



## Twyford School Twyford, Winchester

Archaeological Assessment and Updated Project Design



**TWYFORD SCHOOL,  
TWYFORD, WINCHESTER, HAMPSHIRE**

**Post-Excavation Assessment  
And  
Updated Project Design**

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**TWYFORD SCHOOL,  
TWYFORD, WINCHESTER, HAMPSHIRE**

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# **TWYFORD SCHOOL, TWYFORD, WINCHESTER, HAMPSHIRE**

## **Post-Excavation Assessment And Updated Project Design**

### **Summary**

Following the discovery of archaeological remains during construction work within the grounds at Twyford School, Twyford, Hampshire, Wessex Archaeology was commissioned to undertake an archaeological excavation. The Site, excavated in October 2007, comprised an area approximately 0.25 hectares, centred on NGR 448380 125016.

Part of a Mid-Saxon cemetery and other features, including a penannular ditch and possible post-built structures, were revealed.

The remains of 19 individuals were recovered from 18 graves, and a few fragments were found redeposited in graves, the penannular ditch and modern utility trenches. Grave goods furnished ten of the burials, ranging in date between the late 5<sup>th</sup>/6<sup>th</sup> century (AD) and the 7<sup>th</sup>/8<sup>th</sup> century. Burials of the 7<sup>th</sup>/8<sup>th</sup> century conversion period or 'Final Phase' tended to be furnished with ever fewer grave goods. The adoption of Christianity may have been a factor in these changes, however other reasons ought to be considered. The natures of the burials at Twyford may reflect a temporal change in burial rite, although status may have been an alternative influence. The correlation between sex and grave good type in the Twyford cemetery follows that seen in other Saxon cemeteries. Knives and buckles were found in both male and female graves, whereas the necklaces were buried with a female and the shields with males. A *Seax* accompanied a probable female burial. Such an implement is at times considered to have been a weapon, although it might have been general purpose tool.

The penannular ditch is likely to have been associated with the cemetery. Such features and their association with a cemetery have been recognised in contemporaneous sites, as have parallels for the three (poorly dated) possible post-built structures.

The cemetery at Twyford provides an opportunity to study part of a previously unknown, Mid-Saxon cemetery, in relation to its geographical and topographical location. A full analysis of this cemetery's attributes as represented by the excavated portion of it, in the context of other cemeteries of a similar date in the region, will contribute to research framework aims concerning the dating of these cemeteries, and information they contain concerning funerary practice, health and demography.

It is proposed that a journal article will be compiled in order to disseminate the results of this project. It is intended that it will be published in *Hampshire Studies*.

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**Acknowledgements**

Wessex Archaeology is grateful to Twyford School for commissioning the archaeological excavation and to Hampshire County Council for contributing to the commission. It is also grateful to English Heritage for commissioning the post-excavation assessment project and to the Archaeology Officer of Winchester City Council for providing advice.

The excavation was directed by Jon Martin who was assisted by Robert De' Athe, Neil Fitzpatrick, Laura Cassie and Marta Martin-Belenguer.

This report was prepared by Kirsten Egging Dinwiddy, with specialist contributions from Lorraine Mephram (general finds assessment), Jacqueline I. McKinley (human bone), Jessica Grimm (animal bone) and Talla Hopper (beads). Lyn Wootten assessed the conservation requirements of the metal artefacts. The bulk environmental samples were assessed by Ruth Pelling. Sarah Wyles provided advice concerning molluscs. Christopher Stevens assisted in the identification of *Carpinus* sp. The report illustrations were produced by Kenneth Lymer.

The project was managed for Wessex Archaeology by Paul McCulloch.

# TWYFORD SCHOOL, TWYFORD, WINCHESTER, HAMPSHIRE

## Post-Excavation Assessment And Updated Project Design

### SECTION A: POST-EXCAVATION ASSESSMENT REPORT

#### 1 INTRODUCTION

##### 1.1 Project Background

- 1.1.1 Wessex Archaeology was commissioned by Twyford School ('the School'), to carry out a programme of archaeological work in advance of the development of classroom buildings, access, and car parking at the School (NGR 448380 125016) hereafter 'the Site' (**Figure 1**). The archaeological work was intended to investigate, record, and excavate archaeological remains discovered unexpectedly on commencement of groundwork for the development in September 2007.
- 1.1.2 Planning permission for the development was granted by the Local Planning Authority Winchester City Council in March 2007 (Planning Reference 07/00090/FUL). No condition was applied to the grant of planning permission on archaeological grounds.
- 1.1.3 Discovery of the archaeological remains, in the course of the mechanical removal of topsoil and underlying chalk, was reported to the Historic Environment Officer (HEO) of Winchester City Council, who visited the Site on the 28<sup>th</sup> September 2007. The HEO advised the School on the remains, which appeared to comprise disturbed but well preserved skeletal remains of at least one human burial. These remains were removed from the Site and have been added to the Site archive.
- 1.1.4 In keeping with the advice of the HEO the School requested Wessex Archaeology to rapidly inspect the Site and, with the assistance of the School's appointed contractor, Barfoot and Powell Ltd, further mechanical stripping of the Site was undertaken on the 1<sup>st</sup> October 2007. This revealed the Site to contain a number of archaeological features concentrated in the centre and north-east quarter of the Site (**Figure 1**).
- 1.1.5 Following discussions between the HEO, English Heritage and the School regarding arrangements for funding and commissioning an excavation of the identified remains, Wessex Archaeology was instructed by the School to carry out the excavation and, in accordance with a Written Scheme of Investigation (WA 2007a), this was completed over a period of three weeks between the 9<sup>th</sup> and 24<sup>th</sup> of October 2007.
- 1.1.6 Following further negotiations with the School, English Heritage agreed to meet the costs of post-excavation works and any subsequent analysis, report preparation and dissemination that might be identified.



- 1.1.7 This report presents the results of the excavation and sets out an updated design for further work i.e. analysis and publication.
- 1.1.8 The project followed current, relevant guidelines including English Heritage's *Management of Archaeological Projects* (1991) and more recent MoRPHE (2006) guidance and those produced by the Institute of Field Archaeologists including *Standards and Guidance for Archaeological Excavation* (1999) and *Excavation and post-excavation treatment of cremated and inhumed human remains* (McKinley and Roberts 1993).

## 1.2 The Site

- 1.2.1 The Site (**Figure 1; Plate 1**) lies east of Searles Hill, the B3335 Twyford to Winchester Road, and south of Bourne Lane, within the grounds of Twyford School. The Site lies north of the School's current teaching facilities and immediately west of the Headmaster's House.
- 1.2.2 Until recently, the Site has comprised an access road and open ground laid to lawn.
- 1.2.3 The natural topography in the area of the Site ascends gently north and east and falls to the west toward the River Itchen, some 500m away. The Site itself is generally flat, gently sloping north to south with ground level occurring at approximately 46m above Ordnance Datum. The Site lies on chalk (BGS, Sheet 299).

## 1.3 Archaeological Background

### *Prehistoric (12.000BC – AD 43)*

- 1.3.1 Sites and find spots of prehistoric date have been recorded in the area of the Site. Neolithic and Bronze Age funerary monuments survive in the surrounding Downland landscape, as does evidence of settlement and agricultural practices on Twyford Down, which lies some 2 km north of the Site, close to the Iron Age hill fort, St Catherine's Hill.

### *Roman AD (43 – 410)*

- 1.3.2 The Site lies south of the Roman town of *Venta Belgarum*, later historic Winchester, and west of the Roman road linking *Venta* to the south, now followed by the Morestead Road. The Site lies some 500m to the south of the site of a Roman courtyard *villa* and bath house that was occupied from the 1<sup>st</sup> to the 5<sup>th</sup> centuries AD (Whinney, 1999).

### *Saxon-medieval (AD410-1500)*

- 1.3.3 Twyford ('two-fords') was one of the Hundred Hides of the Chilcomb estate granted to the church at Winchester in the 7<sup>th</sup> century and, as such, was in existence at this time. It is recorded in Domesday as in the possession of the King but held by the Bishop of Winchester.
- 1.3.4 No archaeological remains (other than metal detected finds (Nick Stoodley *pers. comm.*) of this period have been recorded in the vicinity of the Site, however the church of St Mary is thought to have been a Norman, or conceivably earlier, foundation. Four mills are recorded in Twyford in the 11<sup>th</sup> century Domesday survey.

- 1.3.5 Several contemporaneous cemeteries have been discovered in the Winchester vicinity, including Worth Park, Kingsworthy, Winnall Down, Oliver's Battery and St. Giles' Hill (**Figure 1**).

*Post-medieval*

- 1.3.6 The Site lies in the former grounds of the 18<sup>th</sup> century Queen Anne period Twyford House, which lies to the west, separated from the Site by the B3335. It is believed the grounds in which the Site lies were substantially landscaped.
- 1.3.7 The Site now lies within Twyford School, founded in 1809.

## **2 AIMS AND OBJECTIVES**

- 2.1.1 The aims of the archaeological work were to:
- 2.1.2 Investigate and record, through excavation, all significant archaeological remains within the Site as affected by groundwork for the development, sufficient to achieve their preservation *by record*
- 2.1.3 Assess the results of the archaeological works and present the assessment in the form of a Post-excavation Assessment Report to include, as appropriate, an Updated Project Design for further analysis, report preparation, and dissemination.
- 2.1.4 The work also aimed to:
- *Determine so far as possible the date of the human remains, including the date of the earliest and latest burials on the Site*
  - *Characterise the attributes and range of funerary practice in evidence*
  - *Determine so far as possible the date of, and characterise, other archaeological remains, features and deposits present within the Site*
  - *Record the spatial, functional, and chronological relationship of the funerary and other archaeological features on the Site*
  - *Assess the chronological and cultural affinities of the burials and consider the wider context of those affinities with reference to comparative and contrasting evidence from the locality and region of the Site*
  - *Determine from the human skeletal remains, where possible, the age at death, gender, and evidence of pathology present, toward providing an assessment of the human remains.*

## **3 METHODS**

### **3.1 Introduction**

- 3.1.1 Following the unexpected discovery of archaeological remains during redevelopment, the involved parties (the HEO, the English Heritage Inspector of Ancient Monuments, the School and Wessex Archaeology) agreed upon a mitigation strategy detailed in the Project Design (WA 2007a).

### **Site methodology**

- 3.1.2 The archaeological remains were preserved *by record* through a programme of work to investigate, record, excavate and remove them in mitigation of the impact of the development
- 3.1.3 In order to establish the extent of the remains, the Site was mechanically stripped of the topsoil and modern overburden, down onto the underlying geology.
- 3.1.4 The archaeological features were surveyed using a Leica Total Station and GPS, providing three-dimensional co-ordinates (tied to the Ordnance Survey) for all features. Planning location points and special artefacts were also recorded in this fashion, resulting in a complete digital Site plan (AutoCAD) from which stable paper copies have been produced.
- 3.1.5 The features and deposits were excavated and recorded using Wessex Archaeology's *pro forma* recording system, and in accordance with all relevant legislation and guidelines. All graves were fully excavated and a standard suite of soil samples taken. Other features were appropriately sampled to satisfy the aims and objectives of the project design (WA 2007a).

### **Post-Excavation methodology**

- 3.1.6 Specialist assessment methodologies are included in the specialist sections as appropriate. Methods for recommended further work are proposed in the Updated Project Design (Section B).

