and one or two have had their exteriors smoothed and lightly burnished. Befitting its bowl function, **29**'s interior was lightly burnished.

# Vessel and decoration types (Figs.00-00)

#### Site-Phase 5A:

Only 4 vessels are sufficiently extant to define their form type. Of these the fairly small diameter of **No.14** indicates that it is from a biconical bowl or small jar; the remainder are larger-diameter jars - **No.19** subbiconical, **Nos.15-16** globular and **18** from a hollow-necked jar. The small diameter and flaring rims of **Nos.20**, **24** suggests that they are from sub-biconical or globular forms; the form of **25** is uncertain. Most rims are simple, curving and variably everted, with **15**'s slightly thickened and **25**'s atypically flat-topped with an everted lip. The decoration on **14-16**, **20** and an un-illustrated unstratified bodysherd is principally linear. A broad panel of continuous horizontal grooves on **14**, a series of 'standing arches' beneath twin horizontal mid-shoulder grooves on **15**, and a below-shoulder series of overlapping 'hanging arches' with centrally-placed single dot impressions (Briscoe Type **00** stamp) within each arch on **16**. The more complex-decorated **19** has a shoulder frieze of multiple-line crossing chevrons beneath a neck-mid shoulder panel of either multiple-line spaced diagonals or simple chevrons interspersed with one or more dot impressions. **No.20** is too worn to be certain of orientation – its decoration has been drawn as part of a rectilinear design, but the vertical lines could equally well 'hang down' from horizontal girth grooves.

# Site Phase 5B:

Other than the non-local wares dealt with separately below only one form, bowl **26**, can be confidently allocated to this phase. It is unusual in this type of context and,

if included in a grave, may have served the same intention as the deposition of glass palm cups.

# The wheel-thrown fine wares from Graves 1 and 11 (Fig.00)

# **No.27** (Grave 1, SF 145, Fabric S8, 35 sherds):

A small competently-thrown round-shouldered jar with a near-upright short neck and simple very slightly everted rim. The neck has a broad slightly concave incipient collar. The base is slightly concave with a slightly uneven edge and was wire-cut from the wheel-head. It was made using a moderately sandy clay with fairly profuse quantities of fine to fairly small maroon-red and brown-red iron-oxide inclusions. The body was smoothed overall, more evenly above the shoulder, more superficially below - and then burnished, patchily noticeable above the shoulder, virtually non-existent over the lower-body zone. It was fired moderately hard in oxidising conditions, giving an even gradation of pale buff-pink surfaces with a slightly darker fabric in the thinner wall sections and the same, but with a pale grey core, in the thicker lower-body zones. The lower body, on one side, is scarred by widespread shallow flaking away of the surface skin. Some scar edges are worn, indicating that at least some of this damage was not post-depositional but occurred while the pot was still in use.

# **No.28** (Grave 11, SF 144, Fabric S7, 13 sherds):

A fairly competently-thrown bottle with a well-formed flaring and internally-cupped rim. The body and neck profile is rather uneven and the base slightly concave with an unevenly-finished edge. Before firing, a neat small 5mm. diameter hole was bored, from the exterior inward, through the nearly flat base, and pushing up a thin ridge of clay around the hole's inner lip (see *Ritual aspects* below). It was

made using a fine-grained silty clay containing visually distinctive quantities of fairly profuse fine to fairly small brown or maroon-red iron-oxide inclusions - occasionally occurring as purple-brown crystals. The upper body was decorated with three broad fairly unevenly spaced bands of horizontal rouletting – all set below a single irregular line poorly incised a little below the base of the neck. Either this line was intended to demarcate the upper limit of the overall decorated zone or it was roughly done after the rouletting as a visual compensator for the poor impression of the upper edge of the top band. The rouletting itself is unevenly applied, relatively sharper in detail on the flatter surfaces of the upper body, less so on the more pronounced curve at maximum girth. Rouletting start- and end-points are not the same, with marked 'mazing' of the pattern occuring at different places where the roulette has been allowed to overrun. In addition, both the upper edge of the top band and, to differing degree, both edges of the lower band, have been smudged during subsequent handling – and then smoothed flat or burnished over. The burnishing was moderate – vertical and fairly shiny around the neck, less so on the rim collar, with light diagonal streaks across the pattern – horizontal and duller but more evenly on the undecorated bands and lower body. The burnishing created a thin compacted skin which, possibly postburial, has blistered and flaked off outer surfaces; interior surfaces are fresh and 'as new'. The fabric is fairly compact but with a sub-laminar structure. Though the pot was evenly fired fairly hard in reducing conditions, giving a thin buff margin beneath darker grey outer surface, parts of the surface spalled away leaving a number of individual or inter-connecting scars on one side of the lower body and part of the base. This left the bottle still usable but having a slight tilt to one side. Again, the softened, burred, profile of the edges of both some of the spalling scars and the base ensure that this damage occurred while the pot was still in use.