## **4 ARCHIVE SUMMARY**

### PAPER ARCHIVE

<b>File</b>	<b>Details</b>	<b>Format</b>	<b>No. sheets</b>
<b>1</b>	Project design (Processing, archive consolidation and Post-excavation Assessment) Assessment Report	A3 & A4 A4	16
	Daybook (photocopy)	A4	14
	Environmental sample register	A4	4
	Environmental sample records	A4	8
	Object register	A4	2
	Object records	A4	27
	Context index	A4	5
	Photographic register	A4	12
	Photographic register (digital)	A4	6
	Context records (1000 – 1148)	A4	147
<b>2</b>	Graphics register	A4	6
	Site graphics	A4	18
	Site graphics	A3	28
	Black and white photo negatives	35mm	6
	Colour slides	35mm	6

### DIGITAL ARCHIVE

Databases

Images/ Illustrations

To be quantified post-analysis

## ARTEFACTS AND ECOFACTS

Details	Quantity
Bulk finds	22 boxes; 33 bags/102kg
Small finds	5 stewart boxes, one on board; 27 no.
Environmental samples:	
<i>Bulk finds</i>	8 no.
<i>Skeleton samples</i>	96 no.

## 5 STRATIGRAPHIC ASSESSMENT

### 5.1 Introduction

5.1.1 The following section comprises a detailed summary of the archaeological remains encountered on the Site. It provides information upon which to base the Updated Project Design and programme for analysis and publication (Section B). An abridged list of contexts (numerals in **bold**) can be found in Appendix 1; full details are in the Site archive.

### 5.2 Natural deposits and soil sequence

5.2.1 The upper deposits on the Site mainly comprised topsoil (**1000**) – a dark brown loam c. 0.3m thick, with an abundance of post-medieval artefacts of various dates and types. The southern section of the Site was overlain by modern overburden and surfaces. The underlying natural geology, slightly degraded chalk (**1001**; **Plates 1 and 2**), was revealed immediately below the topsoil and modern surfacing.

### 5.3 Archaeological sequence

5.3.1 The archaeological features were distinct, and all were revealed as cut into the natural geology (**Figure 2**), and were as a result defined and recorded from the surface of the chalk.

5.3.2 The archaeological sequence was stratigraphically very simple, with few incidences of inter-cutting between features and only localised modern disturbance (detailed below and **Figure 2 and 3**). The range of feature types and dates was also limited. Many of the features (and all of the inhumation graves) were of the Saxon period, although a number, including a penannular ditch and possible structures, are dated by their apparent association with more firmly dated features alone.

5.3.3 Evidence for earlier activity was entirely residual. Many of the remaining features included postholes and small pits, most of which were not dated. At least ten tree throw holes were identified, one of which contained medieval pottery.

#### ***Prehistoric (to AD 43)***

5.3.4 Most prehistoric material was recovered from the topsoil, tree throw holes, or within later features.

#### ***Romano-British (AD 43 – 410)***

5.3.5 Evidence for Romano-British activity was restricted to residual artefacts (mainly pottery) found in Post-medieval pit/tree throw hole **1033** and pit/posthole **1119**, and Saxon graves **1130** and **1143**.

## **Saxon (AD 410 – 1066)**

### *Introduction*

- 5.3.6 On the eastern edge of the Site, 18 inhumation graves represented what appeared to be the western edge of a Mid-Saxon inhumation cemetery.
- 5.3.7 Dating evidence, in the form of grave goods recovered from ten graves, indicates that this part of the cemetery (at least) was in use from the late 5<sup>th</sup>-6<sup>th</sup> century AD until the 7<sup>th</sup>-8<sup>th</sup> century, the 'Final Phase'. Individuals from all age groups and both sexes were represented in the excavated assemblage.
- 5.3.8 The graves occupied an area approximately 28m x 8m, with a distinct western limit, aligned north-west/south-east. Immediately west of this apparent boundary lay a penannular ditch and possible post structures, all of uncertain date (see above and below). There were larger and more frequent tree throw holes on the western side of the Site, further emphasising the probable cemetery boundary.
- 5.3.9 The extent of the cemetery on the remaining three sides remains unclear, although the burials undoubtedly continued outside the area of excavation. A local account of a burial found within a service trench in the 1970s, approximately 75m to the north of the excavation, suggests the burials extended at least that far. This supports the theory that the Site is only part of a more extensive cemetery.

### *Disturbance*

- 5.3.10 Modern activity in the form of sewer and utility runs had cut away parts of two graves (grave **1126** and **1086**). Levelling and landscaping in the recent past had caused horizontal truncation of the graves and in several cases this caused the removal of parts of the burial remains (graves **1075**, **1080**, **1083**, **1095**, **1123** and **1143**).
- 5.3.11 Redeposited human bone was found in the fill of the penannular ditch **1002**, as were two clay pipe stems; this feature was also disturbed by modern utility runs.
- 5.3.12 There were only two cases of inter-cutting graves: Grave **1106** cut through the southern (head) end of grave **1130** and grave **1070** cut through the northern edge (left side) of grave **1049**; in both cases the human remains were undisturbed. This indicates that graves were marked or their whereabouts known in some way to avoid disturbance, and also that space was not overly restricted.

### *The graves*

- 5.3.13 Most of the graves (**Figure 3**) were sub-rectangular, a few had rounded ends and several – due to truncation - had an irregular outline. Complete adult graves were between 1.59m and 2.15m long, averaging 2.01m. The shortest grave contained a moderately flexed burial, the rest were less flexed or extended. The widths of the adult graves ranged from 0.49m to 1.17m, averaging 0.77m. The narrowest grave (**1143**) paradoxically contained two burials, but it had been very truncated. The widest graves were **1106** and **1130**; both contained single slightly flexed burials. The adult grave depths varied between 0.13m and 0.4m, on average 0.28m from the surface of the chalk. The deepest graves were located towards the east and south of the Site.

- 5.3.14 The complete graves of immature individuals (up to sub-adult) were between 1.13m and 1.6m long, averaging 1.48m. The widths ranged from 0.42m – 0.72m, with an average of 0.54m. The depths varied from 0.08m – 0.26m. Understandably, variation in grave dimensions reflected the size of individuals, with immature individuals in generally smaller and shallower graves than adults, and varying relatively within the immature group. An exception was burial **1087**, an infant, which was made in an adult-sized grave **1086**. This grave was highly truncated and could well have contained a second (larger?) burial.
- 5.3.15 When describing grave/burial alignment, the first cardinal point refers to the location of the head end, the second to the foot end. Of the 18 graves, ten (c. 56%) were aligned approximately west-east, and contained individuals of all ages and both sexes. Grave **1106** was more or less the reverse, i.e. east-north-east/west-south-west, and burial **1087** in grave **1086** was probably east/west. The remaining six graves (c. 33%) were all oriented roughly south/north.
- 5.3.16 The cemetery layout indicates a degree of organisation and formality. Rows were evident in an approximately north-south and an east-west alignment, although these were not strictly adhered to, creating a slightly random arrangement. Some patterns were evident e.g. three graves (**1114**, **1123** and **1006**) appear to be closely associated in burial position, location and alignment. The cluster at the centre may indicate a favoured location, perhaps a family plot, or proximity to features such as funerary monuments. It is likely that the general alignment and location of the graves originally respected markers in the landscape such as roads or existing boundaries.

#### *The burials*

- 5.3.17 Burial position was observable in most cases, an exception being the poorly preserved infant burial **1087** in grave **1086**. Where the lower limbs were missing (e.g. graves **1080** and **1143**) the complete position could not be confidently ascertained.
- 5.3.18 Approximately 72% of the burials (13) were made in the supine position (lying on the back), of which eight (c. 62%) were extended and two had slightly flexed (bent) legs. The rest of the burials (28%) were made lying on the side, although only slightly in most cases. All of these were made in the flexed position, the most extreme case being the burial in grave **1006** (an older adult female), where the knees were bent to approximately 45 degrees, and the femora at c. 70 degrees to the body. Three burials were made on the right side, and two on the left. Burial **1084**, a juvenile, possible female in grave **1083**, appears to have slumped from a position on the left side, to being almost prone (face down). The burial in grave **1130** (an older adult female **1131**) was notable in that the right side of the body seems to have slumped back to the right, leaving the skull in place, some distance from the neck and shoulder, and slight dislocation of the pelvic bones. This might indicate some space around the body to allow movement during decomposition.

#### Grave goods (Figure 3)

- 5.3.19 Nine graves contained artefacts (not including nails) deliberately placed with the burial and therefore considered to have been grave goods. They included everyday items such as knives, items associated with attire and adornment, and personal equipment. A further grave (**1086**) contained a

metal bar of unknown function that may have been associated with the burial.

- 5.3.20 Knives (supporting a post – AD 600 date) were found in four graves (**1006** (two), **1062**, **1075** and **1143**); all were placed in front of or close to the pelvis, seemingly attached to a belt. A larger knife (a *Seax*, dated to the 7<sup>th</sup>-8<sup>th</sup> century) was placed with the burial in grave **1062**. It was found between the ribs and femur on the right side of the body, handle uppermost; the left hand was placed over the tip (**Plates 4** and **5**). The presence of mineralised organic material suggests that the handle was made of horn. A belt was indicated by the 7<sup>th</sup>-8<sup>th</sup> century 'D'-shaped buckle found directly on top of the *Seax* blade; leather remnants adhered to the blade. The burial associated with the *Seax* was that of a probable female, not an unusual occurrence – such an association was observed at Park Lane, Croydon (McKinley 2003).
- 5.3.21 Two disc brooches of mid 5<sup>th</sup> to late 6<sup>th</sup> century were located to the right of the skull in grave **1049**, that of a juvenile c. 7-9 years. Their position suggests they may have been on an item of dress placed deliberately in the grave to one side, as opposed to clothing the body. The burial of an adult female (in grave **1070**) contained a necklace (**Plate 3**). Beads of amber, glass and stone, along with copper alloy and glass pendants (possibly originally strung on silver wire loops) were found at the neck of the individual. A small stone bead was the found with the infant burial in grave **1114**.
- 5.3.22 Several burials included a single nail, and in one case three possible nail fragments. These were not obviously associated with coffins, indeed no evidence for coffins was encountered, however the use of carpentry joints rather than nails has been suggested elsewhere. There has been some suggestion that single nails accompanying burials (Late Romano-British) may have had some amuletic significance (WA 2007b and Dungworth 1998).
- 5.3.23 Excluding the iron nails, all but one furnished burial contained a single type of grave good, although two of the same type occurred in two graves – the brooches (grave **1049**) and two knives with older adult female (grave **1006**). The only other exception was grave **1062**, which contained the burial of an adult, probable female. This burial included a buckle – on a belt worn when the burial was made, a knife and a *Seax*. The nature of this burial was otherwise unremarkable.

*Other features*

*Penannular ditch and structures*

- 5.3.24 Dominating the centre of the Site, to the west/south-west of the cemetery, was a penannular ditch (**1002**; **Figure 2**; **Plate 2**) with an entrance in the south-eastern portion (c. 7m diameter, entrance c. 4m wide). The ditch was on average 0.65m wide and 0.06 to 0.11m deep. The profile narrowed towards the entrance termini, although disturbance by a modern sewer run in this area may have altered or even created the illusion of an entrance. This ditch cut through a tree throw hole.
- 5.3.25 The single fill was a greyish brown loam, containing burnt and worked flint, animal bone and redeposited human bone (an adult >18 yrs), iron nails, clinker or fuel ash slag. This mixed group of both residual and intrusive

material of prehistoric to post-medieval date is similar to the assemblages from a number of the other features on the Site (see below).