The roulette-type is a curvilinear interlace consisting, in principle, of two interwoven strands containing an 'eye' within each loop and framed by two horizontal lines. These border-lines are interrupted at regular intervals by a diagonally-cut break in the otherwise continuous impression. The distance between each break is 9.5cms (as measured around the pot's diameter) and represents the beginning-end of the cut roulette pattern. This is indirectly confirmed by a series of similarly distanced smudges in the pattern itself, due to an un-removed clay accumulation on the roulette-wheel. These two points indicate a roulette-drum diameter of approximately 4.7cms. For the interlace itself, none of the line elements forming the overall pattern are connected-up. Instead of the individual strands consisting of continuous flowing lines, the normally curving flow of the strands are interrupted at each overlap, the upper overlap being replaced by short straight diagonal lines, aligned in the same direction. In addition, these deliberate visual 'fracture' points are enhanced, above and below, by a similar pair of short lines aligned in the opposite direction. As a design device – this is both economic and artistic. It obviates the need to spend time neatly incising the roulette-cylinder itself with continuously connected curving lines. At the same time, it introduces a sense of visual agitation and complexity, highlighting the vibrancy of each overlap, and the overall pattern - with the diagonal lines additionally providing a sense of lateral movement or 'flow' to an otherwise static design.

# **Parallels**

# Fabrics:

The Canterbury Saxon fabrics EMS 1B-3 have all been dated c.450-625/650 AD and, in principle, there is no reason why this dating should not be applied to at least Star Hill *Fabrics S1-4*. *Fabric S6* is basically the same as the organic-tempered Canterbury EMS 4 with a main Canterbury currency of c.575/600-675 AD. Since the cemetery has already produced 2 Frankish vessels of broadly seventh century date, there is little reason why the 5 organic-tempered *Fabric S6* sherds should not be similarly dated. However, the recovery of Primary phase Anglo-Saxon pennies from a number of graves in Area 4, dated to the late seventh century, confirms the continuity of the cemetery upto c.700 AD, if not slightly later. Though there is no direct association, this could imply the localised currency of organic-tempered fabrics as late as the beginning of the eighth century AD.

#### Phase 5A cremation vessels:

Although it is just possible that the bowl **14** carried other below-shoulder decorative elements, the extant sherds indicate that its form and decoration are related to facetted bowls and jars whose simple linear decor has been placed early in the English sequence (Myres *op.cit.*17, Figs.88-89) ie., principally in the years immediately before and after 450 AD – although it can occur as late as the late sixth century.

Sufficient bodysherd material was recovered to ensure that **15**'s decoration consisted of no more than a simple sequence of 'standing arches' beneath horizontal shoulder grooves. As a general type it has a

number of fairly close parallels (Myres *op.cit*. Type II.3, Figs.162-3) and this style of decoration, without any additional bossed or stamped elements, has been frequently recorded from sites between the Elbe river and the Low Countries and dated as the facetted bowls referred to above. In turn this means that **15** can be dated early, as **No.14**, but with a similar proviso that some examples could occur somewhat later.

Within Myres' Corpus, there are no close parallels for **No.19**, particularly the crossing diagonals of its overlapping chevrons. Instead, its linear and stamped decoration appears to be a fusion of his Types II.2 (line-and-dot, Fig.130) and II.7 (chevron-and-dot, Fig.285) categories – the former with its two zones of diagonal linear decoration, the latter more particularly with its tendency for a single dot within each triangular zone. Both of these groups are again dated early and, in this country, can be placed around or slightly later than the mid-fifth century AD. **No.16** appears to be a variant of the same Type II.7 style with single-dot decoration placed centrally within incised hanging arches (Myres' Type II.3, Figs.170-1), and can be similarly dated.

Irrespective of whether **No.20**'s vertical decorative element is above or below its horizontal lines, it is almost certainly a scrap from a jar decorated in Myres' Type II.6 (grouped vertical lines) or his Type II.7 Kentish chevron style which can include both diagonal or vertical grouped lines – in this case eg. Canterbury 1078 and Bekesbourne 1080-1081 (*op.cit.* 47, Fig.279). This latter style, though present in other zones along the North Sea coast Migration route, has marked concentrations in Jutland and Kent, again with late fourth-early fifth century antecedents and likely initial arrivals in this country around c.450 AD. However, a fairly unworn sandy ware example from Period 6III of the Canterbury Marlowe I sequence has been dated to between c.550-600 AD (Macpherson-Grant 1995, Fig.352, 52). Even allowing for a degree of residuality at time of loss, this example emphasises the need to realise that some decorative styles *were* long-lived, a point under-pinned by a later probably seventh-century organic-tempered example from the same sequence (*op.cit.* Fig.374, 280).

**Nos. 17-18** are all that survives from two excavated cremation pits, **Nos. 21-25** are presumably also derived from cremations. Little can be said about such simple rim types except that none would be out of place in fifth-seventh century AD Saxon contexts and, also, that there are some indications within the Canterbury Marlowe sequence that small-diameter, flaring-mouthed forms are more likely to occur later, in the seventh century AD, than earlier – a point previously noted by Myres (*op.cit.* 11).

Phase 5B wheel-made and other vessels:

**No. 27:** There are no close parallels for this vessel amongst the imported continental, or continental-style, material reviewed by Evison (1979). For its generally ovoid shape and upright 'collared' rim, the best might be her Plate IIIA (Kingston Grave 205) - but without the rouletted decoration and girth rib.

No 28: Again there are no identical parallels among the imported Frankish bottles published by Evison (op.cit.). However, the well-balanced ovoid shape is similar to a bottle from Sarre (op.cit.Fig.4c), the long straight neck to a lost example from the Somme area (op.cit. Fig.21c), and both body-form and neck to an un-provenanced example in Compiegne Museum (op.cit. Pl.X, A). For the well-formed internally-cupped mouth, there are some general continental examples (op.cit. Fig.29). There is no equivalent for 28's distinctive roulette pattern, although the upper-body application in 3 bands occurs fairly frequently. The interlace roulette-type is not that common either - mostly occurring on bottles, with a few examples on other vessel types. However, with these, the pattern is created by a sequence of simple rectangularly-cut teeth, not the less-Romanised complex incised-line motif present on this vessel. The best parallel for this more imaginative and fluid type is the Z-style roulette that occurs on two vessels from east Kent (cf. op. cit. Fig. 15i, Fig. 17b). Since her review, a further five examples, from both domestic and cemetery contexts, are now known from the region and believed to come from a Kentish workshop (Evison 1900, 00; Stowe 1995, 829; Macpherson-Grant 1900, 00). In a similar manner to 28, at least one of these has its pattern framed by horizontal lines, a design characteristic that apparently occurs only once among the majority of more conventionally-cut roulette types illustrated by Evison. Although this characteristic cannot, alone, be used to claim that bottle 28 represents the product of a second non-continental workshop it is worth noting that, coincidentally, it apparently occurs mostly on highly individual roulette-types, of which at least one is almost certainly Kentish in origin. The Z-roulette vessels from Finglesham have been dated by grave-good associations to c.630-670 AD (Stowe op.cit.). Principally by equation with the latter, but also stratigraphic position and its predominant association with organic-tempered wares, its equivalent from Canterbury was similarly dated within Period 6IV-7 of the Marlowe sequence (Macpherson-Grant 1995, Fig. 385). If there is any

genuine manufacturing-area equation between these two roulette-types, it is interesting that although 28 is dated to between c.675-690 AD by its associated coins, the fairly marked degree of wear on its lower body could indicate it was an heirloom at time of burial and therefore its manufacturing date closer to that given for the Z-rouletted vessels.

**No.26:** For this simple bowl, the best dating evidence is not its form, but its fabric. Within the Canterbury Marlowe sequence, organic-tempered pottery is present as early as c.450-500 AD (Period 6I), but in very small quantities that only slowly increase throughout the fifth century until about 575 or 600 AD. From thereon the ware's popularity increases, particularly during the second and third quarters of the seventh, beginning to decline in the last quarter (Macpherson-Grant 1995, 886).

CHRONOLOGY 600	AD: 625	375 650	400 675	425 700			500	525	550	575
			•		•		•	•	•	•
PARALLELS :						HILL PO	OTTERY	, 		
Site-Phase 5A :										
Fabrics 1-4: Canterbury EMS 1	A					/	?			
Canterbury EMS 1	B-3					cf. Pot				
/										
Pottery :										
Myres Type II.2					Pot 14	•				
Myres Type II.3					Pot 15	/				
Myres Type II.7						/				
? Myres Types II.2 &	& II.7				Pot 16	/				
? Myres Type II.6					Pot 19					
					Pot 20					
Site-Phase 5B :										
Fabric 6 : Canterbury EMS 4									?	/
				cf. Pot	26					
<i>Pottery :</i> Star Hill <b>27</b>										
						Pot 27				
Star Hill 28						Pot 28				
Small Finds :										
Series A pennies (c	c.675-69	00 AD)								
Series B1 pennies				-						
			/? •				•	•	•	
•	•	375		425	450		500	525	550	ETE
600	625	375 650	400 675	425 700	450 725	475 750	500	525	550	575

Table 5. Numbers of parallels per site, associated dating and suggested date range for the Early-Mid Saxon

cemetery at Star Hill, Bridge, Kent 2002-2006. (A '/' equals a preferred end- or start-date, a '?' equals 'or possibly upto'; shaded zones equal estimated start- and end-dates for the cemetery).

# Dating and cemetery longevity (Table 5):

Close to the beginning of the cemetery's life - the form and broad grooved horizontal decoration of No.14 is broadly related to a type of carinated bowl with a facet-decorated shoulder, ultimately derived from the Elbe river region in Germany, and almost certainly arriving into or being made in south-east England before c.450 AD (Myres 1977, 18-19 and Fig.95; Hurst 1976, 292, Fig.7.3-1). However, it lacks that particular type of decoration, so a commencement-date significantly earlier than c.450 AD cannot be claimed for the Star Hill cemetery. Irrspective, the decoration on Nos.14-16 and 19 all belong to Myres' early styles. By 'early styles' Myres meant those decoration types that, on the continent were in currency during the later fourth-mid fifth centuries at least, and in this country could pre-date c.450 AD but mostly are datable to between c.450-475 AD. These include, as here, simple linear designs unaccompanied by the addition of bossed or the more complex types of stamped decoration. Although the latter did occur alongside, or were used together with, early styles, complex bossed or stamp-decorated vessels did not really increase in frequency until the later fifth and sixth centuries. Possibly underlining this trend of 'earliness' is the markedly sandy fabric of **No.15** (Fabric S2A). If, as noted above (and all provisos admitted), the apparent regional trend for the adherence to broadly similar fabric recipes is genuine, it may be reasonable to equate this fabric with Fabric EMS1A from the Canterbury Marlowe sequence. There, a similarly coarse sandy fabric, noticeably different from the main fabric types used throughout the fifth-earlier seventh centuries, was recorded from the sunken-floored structure Marlowe Theatre S30 of Period 6I containing an important group of early pottery. The occupancy of this structure was dated to c.450-500 or 525 AD, but the manufacture and use of the pottery itself, to between c.450-475 AD.(Macpherson-Grant op.cit. 857-860, 885, Fig. 384). Overall, for this phase of the Star Hill cemetery, the small amount of material recovered to date all appears to be early, indicating a possible start-date around c.450 AD, and almost certainly between c.450-475 AD. Other sherds, with long-surviving simple rim or decoration types (eg. No.20) could be of late fifth or sixth century date.