- 5.3.26 To the north-west of penannular ditch (**1002**), several pits and/or postholes were recorded. These appear to be arranged in squares/rectangles, and are likely to represent the remains of three post-built structures (groups **1017**, **1149** and **1150**; **Figure 2**). As with the penannular ditch, dating material was mixed.
- 5.3.27 Posthole (**1015**) appears to form the south-east corner of a four-post structure (group **1017**). The arrangement of postholes was approximately 2m x 2m square and aligned north-south/east-west. Residual prehistoric material was recovered from this feature. No other postholes in this group contained datable material.
- 5.3.28 Similar square to rectangular structures **1149** and **1150** comprised at least seven and five postholes/pits respectively. The former was c. 3m x 2.8m, whilst the latter was c. 2m x 2.5m, or c. 5m long if feature **1057** is included. Only a few elements of **1150** contained any datable material i.e. pottery of Early Iron Age, Romano-British and Post-medieval date.
- 5.3.29 None of the material from these features was *in situ*, and the date ranges were too diverse for confident dating of the deposits to be determined. Later activity such as landscaping and development on the Site is likely to have caused some disturbance and contamination of a number of the archaeological deposits. Therefore, based on form, size and location, the features are cautiously regarded as contemporaneous with the cemetery. Parallels include features recorded at *Hamwic* in Southampton, Hampshire, (Morton 1992, 176).
- 5.3.30 At the nearby Winnall cemetery site, Winchester, Meaney and Hawkes (1970, 21) noted that nearly all the graves contained intrusive material including mixed pottery, brick, burnt clay, charcoal, animal bone, as well as slate, glass and coal. In this case bioturbation was the suggested cause.

#### Pits

- 5.3.31 Several pits (**1036**, **1089**, **1111**, **1117** and **1137**) contained medieval/Post-medieval material similar to that recovered from the possible structures. It is likely that most are refuse pits of these periods, the contents including large and sawn animal bone. It is possible that some deposits may be earlier, with intrusive later artefacts. Some of these pits may be related to the undated pits, for example **1117** is similar and close to undated feature **1109**. Further examination of the form and contents of the pits and postholes might establish patterns, allowing a more informed interpretation.

#### **Medieval and Post-medieval (1066 – 1799)**

- 5.3.32 The presence of medieval and Post-medieval material such as clinker, brick and tile within the upper fills of some of the possible postholes/pits is most likely the result of later redevelopment. The Site has been subjected to large-scale landscaping and levelling, which appears to have incorporated material of later (and earlier) dates into the upper sections of the features.
- 5.3.33 The environmental samples revealed relatively large quantities of clinkered material and metallic waste probably largely derived from a single, possibly



industrial or semi-industrial process, an episode unlikely to be related to the excavated features and therefore intrusive.

***Modern (1800 – present)***

- 5.3.34 Features of modern date included service runs emerging from and presumably connected to the Headmaster's House, a recent structure. The service runs were cut through a number of graves (see cemetery descriptions above and **Figures 2 and 3**).

***Undated***

- 5.3.35 A number of the more significant, but undated features are discussed above in their suggested phase. The remaining undated features comprised eight pits/postholes (**1031, 1057, 1091, 1093, 1109, 1133, 1135 and 1141**) ranging between sub-circular and sub-square with steep sides and flat bases. Sizes varied between 0.35m and 0.7m long by 0.24m to 0.6m wide and between 0.06m and 0.38m deep. Pit/posthole **1057** may be related to structure **1150**. The rest are scattered along the western edge of the cemetery, with no obvious coherent pattern.

## **6 FINDS ASSESSMENT**

### **6.1 Introduction**

- 6.1.1 Finds recovered from the excavation relate largely to the Saxon cemetery; these include human remains (inhumed) and a relatively restricted range of grave goods. There are also 'incidental' finds from graves, which probably represent redeposited material; these finds are of prehistoric, Romano-British and Saxon date. Of the 18 graves excavated, nine produced grave goods of some sort, and a further three contained objects or fragments which might relate to the burials (e.g. possible coffin nails) or could just be redeposited. The remainder were unaccompanied by grave goods, although the grave fills of three contained redeposited material (pottery and worked flint).
- 6.1.2 A second group of material came from non-grave and unstratified contexts (topsoil and a few cut features); this includes finds of prehistoric, Romano-British, Saxon, medieval and post-medieval date. It is possible that some of the Saxon pottery sherds from feature fills derive from disturbed graves. This is almost certainly the case for the human bone recovered from topsoil, and possibly from other non-grave features: potentially disturbed fill (**1068**) of penannular ditch **1002** and probably post-medieval posthole/pit fill **1138**.
- 6.1.3 All grave goods and other metal 'objects' have been allocated unique Object Numbers within a continuous sequence from 100. All finds, both objects and bulk finds, have been quantified by material type within each context, and a summary of the total quantification is presented in **Table 1**. A summary of the grave goods by type is presented in **Table 2**; note that this is based on preliminary identification of objects, several of which remain unidentified at this stage.

**Table 1: Finds totals by material type**

<i>Material</i>	<i>GRAVE FINDS</i>		<i>NON-GRAVE FINDS</i>		<i>TOTAL</i>	
	<i>No.</i>	<i>Wt. (g)</i>	<i>No.</i>	<i>Wt. (g)</i>	<i>No.</i>	<i>Wt. (g)</i>
<i>Human Bone</i>	19 indiv.	-	36 redep.	-	19 indiv. 19 redep.	-
<i>Animal Bone</i>	20	85	107	706	127	791
<i>Metalwork</i>	51	-	34	-	85	-
Silver	6	-	0	-	6	-
Cu alloy	16	-	1	-	17	-
Iron	28	-	33	-	61	-
Lead	1	-	0	-	1	-
<i>Glass</i>	12	-	5	-	17	-
Objects	12	-	-	-	12	-
Other	-	-	5	-	5	-
<i>Amber</i>	1	-	-	-	1	-
<i>Stone</i>	3	-	-	-	3	-
<i>Pottery</i>	19	90	29	140	48	230
Prehistoric	5	21	7	29	12	50
Roman	5	17	2	6	7	23
Saxon	6	42	-	-	6	42
Medieval	3	10	5	27	8	37
Post-med	-	-	15	78	15	78
<i>CBM</i>	-	-	26	1021	26	1021
<i>Clay Pipe</i>	-	-	-	-	6	21
<i>Worked Flint</i>	8	119	54	544	62	663
<i>Burnt Flint</i>	-	-	-	-	57	361
<i>Slag</i>	-	-	-	-	-	272

## 6.2 Metalwork

6.2.1 The metalwork includes objects of silver, copper alloy, iron and lead. Most represent grave goods found within the Saxon graves (see **Table 2**), but there are also a few objects from topsoil and other contexts.

**Table 2: Grave catalogue (finds only)**

<b>Grave No.</b>	<b>Personal Items</b>	<b>Knives</b>	<b>Weapons</b>	<b>Other</b>	<b>Redeposited Finds</b>	<b>Date (century)</b>
1003					4 sherds pottery	
1006		2		1 nail	4 sherds pottery	7/8 <sup>th</sup> ?
1049	2 brooches					late 5/6 <sup>th</sup>
1059					1 sherd pottery	
1062	1 buckle	1	Seax	1 sheet frag	19 animal bone	7 <sup>th</sup>
1070	Necklace group: 15 beads (1 amber, 12 glass, 2 stone); 12 cu alloy pendant frags; 6 silver wire rings					7 <sup>th</sup>
1075		1		3 ?nails; 4 sheet frags	1 flint	7/8 <sup>th</sup> ?
1080					1 flint	

1086				1 bar		
1095				1 nail	1 flint	
1106			shield boss	1 nail	1 sherd pottery; 1 flint	
1114	1 bead (stone)			1 nail; 1 unid	1 flint	
1123				2 frags	1 animal bone	
1126			shield boss & 2 rivets	1 nail	2 sherds pottery; 1 lead waste	
1130	1 toilet implement			1 unid	6 sherds pottery; 3 flint	
1143		1			1 sherd pottery	7/8 <sup>th</sup>

### **Grave Goods**

6.2.2 These can be divided into Personal Items, Knives, Weapons, and Other Objects.

#### *Personal Items*

6.2.3 These include jewellery, a buckle and a pin (which may have fulfilled the function of clothing or shroud fastener or hairpin).

6.2.4 Two disc brooches came from grave **1049**. Both carry identical decoration of incised concentric circles and ring-and-dot motifs. This brooch type is relatively early, generally considered to date from the mid 5<sup>th</sup> to late 6<sup>th</sup> century (Dickinson 1979; Welch 1983, 55-7).

6.2.5 Other jewellery consists of components of a necklace group in grave **1070 (Plate 3)**, comprising silver wire ring fragments and copper alloy 'bulla' pendants. These bullae are hemispherical with flat backs; there are at least six here. They are more frequently found in silver, which is interesting given that the associated wire rings were of silver. Bullae are known in Lombardic cemeteries of the 6<sup>th</sup> century and were introduced to England in the 7<sup>th</sup> century; Geake (1997, 37) gives a date range in this country as covering the second half of the 7<sup>th</sup> century and possibly extending into the 8<sup>th</sup> century. The necklace also contained beads of amber, stone and glass, and a glass cabochon pendant set in a copper alloy surround (see below).

6.2.6 The buckle (grave **1062; Plate 5**) is a narrow D-shaped form with a single tongue and a plain, rectangular, folded buckle plate secured by three rivets. Small oval buckles, often with folded and riveted plates, are common in the 7<sup>th</sup> and 8<sup>th</sup> centuries (Geake 1997, 13). This is not a particularly small example, but a late date would be supported by the Seax in the same grave (see below).

6.2.7 The pin (grave **1130**) is complete, slightly bent, and has a plain shaft surmounted by a flat disc head, centrally perforated and retaining part of a wire suspension ring. This object type is not particularly closely datable.

#### *Knives*

6.2.8 All five knives from graves fall into Böhner's type C (Böhner 1986); four are Evison's type 4 (curved back and straight cutting edge) and one is type 3 (angled back and curved cutting edge) (Evison 1987, text fig. 22). Type C is one of the main Final Phase (7<sup>th</sup>/8<sup>th</sup> century) knife types. Little systematic work has as yet been undertaken on the typology of Anglo-Saxon knives

after Böhner, and the presence of these knife types should therefore be used only as a support for a date after AD600 and not as proof (Geake 1997, 16).

#### *Weapons*

- 6.2.9 Weapons are represented by three items: two shield bosses and one Seax, from three separate graves.
- 6.2.10 Neither of the shield bosses survives complete. The boss from **1106** is missing its apex, while the boss from **1126** has a torn and heavily distorted cone and flange. This damage means that attribution to specific type is not straightforward. The boss from **1126** has a disc-headed apex, and the height, despite the distorted profile, appears to be relatively low (perhaps around 90mm), and the diameter around 170mm. There are three rivets extant, and their placing suggests that there were originally five – the two loose rivets also found in this grave almost certainly come from this shield boss. The cone appears to be straight or slightly convex. All these attributes would place this boss within Dickinson and Härke's boss groups 1-3 (1992), giving a potential date range of c.450-650. The second boss, from **1106**, is smaller, with a diameter of around 140mm; even without the apex the height seems relatively low, and this boss is, therefore, also likely to fall within groups 1-3.
- 6.2.11 The division between large knives and Seaxes is somewhat arbitrary, but Seaxes are generally considered to have an overall length greater than 250mm, and a blade length of at least 180mm. The object from grave **1062** (**Plates 4 and 5**), therefore, a single-edged blade with an overall length of 415mm and a blade length of 312mm, falls well within the size range for 'narrow Seaxes'. The Seax is a Merovingian type introduced in the 6<sup>th</sup> century, but far more commonly found in the 7<sup>th</sup> and 8<sup>th</sup> centuries. Although not definitive proof of a date after AD600, as are broad Seaxes and long Seaxes, the narrow Seax (or at least the short-handled variety, as is this example) are seen as giving 'a very strong hint of this date' (Geake 1997, 14-15).