Other than the last comment, there is no firm ceramic evidence for the sixth century AD. For the early-mid seventh century there are, potentially, the small-diameter flaring-mouthed vessels **Nos.21**, **24** and, perhaps, the bowl **26**.

Close to the end of the cemetery's life, and irrespective of any dating supplied by parallels for the wheel-thrown Nos.27-28, there are the Anglo-Saxon Series A and B1 silver pennies from Grave 1 in Area 4 - the first type dated 675-690 AD, the second similarly but possibly coming out of circulation by the early eighth century. This dates Grave 1 Pot 27 to within the last quarter of the seventh century and prior to 690 AD. In addition, there are the re-deposited prehistoric sherds, with conjoins between this grave and Grave 11 (see below), implying burial at the same time – so that the same coinage dating for Grave 1 can be extended to Grave 11 and Pot 28. Although it is not entirely impossible that the single sherd of Ipswich Ware itemised below is derived from a burial - meaning that the cemetery was still in use by the mideighth century AD, the estimated start-date for the currency of this ware - to date no Ipswich Ware vessels have been recovered from Anglo-Saxon cemeteries (pers.comm.P.Blinkhorn). In addition, though the coin evidence could suggest that some burials were as late as the early eighth century, by this time full conversion to Christianity should have meant cessation of the pagan burial rite. Summarising, the recovered pottery indicates a currency for this cemetery from c.450 AD, or between 450-475, until c.690AD or very shortly after - a period of approximately 225-250 years.

# Mid-Late Saxon Ipswich-type ware:

Pottery recovered during Topsoil clearance included one small fairly worn plain bodysherd of Mid-Late Saxon Ipswich-type ware, currently datable to between c.750-850 AD. It is the **only** sherd to fill the long 400-450 year gap in the ceramic record, following disuse of the earlier Saxon cemetery and the appearance of Early Medieval pottery in probable manure scatters. If, as seems likely, this sherd is not derived from a burial it could represent no more than an accidental loss. Alternatively, it derives from either deliberate surface (or turf band) deposition during a ceremony (Christianised or pagan) honouring old land-based kin ties to ancestors buried in the earlier cemetery, or from manure scatters. If the latter, the manured fields would have to be well outside the cemetery area (and the sherd ploughdragged to the excavation area during more recent Post-Medieval activity), since such a relatively early desecration of even pagan hallowed ground ought to have been unacceptable to any local intergenerational relationships.

#### Ritual aspects

In addition to the rare 4-post setting around the Phase 5A Cremation 173/174 (see above), two other aspects are worth highlighting.

# Graves 1 and 11:

Not unexpectedly, for a cemetery cutting previous occupation, some of the grave backfills frequently contained residual pottery. However two of the graves from the regularly-spaced Phase 5B cluster in Area 4 each produced a deposit of prehistoric sherds – 4 from Grave 1 (SF 155) and 8 from Grave 11. Those from Grave 1 were close to the jar 27, those from Grave 11 close to the roulette-decorated bottle 28 (see Figs.). The former contained the handle fragments 8-9, the latter plain bodysherds. Both groups were found as discrete clusters on the floor of the graves, at the same level as the burials and other grave goods. Both sherd groups were of LBA/EIA date and one bodysherd from Grave 11 joined the handle 8 from Grave 1. These placements and their similar spatial relationships with associated grave goods interestingly imply the deliberate re-deposition of non-cultural elements disturbed from earlier features - their collection and re-burial a mark of respect for the 'ancestors'. Though there were no indications in either grave that they had cut an earlier feature, it is clear that EIA activity extended to this part of the site (Pit 1 within the hexagon - Fig.), so any disturbed pre-grave features are likely to have been minor - shallow post-pits or small pits. Irrespective of whether the sherds forming the conjoin No.8 were derived from the same feature, their distribution in two separate graves not only implies that they were re-buried at the same time but also that most of the compact evenly-spaced cluster of graves in this western part of the site may have been dug as part of one burial sequence.

#### Grave 11 Bottle 28:

The production of a bottle-form indicates the need to create a vessel intended to carry liquid. The production of one made with a hole in its base qualifies that intention. The combination of both implies the deliberate production of a vessel that was not intended to hold liquid for any length of time – but only on an occasional basis.

# IV. IMPLICATIONS FOR REGIONAL STUDIES

As a technique it is also present on the interior of an *assiette tronconique* fineware bowl from the nearby Kingston Down settlement (Bridge By-Pass Site 5) and initially dated by Cunliffe to between c.1000-800 BC (Cunliffe 1980, 179).

# **BIBLIOGRAPHY**

# Barret and Bond 1988:

Barrett, J.C., and Bond, D., 'Excavation at the North Ring, Mucking, Essex', *East Anglian Archaeology* **43** (1988).

# Blancquaert and Desfosses 1996:

Blancquaert, G. et Desfosses, Y., 'Premier bilan des decouvertes issues des fouilles de sauvetage sur Le Trace A29 (Le Havre-Saint.Saens, Huate-Normandie)', in *Revue archaeologique de Picardie* **3-4** (1996), 11-22.