#### *Other Objects*

- 6.2.12 Other objects include nails, miscellaneous fragments, and objects at this stage too small and/or corroded for positive identification. Nails occurred in six graves, mostly singly, with three from grave **1075** (although these are fragmentary and not positively identified). It is difficult to say whether these nails were used in coffin construction, or were residual finds, perhaps of Romano-British date. Iron coffin fittings are not common in Anglo-Saxon graves, and it appears that coffin construction must have been largely aided by carpentry joints (Evison 1987, 100).
- 6.2.13 The single piece of lead in grave **1126** is a waste fragment, and is regarded here as a residual find.

#### *Metalwork from other contexts*

- 6.2.14 There are 33 iron objects from non-grave contexts (topsoil, various pits and postholes, and penannular ditch **1002**). These consist largely of nails (26), with other structural items (2), knives (2), and unidentified fragments (3). The nails include one fiddle-headed and several T-headed examples, which are probably horseshoe nails of medieval or later date – the fiddle-headed

nail and one T-headed nail came from penannular ditch **1002**, but may be intrusive here.

- 6.2.15 One knife came from topsoil, and one from pit **1121**; the latter has a bolster (a thickening between tang and blade), a feature introduced around the middle of the 16<sup>th</sup> century.

### 6.3 Glass Beads and Pendant

- 6.3.1 The 15 glass beads from the necklace in grave **1170 (Plate 3)** were all monochrome, comprising yellow, blue and clear examples. Several forms are represented including disc, annular, biconical and drawn cylinder types. The copper alloy bulla pendants (described above) indicate a 7th century date, a date supported by the small number of beads typical of later necklace groups, when compared to those of the 6<sup>th</sup> century.
- 6.3.2 A single Cabochon pendant was also found with the necklace group in grave **1170**. This dark glass ornament (colour undetermined) had a beaded copper alloy surround, but lacked the usual suspension ring. Such pendants typically have a glass or garnet setting, at least partially convex in profile. Cabochon pendants were made throughout the 7<sup>th</sup> century and they tend to be found in relatively wealthy graves (Geake 1997, 39-40), although in this instance the necklace group constitutes the only grave good.

### 6.4 Amber and Stone Beads

- 6.4.1 The amber bead, and two of the stone beads came from the probable later 7<sup>th</sup> century necklace group in grave **1170** (see above for other components). The stone items comprise one flat disc bead of white stone, possibly gypsum, and two natural flint near-spheroids (one of which was recovered from grave **1114**); both had perforations, indicating they may have been utilised as beads.

### 6.5 Pottery

- 6.5.1 The small pottery assemblage includes sherds of prehistoric, Romano-British, Saxon, medieval and post-medieval date. Nineteen sherds came from grave fills, but these are all, apparently, redeposited, even the six Saxon sherds, although these could represent the fragmentary remains of grave goods disturbed from earlier burials. The three medieval sherds from Saxon grave fills are presumably intrusive in these contexts (all are small sherds).
- 6.5.2 The condition of the assemblage is poor – all sherds are small, and many sherds are heavily abraded. Mean sherd weight overall is 4.8g. The whole assemblage has been quantified by broad ware type, and fabric totals are given in **Table 3**.

**Table 3: Pottery totals by ware type**

<i>Date Range</i>	<i>Ware Type</i>	<i>No. sherds</i>	<i>Weight (g)</i>
<i>PREHISTORIC</i>	<i>Flint-tempered ware</i>	11	48
	<i>Sandy ware</i>	1	2
	sub-total prehistoric	12	50
<i>ROMANO-BRITISH</i>	<i>Grog-tempered ware</i>	1	2
	<i>Greyware</i>	6	21
	sub-total Romano-British	7	23

<i>SAXON</i>	<i>Organic-tempered ware</i>	6	42
<i>MEDIEVAL</i>	<i>Misc. medieval coarseware</i>	6	34
	<i>Laverstock-type fineware</i>	1	2
	<i>Laverstock-type coarseware</i>	1	1
	sub-total medieval	8	37
<i>POST-MEDIEVAL</i>	<i>Verwood-type earthenware</i>	2	20
	<i>Redware</i>	7	33
	<i>Stoneware</i>	4	23
	<i>Refined whiteware</i>	2	2
	sub-total post-medieval	15	78
	<b>OVERALL TOTAL</b>	<b>48</b>	<b>230</b>

### ***Prehistoric***

- 6.5.3 Twelve sherds were identified as prehistoric, all plain body sherds. All but one of these are in coarse, flint-tempered fabrics. Although undiagnostic, these sherds can be dated on fabric grounds as Late Bronze Age. Five of these sherds came from Saxon graves and one came from topsoil. The remaining five sherds came from posthole **1015**.
- 6.5.4 One sherd (from pit **1025**) is in a fine-grained sandy fabric which is not particularly distinctive but which may be Iron Age in date.

### ***Romano-British***

- 6.5.5 There are seven Romano-British sherds. All are coarsewares, comprising six greywares and one grog-tempered ware. These are all small body sherds and cannot be more closely dated within the Roman period. Five sherds came from Saxon graves, one from pit **1033** and one from pit **1119**.

### ***Saxon***

- 6.5.6 All six sherds identified as Saxon are in organic-tempered fabrics, and all came from grave contexts (**1006**, **1030**) although, as noted above, these are unlikely to represent grave goods but rather redeposited sherds. None are diagnostic. Organic-tempered fabrics have a currency from the 5<sup>th</sup> to the 8<sup>th</sup> century, but have their *floruit* in the 6<sup>th</sup>/7<sup>th</sup> century.

### ***Medieval***

- 6.5.7 Eight sherds are medieval. Seven are coarsewares, and include Laverstock-type wares from the Salisbury area as well as miscellaneous sandy and sandy/flint-tempered wares from other (unknown) sources). Two of these sherds were intrusive within Saxon grave **1126**; the others came from pits **1021**, **1033**, **1111** and **1121**. There is one fineware sherd, again a Laverstock type, intrusive within Saxon grave **1006**.

### ***Post-Medieval***

- 6.5.8 Post-medieval/modern sherds came from topsoil as well as pits **1021**, **1036** and **1111**, and posthole **1137**. They comprise coarse earthenwares (redwares and Verwood types), modern stonewares and refined whitewares.

## **6.6 Ceramic Building Material**

- 6.6.1 This category includes fragments of brick and roof tile. Most is of post-medieval date, with some possible medieval roof tile fragments from topsoil.

## 6.7 Worked and Burnt Flint

- 6.7.1 The small quantity of worked flint consists almost entirely of waste flakes, with one scraper and one other possible retouched piece. The raw material is chalk flint; most pieces are patinated and most are edge damaged, consistent with a residual provenance. Eight pieces came from Saxon graves; other pieces came from topsoil (24 pieces), and from various pits and postholes, and from penannular ditch **1002**.
- 6.7.2 The small quantity of burnt, unworked flint recovered (all from non-grave contexts) is also likely (although not proven) to be of prehistoric date. This material type is of uncertain origin.

## 6.8 Human Bone

### *Introduction*

- 6.8.1 Human bone was recovered from 26 contexts including the remains of 18, possibly 19 Anglo-Saxon (late 5<sup>th</sup> – 8<sup>th</sup> century) *in situ* inhumation burials. Other deposits comprised redeposited bone, mostly from modern disturbance associated with the development and circumstances of discovery of the graves (see above).
- 6.8.2 The graves were situated along the length of the eastern margins of the site (**Figures 2 and 3**) and clearly form part of a cemetery extending to the east, probably to the north and possibly the south of the excavated area. A verbal account of a burial being observed in a service trench dug in the 1970s c. 50-100m to the north of the Site may be indicative of the extent of the cemetery.

### *Methods*

- 6.8.3 All the bone was subject to a rapid scan to assess the condition of the bone, demographic data, potential for indices recovery and the presence of pathological lesions. Animal bone was separated-out for assessment by the archaeozoologist. Assessments of age and sex were based on standard methodologies (Beek 1983; Buikstra and Ubelaker 1994; Scheuer and Black 2000). Grading for bone preservation follows McKinley 2004 (fig. 6).

### *Results*

- 6.8.4 A summary of the results is presented in **Table 4**. The surviving depths of the graves ranged from 0.08m to 0.40m, with most (c. 67%) remaining to a depth of more than 0.15m and half to over 0.20m. Intercutting between graves was rare but substantial disturbance had occurred to numerous burial deposits due to the circumstances of discovery (see above and 'comments' section of **Table 4**). A considerable quantity of the bone disturbed and removed from extant graves prior to archaeological involvement was retained by the developers and forms part of the redeposited bone assemblage.
- 6.8.5 A further consequence of the circumstances of discovery is the heavily fragmented condition of much of the bone (**Table 4**), particularly the skulls, and reconstruction will be required in many cases. The condition of the bone is generally good (grades 0-2), with moderate surface degradation (grade 3) in some cases. The bone from a few graves shows considerable variation in condition across the skeleton. The percentage of skeletal recovery is variable with more than 50% recovery in 50% of cases and over 80%

recovery in only five; the figures are generally reflective of recent disturbance rather than bone condition. A few skulls were warped due to soil pressure.

- 6.8.6 A minimum of 19 individuals is represented, one from each of the excavated graves and one from redeposited bone within grave **1143**. Most, if not all of the redeposited bone from the topsoil and unstratified deposits is likely to relate to the recently disturbed *in situ* remains. The assemblage has the appearance of a 'normal' domestic population with eight (42%) immature individuals including three young infants, two juveniles and three juvenile-sub-adults, and adults of both sexes (five females and five males; **Table 4**). Most of the adults appear to fall within the older age categories with several potentially in excess of 50 years of age and only one under 30 years. Although the proportion of immature individuals may appear comparatively high, this age group - representing only c. 31% of the population within the contemporaneous cemetery at Worthy Park, Winchester, for example (Wells *et al.* 2003, table 3.6) - is within the bounds of that expected within a 'normal' population. The latter is, however, relatively rarely observed in archaeological populations due to a variety of largely taphonomic factors.
- 6.8.7 Pathological lesions were observed in the remains of a minimum of 12 individuals from the *in situ* deposits. Various dental conditions and degenerative joint diseases were commonly observed, both to be expected given the generally advanced age of much of the adult population. A range of other conditions are indicated including several traumas and a possible case of tuberculosis. There is limited osteological evidence for the latter within this period (Roberts and Cox 2003, table 4.10) though a possible case was reported from Alton, Hampshire (Brothwell and Powers 1988, 59). There is some evidence for deficiency disease in the form of *cribra orbitalia* but no dental hypoplasia was observed.