# Blancquaert: 1998:

Blancquaert, G., 'L'age du fer a Coquelles at Frethun (Pas-de-Calais) (Fouilles du Transmanche 1986-1988)', in *Archaeologie de la Picardie at du Nord de la France*, Revue du Nord **328**, Tome LXXX (1998), 109-137

# Champion 1980:

Champion, T.C., 'Settlement and Envirnment in Later Bronze Age Kent' in Barrett, J. and Bradley, R.(eds), *The British Later Bronze Age*, British Archaeological Reports British Series **83** (i), 1980, 223-246

#### Couldrev 2003:

Couldrey, P., 'The Pottery' in Masefield, R., et.al. 'A Later Bronze Age well complex at Swalecliffe, Kent', Antiquaries Journal 83 (2003), 93-98

# Couldrey 2007:

Couldrey, P., 'The Pottery' in P.Bennett *et.al.*, *Excavations at Highstead, Chislet, Kent, 1975-1977*, The Archaeology of Canterbury New Series Volume IV, 101-171.

#### Cunliffe 1980:

Cunliffe, B., 'Overall Discussion of the Iron Age Pottery' in Macpherson-Grant 'Archaeological Work along the A2: 1966-1974', *Archaeologia Cantiana* **xcvi** (1980), 174-179.

#### **Evison 1979:**

Evison, V., Wheel-thrown pottery in Anglo-Saxon graves, London 1979

#### Hurst 1976:

Hurst, J.G., 'The Pottery' in Wilson, D.M.(ed.), *The Archaeology of Anglo-Saxon England*, C.U.P. (1976), 283-348

#### Hurtrelle 1989:

Hurtrelle, J. et.al., Les debuts du second age du fer dans le Nord de la France, Gauheria 1 (1990)

#### Jones and Bond 1980:

Jones, M.U. and Bond, D., 'Later Bronze Age Settlement at Mucking, Essex' in Barrett, J. and Bradley, R.(eds), *The British Later Bronze Age*, British Archaeological Reports British Series **83** (i), 1980, 471-482

#### Macpherson-Grant 1980:

Macpherson-Grant, N., 'Archaeological Work along the A2: 1966-1974', *Archaeologia Cantiana* xcvi (1980), 133-183.

#### Macpherson-Grant 1994:

Macpherson-Grant, N., 'The Pottery' in D.R.J.Perkins *et.al.*, 'Monkton Court Farm Evaluation 1992', *Archaeologia Cantiana* **cxiv** (1994), 248-288.

#### Macpherson-Grant 1995:

Macpherson-Grant, N., 'Early to Late Saxon Pottery', in Blockley, K, et.al., Excavations in the Marlowe Car Park and Surrounding Areas, The Archaeology of Canterbury V (Part II) 1995, 818-897

#### Malrain, Pinard and Gaudefroy 1996:

Malrain, F., Pinard, E., and Gaudefroy, S., 'Contribution a la mise en place d'une chronologie du Second Age du Fer dans Le Departement de L'Oise' in *Revue archaeologique de Picardie* **3-4** (1996), 41-70

#### **Morris 2006:**

Morris, E. 'The Later Prehistoric Pottery' in Booth, P.(ed.), *Ceramics from Section 1 of the Channel Tunnel Rail Link, Kent*, CTRL Specialist Report Series (2006), 34-121

# Myres 1977:

Myres, J.N.L., A Corpus of Anglo-Saxon Pottery of the Pagan Period, Cambridge 1977, Vols.1-2

# Needham and Longley 1980:

Needham, S., and Longley, D., 'Runnymede Bridge, Egham: 'A Late Bronze Age Riverside Settlement' in Barrett, J. and Bradley, R.(eds), *The British Later Bronze Age*, British Archaeological Reports British Series **83** (i), 1980, 397-436

#### **Thompson 1983:**

Thompson, F.J., 'Excavations at Bigberry, near Canterbury 1978-80', *The Antiquaries Journal* **lxiii** (1983), 237-278

# **Thompson 1982:**

Thompson, I., *Grog-tempered 'Belgic' pottery of South-eastern England*, British Archaeological Reports **108 i-iii**, Oxford 1982.

#### Wilson 1995:

Wilson, M., 'The Pottery from East of Marlowe Theatre', in Blockley, K., et.al. Excavation sin the Marlowe Car Park and surrounding areas, Part II: The Finds, Archaeology of Canterbury Series 5, 826-829

#### THE SMALL FINDS

Three non-metal small finds were also recorded from two Phase 5B graves – one from Grave 4 and two from Grave 9

#### Grave 4 - Hone stone:

A small fragment (SF 157) of natural iron-impregnated sub-tabular sandstone (max. length: 3.7cm, width: 2.5cm, max. thickness: 1.9cm) was recorded s a surface find. The upper surface is uneven, the underside is shallowly curved and three sides are straight and fairly even. The upper surface has traces of the original smooth surface skin in the hollows. Apart from these all surfaces are abraded. There are two types of abrasion. The first is probably the bi-product of natural erosion, where the surface skin has abraded away leaving a rough sandy texture - mostly on the upper surface, the assymetrical end and on one side. The second is the bi-product of using the stone as a hone – leaving a fairly smooth surface where the sand grains have been 'bruised' against metal. This occurs on the underside and on parts of one side and one end. The shape of the stone made it ideal for sharpening small knives. When using the underside - the stone was held by the thumb and fingers gripping the sides and dorsal surface, when the sides were used, the thumb and first two fingers gripped the upper and lower surfaces.