**Table 4: Summary of results from assessment of human bone**

context	cut	deposit type	quantification	age/sex	pathology	comment
1000a		redep.	5 frags.	adult >18 yr.		2; fresh breaks may refit somewhere
1000b		redep.	20 frags., s.u.l.	1. adult >18 yr. 2. juvenile c. 5 yr. 3. juvenile c. 8-10 yr.		2-3 (worn & slight abraded); old & fresh breaks
1004	1003	inh. burial	c. 96%	adult c. 40-55 yr. male	calculus; osteoarthritis – T; spondylolysis - L5; Schmorl's node – L, T; op – S1, L; destructive lesion – anterior palate; enth – calcaneum; surface defect – foot phalanx	0-1; badly frag. needs reconstruction; most indices; v. heavy attrition; v. large male
1007	1006	inh. burial	c. 93%	adult c. 40-55 yr. female	ante mortem tooth loss; abscess; caries; calculus; osteoarthritis – C; ddd – C; cribra orbitalia; op – T, L; enth – calcaneum	1; frag., needs reconstruction (fresh breaks), most indices; sockets need rewashing
1019	1018	inh. burial	c. 71%	juvenile/subadult c. 10-14 yr.		1-2; frag. some reconstruction; no man./max.
1050	1049	inh. burial	c. 65%	juvenile c. 7-9 yr.		3-4; some reconstruction no indices
1060	1059		c. 50%	juvenile c. 5 yr.		2-4; frag., needs reconstruction
1063	1062		c. 87%	adult c. 30-45 yr. ?female	impacted canine	1-3; some reconstruction, skull heavily frag. & warped some indices; fibula in with arm bones
1068	1067	redep.	8 frags. a.u.l.	adult >18 yr.	pitting – lateral clavicle	1-2; old & fresh breaks; mostly foot bone
1071	1070	inh. burial	c. 98%	adult c. 25-30 yr female.	calculus; Schmorl's node – L; spondylolysis – L5; destructive lesion – L6; op – C; mv – L6 sacralised	0-1; little reconstruction, skull heavily frag., most indices; green staining 1C & mandible; skull needs some rewashing – dirty joins
1076	1075	inh. burial	c. 58%	adult >45 yr. male	?abscess; osteoarthritis – left & right hips; op – left shoulder, S1, L; ankylosis – 2L; enth – patella; exo – left tibia shaft	2-5; frag., may reconstruct, some indices; finger bone with foot, skull with ribs
1081	1080	inh. burial	c. 55%	subadult c. 12-14 yr. ??female	<i>cribra orbitalia</i>	2-4; machine truncated lower limb (see 1000, some ?from here) some reconstructable frag.
1084	1083	inh. burial	c. 45%	juvenile c. 9-11 yr. ??female	calculus	2-4; skull heavily frag.; few measurements; machine truncated lower limb (see 1000, some from here?)
1087	1086	inh. burial	c. 3% s.u.	infant c. 6-12 mth.		3
1096	1095	inh. burial	c. 50%	adult c. 30-45 yr. ?female	calculus; fracture – left humerus; extensive ankylosis - ?via ligament (bodies ?intact (damaged) no exuberant new bone ?longitudinal ligament ?ankylosing spondylitis.; exocranial new bone; op – prox. femur	2-4; warped skull; heavily truncated by machine (see 1000 for some, some from spoil heap); may eventually be able to reconstruct & get some indices

context	cut	deposit type	quantification	age/sex	pathology	comment
1107	1106	inh. burial	c. 40% a.u.l.	adult >45 yr. ?male	op – acetabulum	1-2; heavily truncated & frag. by machine; limited reconstruction & indices
1115	1114	inh. burial	c. 70%	infant c. 1.5 yr.		1-2; heavily fragmented, some reconstruction useful
1124	1123	inh. burial	c. 20%	infant c. 9-14 mth		1-2; heavy truncated & fragmented
1128	1126	inh. burial	c. 65%	adult c. 30-50yr. male	<i>ante mortem</i> tooth loss; calculus; destructive lesion (?TB) – T; enth – calcaneum; op – C; mv – os trigonum, wormian bones	2-3; heavily truncated (modern); some reconstruction & indices
1131	1130	inh. burial	c. 90%	adult c. 45-65 yr. female	calculus; caries; abscess; osteoarthritis – C; op – right distal femur, right patella, T bsm; ddd – C, L, S1; Schmorl's node – L, T	1-2; heavily frag., some reconstruction & indices
1138	1137	redep.	1 frag.	?		wash!
1144	1143	inh. burial	c. 15%	adult c. 40-55 yr. male	ddd – S1	1-2; very heavily frag., reconstruction needed, few indices
1144b	1143	redep.	c. 30 frags. a.u.	subadult/adult ?female		0-1; frag.
1146	1143	inh. burial	c. 30 frags.	adult >20 yr.		1; frag. vertebrae; ?= 1144/1144b
spoil heap		redep.	c. 17% skull c. 5% axial c. 12% upper l.  c. 15% lower l.	adult >35 yr. adult c. 20-45 yr. male min. 2 adults >18 yr. male + female min. 3 ind. juvenile + 2 adult >18 yr. min. 1 male	op – L bsm, rib facets op – glenoid fossa	0-4; heavily fragmented; skull will reconstruct recovered from spoil heap fresh breaks dumped by machining (pre.arch.). check with 1095, 1083, 1080, 1125, 1126.
u/s		redep.	2 frags. l.	adult >18 yr. female		2, old breaks

KEY: s. – skull, a. – axial skeleton, u. – upper limb, l. – lower limb (skeletal area represented where all are not present); op – osteophytes; ddd - degenerative disc disease; pd - periodontal disease; enth – enthesophytes; mv - morphological variation; C – cervical, T. thoracic. L – lumbar; S – sacral, MtT/C – metacarpal/tarsal; bsm - body surface margins

## 6.9 Animal Bone

### *Introduction*

- 6.9.1 The faunal assemblage consists of 37 hand collected and sampled mammal and bird bone fragments. Conjoining fragments that were demonstrably from the same bone were counted as one bone in order to minimise distortion, and therefore specimen counts (NISP) given here may differ from the absolute raw fragment counts in **Table 1**. On the basis of associated pottery, the material is of mixed date. It is unlikely that any of the bones represent grave goods, although a small quantity came from grave fills (graves **1062**, **1123**). The overall condition of the bone is good.
- 6.9.2 The identified remains consists of cattle (n=3), sheep/goat (7) and bird (3). One of the bird bones belonged to a young chicken; the other two were possibly goose and duck.
- 6.9.3 A possible post-medieval date for some of the bones was attested by the size of the bones, their preservation compared to the redeposited bone scraps, and the clear butchery marks made by a saw. The sawing through of the bone shaft was seen for a sub-adult proximal cattle femur (pit **1033**) and a sub-adult proximal cattle tibia (pit **1111**). The latter pit also contained an adult sheep humerus of which the distal part was sawn off.

## 6.10 Other Finds

- 6.10.1 Other finds comprise two clay pipe stems and a small quantity of slag (probably fuel ash slag rather than metalworking debris). One clay pipe stem came from penannular ditch **1002**. The slag came from several contexts, including topsoil; where associated dating is provided by pottery, these contexts are post-medieval.

## 7 PALAEO-ENVIRONMENTAL EVIDENCE

### 7.1 Aims

7.1.1 Bulk samples taken during excavation were processed and assessed for the quality and quantity of any charred plant remains and charcoal, or other biological remains present, and their potential for analysis.

### 7.2 Palaeo-environmental summary

#### *Introduction and environmental samples taken*

7.2.1 Eight bulk samples were taken from features and were processed for the recovery and assessment of charred plant remains and charcoals.

7.2.2 The bulk samples break down into the following phase groups:

**Table 5: Bulk samples**

<i>Phase</i>	<i>no of samples</i>	<i>volume (litres)</i>	<i>feature types</i>
Prob. Saxon	1	10	Pit
Saxon	2	22	Burial, Ditch
Undated	5	80	Ditch, Pits
total	8	112	

### 7.3 Methods

#### ***Charred Plant Remains and Wood Charcoals***

7.3.1 Bulk samples were processed by standard flotation methods; the flot retained on a 0.5 mm mesh, residues fractionated into 5.6 mm, 2mm and 1mm fractions and dried. The coarse fractions (>5.6 mm) were sorted, weighed and discarded. Flots were scanned under a x10 – x40 stereo-binocular microscope and the presence of charred remains quantified (**Appendix 3**) to record the preservation and nature of the charred plant and wood charcoal remains. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997).

### 7.4 Results

7.4.1 The flots were generally of moderate size. There were low numbers of roots and modern seeds suggesting limited reworking or contamination. All the flots however, contained substantial quantities of highly clinkered material of unknown origin and occasional coal and metallic residues. The similarity of the appearance of the flots would suggest they are largely comprised of material derived from a single, possibly industrial or semi-industrial process, and episode which is not related to the archaeological contexts. Charred material was poorly preserved.

#### ***Charred plant remains***

##### *Saxon*

7.4.2 One sample from a probable Saxon feature (pit **1025** in group **1149**) was examined. A single seed of *Rumex* sp. (docks) was present.

7.4.3 Two samples were examined from Saxon features (grave **1003** and ditch **1065**). The grave fill produced no charred plant remains. The ditch feature produced one nutlet of cf. *Carpinus* sp. (hornbeam). While *Carpinus betulus*

(hornbeam) is native in parts of southern Britain, trees of the genus are also widely planted as ornamentals and for hedging. The wood is often used in charcoal production. The nutlet may have entered the sample with firewood.

#### *Undated*

- 7.4.4 Five samples were examined from undated features including one ditch (feature **1067**) and four pits. Occasional grains of *Hordeum vulgare* (barley) and indeterminate species, a fragment of *Corylus avellana* (hazelnut) and a second nutlet of *Carpinus* sp. (hornbeam) were present in the ditch sample. No grain was present in the pit sample. A single seed of *Galium aparine* (goosegrass, cleavers) was present in the sample from pit **1023**.

#### **Wood Charcoal**

- 7.4.5 Wood charcoal was noted from the flots of the bulk samples and is recorded in **Appendix 3**. Charcoal was only present in small quantities.

### **7.5 Land and fresh/brackish water molluscs**

- 7.5.1 No samples or sequences of samples were taken specifically for land snails, as they are not normally useful from this sort of feature/geology. The presence of snails was noted, and recorded (**Appendix 3**), in the flots, although it is unlikely that they will aid in characterising the nature of the wider landscape.

### **7.6 Dating**

- 7.6.1 The charred remains recognised, including the charcoal, are of doubtful value in terms of dating, given the low density of remains, their mixed nature and the consistent similarity of the flots. This is especially the case given the frequent presence of coal /coke type material.

## **8 STORAGE AND CURATION**

### **8.1 Museum**

8.1.1 It is recommended that the project archive resulting from the excavation be deposited with the Winchester Museums Service. The Museum has agreed in principle to accept the project archive on completion of the project and has issued a code for the archive – WINCM: AY 340. Deposition of the finds with the Museum will only be carried out with the full agreement of the landowner.

### **8.2 Preparation of Archive**

8.2.1 The complete site archive, which will include paper records, photographic records, graphics, artefacts and ecofacts, will be prepared following the Museum's 'Archive preparation standards', and in general following nationally recommended guidelines (Walker 1990; SMA 1995; Brown 2007).

8.2.2 All archive elements are marked with the Winchester site code (**AY340**), and a full index has been prepared.

### **8.3 Conservation**

8.3.1 No immediate conservation requirements were noted in the field. Finds which have been identified as of unstable condition and therefore potentially in need of further conservation treatment comprise the metal objects, most of which were recovered from graves as grave goods.

8.3.2 Metal objects have been X-radiographed as part of the assessment phase, as a basic record and also to aid identification. On the basis of the X-rays, the range of objects present and their provenance on the Site, 19 objects or groups of objects (one silver, four copper alloy and 14 iron) have been selected for further conservation treatment, involving investigative cleaning and stabilisation; this includes all grave goods apart from undiagnostic fragments, selected 'nails' from grave contexts (possibly not all nails), as well as two knives from other contexts. Details of selected objects and their proposed treatments are given in **Appendix 2**.

### **8.4 Discard Policy**

8.4.1 Wessex Archaeology follows the guidelines set out in *Selection, Retention and Dispersal* (SMA 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. In this instance, burnt, unworked flint has already been discarded. No further discard is anticipated.