# *Grave* 9 - 2 spindle-whorls:

*SF 167*: A small bun-shaped spindle-whorl (diam: 3.7cms, max. thickness: 1.1cm, weight: 13gms) with a flat under surface and a slightly domed upper surface was recorded from **Grave 9.** The fabric is a fine-grained pasty pale yellow-ochre coloured clay, under-fired and soft, with pale drab buff easily scratchable surfaces that tend to flake. The perforation is slightly acentral and straight.

SF 168: A small dome-shaped spindle-whorl (diam: 3cms, max. thickness: 1.5cm, extant weight: 2gms) was recorded from **Grave 9.** The fabric is a fine-grained pasty pale yellw-buff coloured clay, under-fired and soft, with a tendancy to flake. Undamaged upper surface areas are smooth with a dirty 'patina' from frequent use.

Both spindle-whorls were made from a similar fine marly clay, both rather under-fired, and obviously from the same source. Both belong to Roger's Class A1, dated to the sixth century AD (Rogers 2007, 23-6).

# Bibliography:

#### **Rogers 2007:**

Rogers, P.W., Cloth and Clothing in Early Anglo-Saxon England AD 450-700, CBA Research Report 145 (York 2007), 23-6

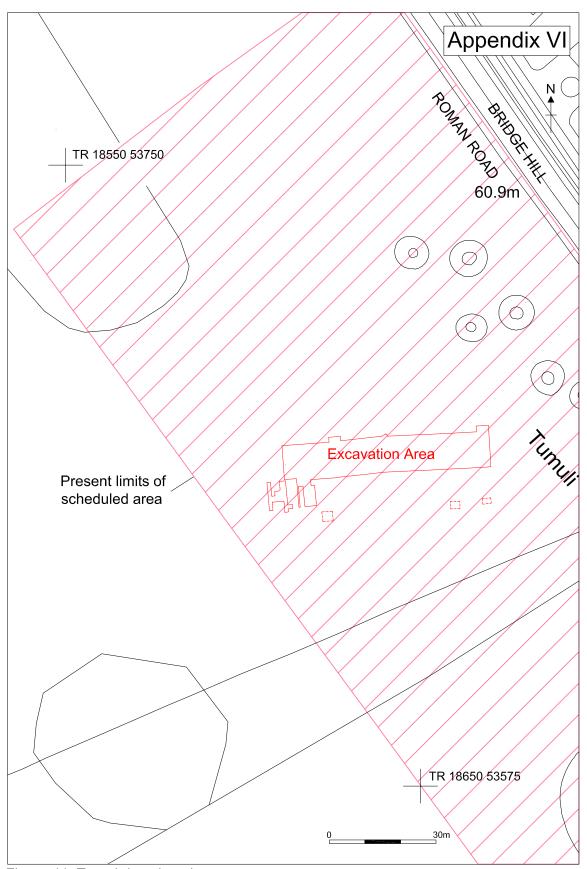


Figure 41. Trench location plan



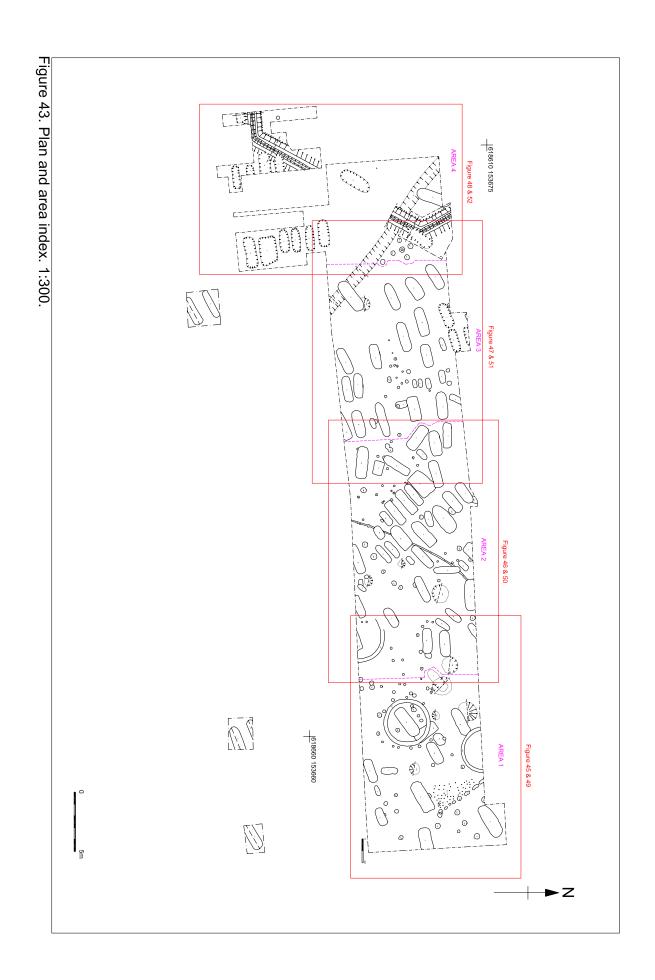


Figure 44. Phases 1-4. 1:300 Late Iron Age-Early Roman. c.100 BC-50 AD Late Bronze-Early Iron Age Transition Late Neolithic-Early Bronze Age. c. 2500-1800 BC Mid Roman. c. 125/100 AD 618610 153675 618660 153660 ►Z

Figure 45. Area 1, Phase 1-4. 1:80 G32 G19 0 0 0 0  $\bigcirc$ Late Iron Age-Early Roman. c.100 BC-50 AD Mid Roman. c. 125/100 AD Late Neolithic-Early Bronze Age. c. 2500-1800 BC Out 213 G35 0 65.07 m 0  $\bigcirc$ 0 O Cut 49 00  $\bigcirc$ 0 / cut 207 G58 64.78 m 64.99 m Cut 21 Cut 185 0 G38 0 0 0 0 G39 0 G42 65.14 m G45 G47 G46 30.59 K ₹5.32 **---**+≥

G56 G57 Cut)117 Late Iron Age-Early Roman. c.100 BC-50 AD Late Bronze-Early Iron Age Transition Late Neolithic-Early Bronze Age. c. 2500-1800 BC Mid Roman. c. 125/100 AD G77 G75 G78 G79 Cut 143 G55 0 G48 G65 G85 G86 0 Cut 111 G12 G87 G82 G69 G83 G53 G73 G76 G50 Cut 219 Cut 85 0 Area 2 G52 Cut 45 G67 0 65.11 m 65.08 m G17 G32 G19 0 0 0 0 0 Cut 213 G34 G35 | G84 0 0 0 0

Figure 46. Area 2, Phase 1-4. 1:80