8.4.2 The discard of environmental remains and samples follows the guidelines laid out in Wessex Archaeology's 'Archive and Dispersal Policy for Environmental Remains and Samples'. The archive policy conforms with nationally recommended guidelines (SMA 1993; 1995; English Heritage 2002) and is available upon request.

## **8.5 Copyright**

- 8.5.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Wessex Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The recipient museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profitmaking, and conforms to the Copyright and Related Rights regulations 2003.

## **8.6 Security Copy**

- 8.6.1 In line with current best practice, on completion of the project a security copy of the paper records will be prepared, in the form of microfilm. The master jackets and one diazo copy of the microfilm will be submitted to the National Archaeological Record (English Heritage), a second diazo copy will be deposited with the paper records, and a third diazo copy will be retained by Wessex Archaeology.

## SECTION B: UPDATED PROJECT DESIGN

### 9 STATEMENT OF POTENTIAL AND FURTHER RECOMMENDATIONS

#### 9.1 Potential of the features

- 9.1.1 The excavation of the c. 0.25 hectare Site in the grounds of Twyford School, Twyford, uncovered a number of Mid-Saxon graves and associated features. This represented a small section of the western periphery of a 'Conversion Period' or Final Phase (c.AD570 - 720) cemetery. A total of 18 graves containing 19 individuals were located, many of which had been subject to truncation, either dramatically reducing the depth of the grave and exposing the skeletal material to environmental damage, or by complete removal of sections of the burial remains.
- 9.1.2 The nature of the burials, as well as the presence of datable artefacts in half of the graves, suggests a date range for the cemetery between the late 5<sup>th</sup>-6<sup>th</sup> centuries until the 7<sup>th</sup> – 8<sup>th</sup> centuries AD. Mid-Saxon cemeteries are a distinctive entity forming part of the 'Final Phase' as defined by Boddington (1990).
- 9.1.3 Burials of Mid-Saxon date tend to be supine and extended, as are most of those at Twyford. However, many were flexed and some were buried lying on one side. The orientation of Mid-Saxon graves gradually became more uniform over time, as it might have done at Twyford. Grave shape tended to be not entirely regular and the grave tended to be larger than the burial it contained, as seen at Twyford (WA 2008).
- 9.1.4 As well as contemporaneous local sites (e.g. Worthy Park, Kingsworthy and Winnall), there is a plethora of published work on the cemetery archaeology of the Saxon period in Hampshire, which address themes concerning migration, cultural influence, and changing funerary practices. Periodic reviews and comparisons of excavated Saxon cemeteries and associated features will provide essential background to the analysis and publication stage of this project (e.g. Stoodley 2006; Rahtz et. al. 1979; O'Brien 1999; Lucy 2000).
- 9.1.5 In a recent review of the evidence for the Saxon 'way of death', Lucy (2000, 3) describes the shift towards furnished burials in the Saxon period from the Late Romano-British formal unfurnished burials. In particular, the burial of weapons (a practice banned under Roman law) suggests societal change. Some burials, particularly in the east of England, suggest cultural influences from the Continent in the earlier Saxon period, indeed weapon burials are recorded as early as the late 4<sup>th</sup> century AD in Gaul. The unfurnished graves at Twyford could perhaps be of this period, however given the date of the furnished graves, and the generally well-spaced but relatively unorganised layout of the cemetery, it is unlikely.
- 9.1.6 In the late 6<sup>th</sup> century, the marriage of Aethelbert and Frankish princess Bertha illustrates the strong contacts between Britain and the Continent, and coincides with changes in burial rites and the nature of the grave goods. In this period the construction of earthen barrows increased, weapon shapes



changed and jewellery became more refined. Large brooches and bright beads of the early – mid 6<sup>th</sup> century were replaced by more subtle gold and garnet items, silver pendants and rings (Lucy 2000, 3). The necklace found in one of the graves at Twyford included silver links and ‘bulla’ pendants, parallels for which are known from Lombardic cemeteries of the 6<sup>th</sup> century, introduced to England in the 7<sup>th</sup> century. The grave goods of Mid-Saxon burials become sparser than in the previous period and consist of a few utilitarian objects, such as knives, and dress fittings. There is also a move away from the inclusion of weapons (WA 2008).

- 9.1.7 In the course of 7<sup>th</sup> and 8<sup>th</sup> centuries, furnished inhumation burials decline in Britain, and the differential inclusion of grave goods at Twyford may represent this decline. The unfurnished graves could well be later than those with goods, although other factors such as mixed rite practices and status must be considered. The adoption of Christianity has been suggested as a reason for the decrease in the inclusion of grave goods, however there must have been other reasons, particularly as the Church never prohibited grave goods (Lucy 2000, 5).
- 9.1.8 At Twyford, nine of the graves contained grave goods, including knives, brooches, shield bosses, a toilet implement and a beaded necklace. Many graves contained single nails, the location of which may be significant, perhaps amuletic as suggested in the Late Romano-British burials at Little Keep, Dorchester (WA 2007b) and by Dungworth (1998). There were some recognisable correlations between the sex of an individual and some types of grave goods, as might be expected. Of particular interest was the possible female adult in grave **1062**, who was accompanied by a *Seax*, often regarded as a weapon and therefore generally a masculine grave good. Examples of these were seen in graves at Burwell, Cambridgeshire and at Aldbourne, Wiltshire, which was also a possible female (Boddington 1990; WA 2008)
- 9.1.9 The other archaeological features, particularly the penannular ditch and probably associated post-built structures were severely truncated and subject to contamination from post-medieval disturbance. For this reason their dating is uncertain; analysis of form and fills, as well as comparison to dated parallels (e.g. Stoodley 2006) may clarify the function and date of these. Morton (1992, 176) when describing an example from Southampton states that other authors have noticed structures associated with penannular ditches were located on the periphery of certain cemeteries and goes on to conclude that the location of similar features was governed by the need to site the earthwork at the western limit of the cemetery – precisely the location of the penannular ditch and structures at Twyford.
- 9.1.10 Although these ‘Final Phase’ Saxon cemeteries occur with some frequency in the east of England, they are relatively rare in Wessex and therefore of importance. The demography of the human remains would contribute to the study of this Site, in relation to others from the same period, and also the burial ritual at this time of transition.
- 9.1.11 The theory that those buried in Saxon graves were all migrants, is no longer the accepted standard interpretation; nor can it be assumed that those living and dying in the 7<sup>th</sup> and 8<sup>th</sup> century Saxon kingdoms were descendants of the migrants of the early Saxon (‘migration’) period (Lucy 2000, 4).

- 9.1.12 A full analysis of this cemetery's attributes, as represented by the excavated portion of it, needs to be undertaken in the context of other cemeteries of a similar date in the region, including those recorded at Worthy Park, Winnall I & II, St Giles' Hill and Oliver's Battery, and also Southampton. This will contribute to research framework aims concerning the dating of these cemeteries, and information they contain concerning funerary practice, health and demography.
- 9.1.13 The cemetery at Twyford provides an opportunity to study a small and previously unknown Mid-Saxon cemetery in the wider archaeological context expressed within the Solent & Thames Research Framework (Crawford 2008, 2 & 4) and would make a significant contribution to an understanding of the settlement of the Itchen Valley in the early medieval period.

## **9.2 Potential of the finds**

### ***Grave Goods***

- 9.2.1 The finds assemblage recovered from the Site is relatively small. Its primary interest lies in the material recovered from the Anglo-Saxon cemetery (human remains and grave goods). The latter category, however, is only sparsely represented here. Only nine graves produced definite grave goods, with a further three containing objects which could be funerary-related. The condition of the grave goods varies, though most are sufficiently complete and not too corroded to enable accurate identification. Some objects, however, for example the two shield bosses, have suffered damage which hampers their accurate identification.
- 9.2.2 The grave goods that were recovered can provide a limited amount of information regarding the chronology of the cemetery, suggesting that while several of the graves are likely to be 7<sup>th</sup> century (on the basis of knives, the necklace group and the *Seax*), at least one seems to be of late 5<sup>th</sup> or 6<sup>th</sup> century (on the basis of the disc brooches). More than half the graves, however, remain undated by artefacts.
- 9.2.3 A small amount of information will also be provided on burial practices (e.g. age/sex patterning of grave goods), and will contribute to a brief discussion of costume (necklace group, brooches, buckle) and social status (weapons, necklace group). A search for parallels for the objects may provide evidence for external contact and hence cultural affinities.

### ***Human Bone***

- 9.2.4 Analysis will provide more detailed demographic data with regard to the number, age and sex of individuals. With limited reconstruction, metric data – including stature estimates and cranial indices - can be recovered. A detailed record and study of the pathological lesions will enable assessment of the health and, by inference, potentially the status of individuals.
- 9.2.5 Whilst it is known that the excavated graves form only a (possibly small) part of a more extensive cemetery, the range of ages and distribution between the sexes within the assemblage suggests that the remains recovered are likely to give a representative sample of the whole. Comparison of the various forms of data – demographic, metric and pathological – from Twyford School with that from other excavated cemeteries on a local, regional and national level will contribute towards assessing the form and nature of the population from which these individuals derived, homogeneity

and broad genetic links between individuals within local groups and the wider region, and the comparative health and status of the population within its temporal context.

- 9.2.6 Contemporary cemeteries excavated in the immediate vicinity of Winchester include those at Worthy Park and Winnall (**Figure 1**) and Andover (Stoodley 2006). Comparative data for all areas of study are available for the former (Wells *et al.* 2003), while that from Winnall is limited to broad demographic data only (Meaney and Hawkes 1970). In the wider region, other Hampshire cemeteries include Alton (Brothwell and Powers 1988), Droxford (Aldsworth 1979) and St Mary's, Southampton (McKinley 2005), for which some comparative data (chiefly demographic and metric) are available. A recent excavation at Aldbourne, Wiltshire (WA 2008) revealed part of a 7<sup>th</sup> century cemetery, and the data from this will also be consulted.

### **9.3 Other scientific analysis of the remains**

- 9.3.1 The Solent & Thames Research Framework (Crawford 2008, 2 & 4) calls for a programme of radiocarbon dating of both furnished and unfurnished, apparently Mid-Saxon burials. Such dates might allow an assessment of the accuracy of (and potentially fine tune) existing grave good chronologies. The results could also contribute towards discussions regarding the inclusion or exclusion of grave goods i.e. whether temporal, social or other factors lay behind the disparities.
- 9.3.2 There would appear to some potential for the Twyford cemetery to contribute in this area, although the relatively small number of burials that could contribute datable human bone could be a limiting factor, hence radiocarbon dating of human bone from the Site is, for the time being, not proposed.
- 9.3.3 Isotope analysis (Crawford 2008, 2 & 4) has the potential to address questions concerning the origin and diversity of cemetery populations. Given the date of the cemetery has been established with reasonable confidence, it is unlikely to have the potential to contain a significantly diverse population, which isotope analysis might identify.

### **9.4 Potential of the environmental evidence**

- 9.4.1 No further work is recommended.

## **10 RESEARCH QUESTIONS**

### **10.1 Previous aims and objectives**

- 10.1.1 The aims of the archaeological excavation have been successfully achieved as far as was possible, and have provided a basis from which to compile a set of research questions for the analysis and publication phase of investigation.
- 10.1.2 Only the western extent of the cemetery was determined. Undoubtedly the cemetery continues/continued to the north, and probably to south and east. The Twyford School burials clearly represent a small and peripheral section of a more extensive cemetery.

10.1.3 The following demonstrates how the previous aims and objectives have been addressed:

- **Determine so far as possible the date of the human remains, including the date of the earliest and latest burials on the Site**

Nearly half the graves contained datable material, the earliest being c. mid 5<sup>th</sup> to late 6<sup>th</sup> century AD and the latest being 7<sup>th</sup> to 8<sup>th</sup> century. The remaining burials can be fairly confidently dated to the same broad Mid-Saxon period, based on characteristics and association with the dated remains.

- **Characterise the attributes and range of funerary practices in evidence**

There were generally slight variations in the funerary practices represented but none were extreme. The variation in type and number of grave goods appears to be the most common and is readily comparable at a local and regional level.

- **Determine so far as possible the date of, and characterise, other archaeological remains, features and deposits present within the Site**

The other archaeological remains, features and deposits comprised three probable post-built structures, a penannular ditch of probable mortuary nature, scattered pits of unclear function and tree throw holes. Dating evidence was uncertain due to disturbance – i.e. contamination by intrusive and residual material. The structures and penannular ditch have been cautiously attributed to the Mid-Saxon period, however further analysis of form and deposits will be required for clarification.

- **Record the spatial, functional, and chronological relationship of the funerary and other archaeological features on the Site**

The cemetery was spatially and functionally distinct from the rest of the features, occupying the eastern side of the Site, with only a few pits and tree throw holes scattered among the graves. The structures, penannular ditch and most of the tree throw holes were located to the west of the cemetery. The chronological relationships, because of the lack of firm dating in the non-cemetery features, and their spatial separation was not confidently determined at this stage, although it is likely that the penannular ditch is contemporary with the cemetery. To clarify, further consideration such as comparative analysis of the structures and penannular ditch with dated examples is required.

- **Assess the chronological and cultural affinities of the burials and consider the wider context of those affinities with reference to comparative and contrasting evidence from the locality and region of the Site**

The chronological and cultural affinities of the burials within the cemetery have been assessed with reference to the stratigraphic sequence and by preliminary investigation of the distribution of grave and burial characteristics such as location, alignment, contents (including grave goods) and body position. Further analysis of the skeletal remains may produce evidence for familial or activity related associations. Some consideration has been given to cultural affinities in the wider context

with reference to evidence from the locality and region of the Site, however more analysis will be required.

- **Determine from the human skeletal remains, where possible, the age at death, gender, and evidence of pathology present, toward providing an assessment of the human remains**

A summary of the rapidly assessed human skeletal remains has been compiled. This includes, where possible, the age at death, biological sex, and evidence of pathology present. As recommended above, full analysis will be required.

- 10.1.4 It is considered this report fulfils the requirement of the provision of an interim assessment report and updated project design for the results produced by the excavation.

## **10.2 Updated aims**

- 10.2.1 The primary aims of the Post-excavation analysis are as follows:

10.2.2 To provide a chronological narrative of human activity on the Site based on the results of all the archaeological excavation and analysis undertaken, for dissemination via an appropriate academic source (most likely a paper in *Hampshire Studies*).

10.2.3 To prepare and deposit an accessible archive of the results of all the archaeological work undertaken with the Winchester Museum subject to agreement from the School.

## **10.3 Potential research questions**

- 10.3.1 The following potential research questions address research framework themes (Crawford 2008, 2 & 4) and have been considered in the context of the potential of the Site archive:

- **Inheritance and Legacy**

### **How does the Site contribute to the understanding of the origins and history of settlement in the Itchen Valley?**

- 10.3.2 Many of the villages in the Itchen Valley appear to have their origins in the Roman-British period (and possibly earlier), possibly as farming estates, and these may have provided a landscape inherited in the early medieval period. The current regional research framework suggests that the identification of when, how and if *villa* estates ceased to function should be prioritised (Crawford 2008, 2). The Site would appear to represent a population that may have thrived in an inherited landscape, in which case some consideration should be given to the setting of the cemetery relative to the site of the Roman villa at Twyford, some 500m to the south of the cemetery, and thought to have been occupied from the 1<sup>st</sup> to the 5<sup>th</sup> centuries AD.

- **Social organisation, economy and subsistence**

### **How did Anglo-Saxon Twyford relate to early medieval Winchester?**

Twyford's first mention is as one of the Hundred Hides of the Chilcomb estate granted to the church at Winchester in the seventh century, i.e. at a time the Twyford cemetery was probably in use. The emergence of the

church and its Royal patronage at Winchester at this time may be considered to have been a force for change in the wider population, affecting their roles, allegiances and economy and subsistence. Can the 'Final Phase' characteristics of the Twyford cemetery be seen in this context?

- **Ceremony, ritual and religion**

**How does the cemetery represent changing ceremonial, ritual and religious practices in and around Winchester and the Itchen Valley?**

10.3.3 There have been several comprehensive studies and reviews of Saxon burial practices and how these may relate to the population and their culture (e.g. Stoodley 2006; Rahtz, Dickinson and Watts (eds) 1979; O'Brien 1999; Lucy 2000). These, along with more recent discoveries (e.g. McKinley 2005; WA 2008), will provide comparative data and, therefore, a basis on which to approach the Twyford cemetery, which will in turn enhance the knowledge of Saxon burial practices and the cultural influences on the local population.

**How does the demography of the group from Twyford compare with that from other Saxon cemeteries, particularly those from the Final Phase?**

10.3.4 The cemetery population at Twyford presents an opportunity for investigating a previously unknown group in comparison to other examples in the vicinity. Comparison between these groups is of particular interest to ascertain levels of disparity in skeletal form, demographic make-up and the types and rates of pathological conditions which may reflect socio-economic factors. Comparison of the Twyford cemetery data with other local and regional cemeteries may shed light on the nature and variations between the communities burying their dead within these cemeteries, on their health and, by inference, social status. However, it is important to bear in mind that the Twyford assemblage represents an unknown portion of a larger cemetery.

**What is the correlation between the sex and age of the population represented, and the distribution of grave goods in the cemetery?**

10.3.5 The provision of grave goods may present a correlation with the sex and age of individuals within the cemetery. Closer analysis and dating of the individual grave goods may indicate a reduction in the inclusion of artefacts with burials over time. Comparison with other local and regional cemeteries may indicate similarities between the communities. However, the Twyford assemblage is incomplete and possibly too small to address this question comprehensively, nonetheless the results of further analysis will add to the existing corpus of Anglo-Saxon mortuary data, amongst which the answers may lie.

**How do the non-grave features compare with those recorded in the locality and in a wider context?**

10.3.6 The penannular ditch and other possible structures will be compared to others from sites in Hampshire and wider afield to determine whether they can be associated with the cemetery, or are likely to be of a different period. Structural remains from the period are extremely rare and as such are of importance.

- **Osteology**

**How does the case of tuberculosis, identified during the assessment, fit into the picture of disease prevalence in the early medieval period, both nationally and Europe-wide?**

- 10.3.7 The case of tuberculosis identified from the Twyford assemblage is a relatively rare occurrence in Britain during this period. Comparison with the different types of sites in which the disease is recorded to have occurred will enhance our understanding of this period with regards to health within different types of community. Further comparison with occurrences on sites throughout Europe, and the type of environment in which they are situated, will add to our understanding of the development of the disease.

**What is the prevalence of dental and degenerative joint disease and how does it relate to the age profile of the cemetery?**

- 10.3.8 Analysis will provide more detailed data with regard to the age profile of the cemetery and may provide correlations between this and the prevalence of dental and degenerative joint disease throughout the assemblage. Comparison of age groups and the occurrences of these diseases within them may help shed further light on health and socio-economic factors within the community.

## **11 METHOD STATEMENT**

### **11.1 General**

- 11.1.1 The Solent-Thames Archaeological Research Framework (BCC 2008) comprehensively discusses and lists the Anglo-Saxon historical and archaeological background of Hampshire. It provides an invaluable structure within which to consider the Twyford Site.
- 11.1.2 The known archaeology in the vicinity of the Site will be considered, by reviewing relevant published reports and 'grey literature'. These will contribute towards the discussion of the Site as part of a larger landscape and its relationship with contemporary sites in the Itchen Valley and early medieval Winchester.
- 11.1.3 An access database and AutoCAD drawings have been constructed to facilitate rapid cross-examination and enhancement of the archive during post-excavation analysis.

### **11.2 Finds**

#### *Grave goods*

- 11.2.1 Following conservation of the metal objects, individual pieces will be related to established typologies and where possible the original form of the artefact will be reconstructed. Existing catalogue entries will be enhanced as appropriate during the analytical process, and will contribute towards the grave catalogue. All grave goods, apart from small, un-diagnostic fragments, will be illustrated or photographed as part of this catalogue, and combined with the grave plans showing the location of objects within the graves.
- 11.2.2 The grave goods will be discussed in terms of chronology, parallels and, associations, and the implications that these aspects have for burial practice, costume, social status and external contact.

#### *Other Finds*

- 11.2.3 Other finds (incidental finds from grave fills, and miscellaneous finds from other contexts), will not be considered further.

#### *Human Bone*

- 11.2.4 The residues from the samples taken in excavation will be subject to a rapid scan to recover any osseous material overlooked by the non-specialist post-excavation processors.
- 11.2.5 Taphonomic factors potentially affecting differential bone preservation will be examined. The minimum number of individuals will be ascertained following McKinley (2004); disturbed and redeposited bone will be returned to the context of origin where possible. The age of individuals will be assessed using standard methodologies (Brothwell 1972; Beek 1983; Buikstra and Ubelaker 1994; Scheuer and Black 2000). Sex will be ascertained from the sexually dimorphic traits of the skeleton (Bass 1987; Buikstra and Ubelaker 1994). Where possible a standard suite of measurement will be taken (Brothwell and Zakrzewski 2004) and non-metric traits recorded (Berry and Berry 1967; Finnegan 1978).



- 11.2.6 All recording will be undertaken using an Access database and complementary skeleton and dental record sheets with detailed text descriptions of skeletal morphology and pathological lesions where appropriate. Pathological lesions will be recorded in text and via digital photography; several lesions are likely to warrant photographing for publication purposes. It will be necessary to make X-radiographs of skeletal elements showing evidence of trauma and infection to ascertain as far as possible the full nature of the lesions.

*Conservation*

- 11.2.7 Limited investigative conservation, cleaning and stabilisation will be required, as indicated in **Appendix 2**.

**11.3 Environmental**

- 11.3.1 No further work will be undertaken

**11.4 Programme**

- 11.4.1 It will be necessary to agree and finalise the proposals for the post-excavation analysis and publication with English Heritage, the Archaeology Officer of Winchester City Council, and Winchester Museums Service. Following acceptance of this report and agreement of costs, a detailed programme timetable will be drawn up and implemented.

- 11.4.2 Appropriate resources will be made available to enable the agreed programme of post-excavation analysis, as defined in the Updated Project Design, to be undertaken.

**11.5 Publication synopsis**

- 11.5.1 In accordance with the updated project design, the final report will include full stratigraphic and phased accounts of the excavation results, and the results of analysis by specialists outlined above.

- 11.5.2 A report on the project will be published in an appropriate place. In this instance it is envisaged that an article will be prepared for publication in *Hampshire Studies*.