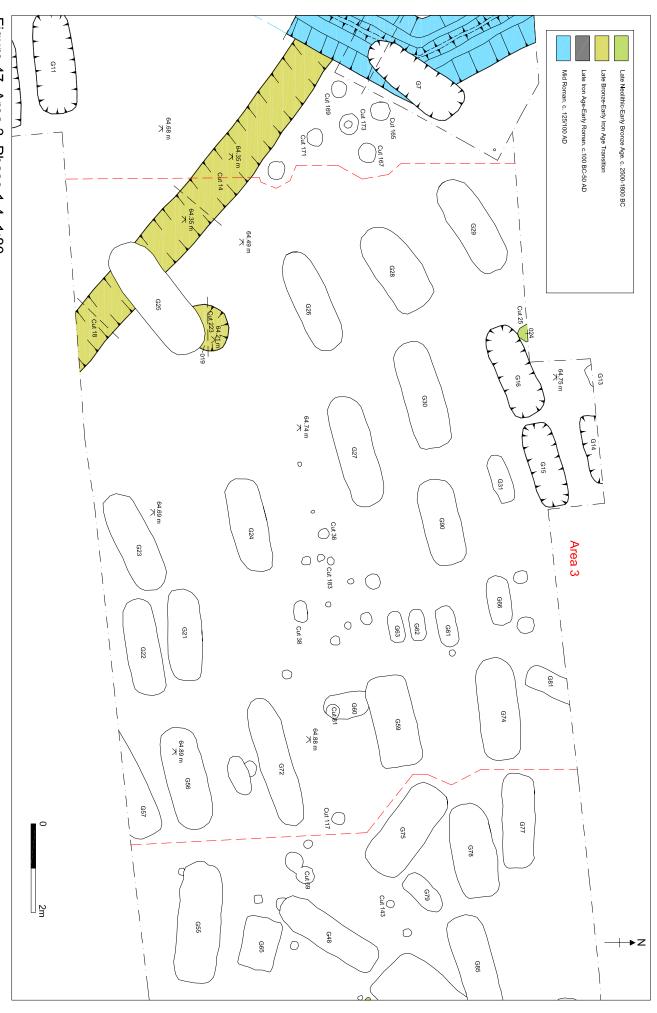


Figure 47. Area 3, Phase 1-4. 1:80

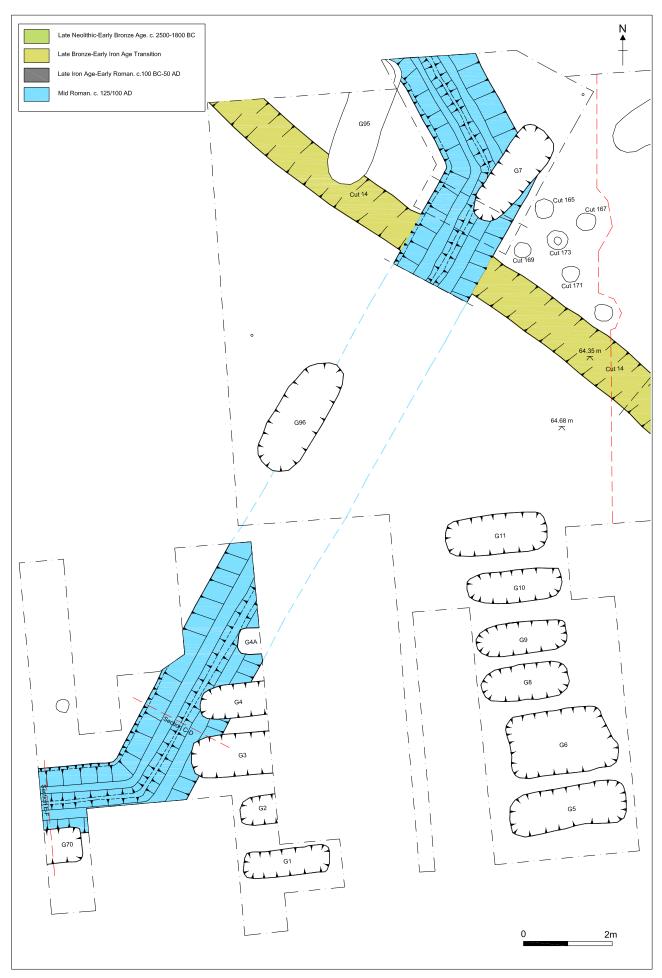
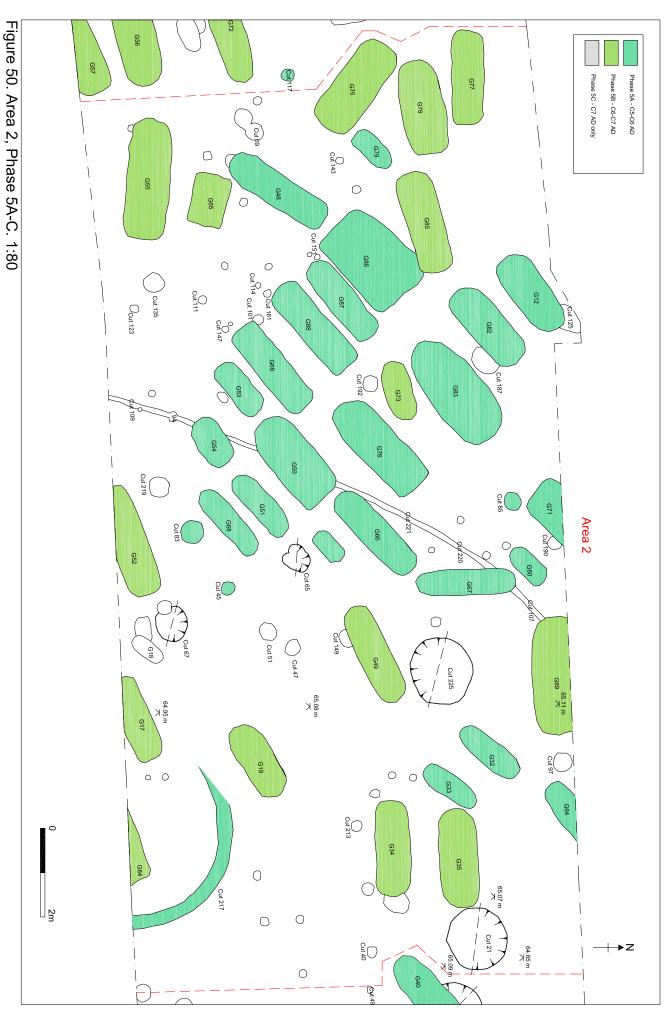


Figure 48. Area 4, Phase 1-4. 1:80

Cut 97 Figure 49. Area 1, Phase 5A-C. 1:80 0 0 0 0 0 Phase 5C - C7 AD only Out 213 G35 0 65.07 m 0  $\bigcirc$ Ocut 40 Ocut 49 0 00  $\bigcirc$ 0 Cut 209 G37 Cut 185  $\bigcirc$ 0 Area 1 0 0 Cut 201 65.10 m G46 X32 **--**+-≥



Phase 5B - C6-C7 AD Phase 5A - C5-C6 AD Phase 5C - C7 AD only Out 173 64.68 m 64.49 m G28 64.75 m 64.74 m G27 0 84.69 m Cut 36 Ocut 183 Area 3 G23 0 0  $\bigcirc$ 0 G74 Cut 117 G77 G78 G79 Out 143 0 G48 G85

Figure 51. Area 3, Phase 5A-C. 1:80

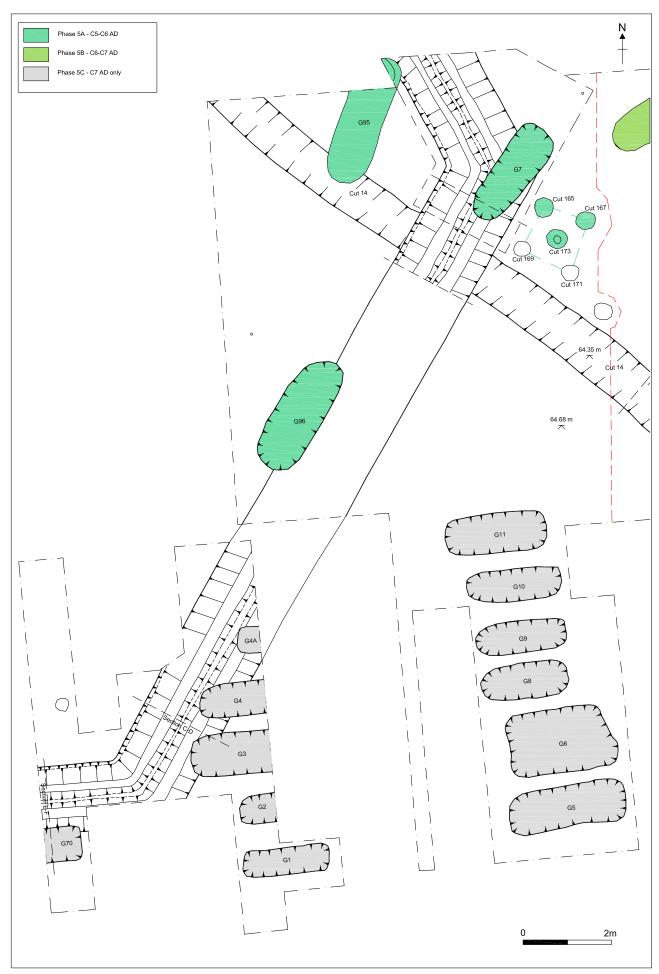


Figure 52. Area 4, Phase 5A-C. 1:80