- 11.5.3 The proposed format for the publication is laid out below:

	<b>words</b>
<b>Abstract</b>	200
<b>Introduction</b>	1200
Site location	
Geographic & topographic background	
Historical and archaeological background	
Project background	
<b>Results</b>	
Archaeological features and deposits	
<i>Pre-Anglo-Saxon</i>	100
Residual and natural features	
<i>Anglo-Saxon</i>	
Inhumation graves	2500
Other features	
Penannular enclosure	500
Post-built structures	500
<i>Post-Anglo-Saxon</i>	100
Human remains	5000
<i>Introduction</i>	
<i>Condition</i>	
<i>Demographic data</i>	
<i>Indices and dimorphism</i>	
<i>Non-metric variation</i>	
<i>Pathological lesions</i>	
<i>Discussion</i>	
Finds	5000
<i>Grave goods</i>	
Weaponry and associated material	
Personal adornments	
Personal equipment	
Other items	
<i>Other finds</i>	
<b>Discussion</b>	2500
<b>Acknowledgements</b>	100

Total 16400

(c. 21 pages @ 800 words per page)

<b>Grave catalogue</b> (smaller font)	<b>2-3 pages</b>
<b>References</b> (2 columns & smaller font)	<b>3-4 pages</b>
<b>Illustrations</b>	<b>10 pages</b>
3 – 4 figures (main)	3 pages
Grave plans with goods	7 pages

**Grand total c. 36 pages**

## 12 RESOURCES, TASK LIST, AND PROGRAMME

### 12.1 Designated project team

12.1.1 It is currently proposed that the following Wessex Archaeology core staff and external specialists will be involved in the programme of post-excavation analyses. Wessex Archaeology reserves the right to replace any member of the named team at its discretion. The project will be managed by Paul McCulloch, who will be responsible to the Head of Specialist Services.

Head of Specialist Services	Karen Walker BA, MPhil, MIFA
Project Manager	Paul McCulloch BA MIFA
Senior Technical Manager Publications	Julie Gardiner, BA, PhD, FSA, MIFA
Project Officer (post-excavation)	Kirsten Egging Dinwiddy, BA, MA, AIFA
Senior Project Officer (human bone specialist)	Jacqueline I. McKinley, BTech, MIFA
Project Officer (other finds, metalwork, stone etc)	Grace Jones
Graphics Officer	Illustrator - TBC
Archive Officer	Christine Butterworth

### 12.2 Management structure

12.2.1 Wessex Archaeology operates a project management system. The team will be headed by the Senior Project Manager, in this instance Paul McCulloch, who will assume ultimate responsibility for the implementation and execution of the Project Specification, and the achievement of the performance targets, be they academic, budgetary or scheduled.

12.2.2 The Senior Project Manager may delegate specific aspects of the project to other key staff, who both supervise others and have a direct input into the compilation of the report. They may also undertake direct liaison with external consultants and specialists who re contributing to the publication report, and the museum named as the recipient of the project archive. The Senior Project Manager will have a major input into the writing of the publication report, and will define and control the scope and form of the post-excavation programme.

## 12.3 Task list

12.3.1 The table below (**Table 6**) lists the tasks necessary to complete the proposed programme of post-excavation analyses and publication. Publication task completion would be subject to a grant from English Heritage. The publication costs will depend on a final decision regarding the content of the proposed publication.

**Table 6: Task list**

Task No.	Task description	Grade	Name	Days
1	Project management	SPM	McCulloch, P	1.5
2	Finds and environmental management	SPM	Crockett, A	0.5
3	Revise phasing	PO	Egging Dinwiddy, K	1
4	Extracting and checking grave catalogue entries for finds (all categories)	PO	Egging Dinwiddy, K	1
5	Site narrative	PO	Egging Dinwiddy, K	4
6	X-radiographing selected human and animal bones (up to 10 bones)	ASS	Britten, A	1.0
7	Human Bone residue sorting, analysis, and reporting	SPO/ PO	McKinley, J/ Egging Dinwiddy, K	15 or 17
8	Conservation	SPO	WA Cons External	4.5 45 hours
9	Metalwork	PO	TBC	5
10	Necklace group	PS	Hopper, T	1
11	Finds illustration (all grave goods incl. 2 brooches, necklace group, buckle, pin, 5 knives, Seax, 2 shield bosses, 8 nails)	GO	Illustrator	5
12	Discussion	SPM	McCulloch, P	3
13	Assemble publication report (includes captions and Bibliography), brief drawing office	PO	Egging Dinwiddy, K	1
14	Figures for publication grave plans	GO	Illustrator	2.5 5-6
15	OS mapping	-	-	£50
16	Review and edit report	SPM	McCulloch, P/Gardiner, J	4
17	Report corrections	PO	Egging Dinwiddy, K	1
18	Figure corrections and prepare figures publication	GO	Illustrator	1
19	Liaise with printers/journal	SPM	Gardiner, J	0.5
20	Proof reading	PM	McCulloch/ contributors	2
21	Archive preparation	PO	Macintyre, H	0.5
22	Microfilm job sheets and checking	PO	Macintyre, H	0.5
23	Microfilm paper records	external	Marathon UK	£75
24	Box storage grant	external	External	£800
25	Archive deposition	PS	H Macintyre + vehicle hire/fuel	1

## 12.4 Programme

12.4.1 It is proposed that the programme of analysis and publication is conducted in 2009-10.

## 13 REFERENCES

- Aldsworth, F., 1979, 'Droxford Anglo-Saxon cemetery, Soberton, Hampshire' *Proc. Hampshire Field Club Archaeol. Soc.* 35, 93-182
- Bass, W.M., 1987, *Human Osteology*, Missouri Archaeol. Soc.
- Beek, G.C. van, 1983, *Dental Morphology: an illustrated guide*, Bristol: Wright PS
- Berry, A.C. and Berry, R.J., 1967, 'Epigenetic variation in the human cranium' *J. Anatomy* 101(2), 261-379
- Boddington, A., 1990, Models of burial, settlement and worship: the Final Phase reviewed, in Southworth, E. (ed), *Anglo-Saxon Cemeteries: a Reappraisal*. Alan Sutton, Stroud, 177-99
- Böhner, K., 1986, *Die Fränkischen Altertümer des Trierer Landes*, Berlin: Germanische Denkmäler der Völkerwanderungszeit Serie B, Band 1, Gebr. Mann Verlag
- British Geological Survey (BGS). Sheet 299.
- Brothwell, D.R., 1972, *Digging Up Bones*, London: British Museum (Natur. Hist.)
- Brothwell, D.R. and Powers, R., 1988, 'Human Bones' in V.I. Evison, *An Anglo-Saxon cemetery at Alton, Hampshire*, Gloucester: Hampshire Field Club Monogr. 4, 59-64
- Brothwell, D. and Zakrzewski, S., 2004, 'Metric and non-metric studies of archaeological human remains' in M. Brickley and J.I. McKinley (eds.), *Guidelines to the Standards for Recording Human Remains*, Brit. Assoc. for Biological Anthropology and Osteoarchaeology / Institute for Field Archaeology, 24-30
- Brown, D.H., 2007, *Archaeological Archives; a guide to best practice in creation, compilation, transfer and curation*. Archaeological Archives Forum
- Buckinghamshire County Council (BCC) 2008. Solent-Thames Research Framework (internet source see below)
- Buikstra, J.E. and Ubelaker, D.H., 1994, *Standards for data collection from human skeletal remains*, Arkansas Archaeol. Survey Res. Series 44
- Crawford, S. 2008. Solent Thames Early Medieval Research Agenda, In BCC 2008.
- Dickinson, T.M., 1979, 'On the origin and chronology of the early Anglo-Saxon disc brooch' in S. Chadwick-Hawkes, D. Brown & J Campbell (eds.), *Anglo-Saxon Studies in Archaeology and History*, Oxford: Brit. Archaeol. Rep. 72, 39-80
- Dickinson, T and Härke, H., 1992, *Early Anglo-Saxon Shields*, Soc. Antiq. London: Archaeologia 110
- Dungworth, D., 1998 Mystifying Roman Nails: Clavus Annalis, Defixiones and Minkisi, In C. Forcey, J. Hawthorne and R. Witcher (Eds.), Trac 97, *Proc. Seventh Annual Theoretical Roman Archaeology Conference*, Oxbow, 148-159
- English Heritage, 1991, 'Management of Archaeological Projects', HBMCE, London
- English Heritage, 2002, *Environmental Archaeology; a guide to theory and practice of methods, from sampling and recovery to post-excavation*. Swindon, Centre for Archaeology Guidelines
- Evison, V., 1987, *Dover: Buckland Anglo-Saxon Cemetery*, English Heritage Archaeol. Rep. 3
- Finnegan, M., 1978, 'Non-metric variations of the infracranial skeleton', *J. Anatomy* 125(1); 23-37
- Geake, H., 1997, *The Use of Grave-Goods in Conversion-Period England, c.600-c.850*. Oxford: Brit. Archaeol. Rep. 261
- Lucy, S. 2000. *The Anglo-Saxon way of death: burial rites in early England*. Thrupp, Gloucestershire

- McKinley J.I., 2003 'The early Saxon cemetery at Park Lane, Croydon', *Surrey Archaeological Collections* **90** 1-116
- McKinley, J.I., 2004, 'Compiling a skeletal inventory: disarticulated and co-mingled remains' in M. Brickley and J.I. McKinley (eds.) *Guidelines to the Standards for Recording Human Remains*, British Association for Biological Anthropology and Osteoarchaeology / Institute for Field Archaeology, 13-16
- McKinley, J.I., 2005, 'Skeletal human remains' in V. Birbeck, *The Origins of Mid-Saxon Southampton. Excavations at the Friends Provident St. Mary's Stadium 1998-2000*, Salisbury: Wessex Archaeology, 47-52
- McKinley, J.I. and Roberts, C.A. 1993 *Excavation and post-excavation treatment of cremated and inhumed human remains* IFA technical paper No. 69
- Meaney, A.L. and Hawkes, S.C., 1970, *Two Anglo-Saxon Cemeteries at Winnall* London: Soc. Medieval Archaeol. Monogr. 4
- Morton, A.D. (ed) 1992. *Excavations at Hamwic: Volume 1*. CBA Research Reports No. **84**. Southampton Archaeology Monographs **5**
- O'Brien, E. 1999. *Post-Roman Britain to Anglo-Saxon England. Burial Practices Reviewed*. BAR **289**
- Rahtz, Dickinson and Watts (eds). 1979. *Anglo Saxon Cemeteries*. BAR series 82 (1980)
- Roberts, C. and Cox, M., 2003, *Health and Disease in Britain from Prehistory to the Present Day*, Stroud: Sutton
- Scheuer, L. and Black, S., 2000, *Developmental Juvenile Osteology*, London: Academic Press
- SMA 1993, *Selection, Retention and Dispersal of Archaeological Collections*, Society of Museum Archaeologists
- SMA 1995, *Towards an Accessible Archaeological Archive*, Society of Museum Archaeologists
- Stace, C., 1997. *New flora of the British Isles*. 2<sup>nd</sup> Edition. Cambridge: Cambridge University Press
- Stoodley, N., 2006, 'Changing Burial Practice in Seventh Century Hampshire: The Anglo-Saxon Cemetery at Portway West, Andover', in *Proc. Hants Field Club Archaeol. Soc.* **61**, 63-80, *Hampshire Studies 2006*
- Walker, K., 1990, *Guidelines for the Preparation of Excavation Archives for Long-Term Storage*, UKIC Archaeology Section
- Welch, M.W., 1983, *Early Anglo-Saxon Sussex*, BAR Brit. Ser., **112**
- Wells, C., Denston, B. and Hawkes, S.C., 2003, 'The inhumations and cremations' in S.C. Hawkes, *The Anglo-Saxon Cemetery at Worthy Park, Kingsworthy, near Winchester, Hampshire*, Oxford Univ. School Archaeol. Monogr. 59, 153-89
- Wessex Archaeology (WA), 2007a, *Twyford School, Twyford, Winchester, Hampshire*, Written Scheme of Investigation: Project Design for Archaeological Works, Ref. 67470.01
- Wessex Archaeology 2007b, *Little Keep, Dorchester, Dorset*, Post-Excavation Assessment Report and Updated Design for Analysis and Publication. Client Report ref. 64912.02
- Wessex Archaeology, 2008, *Former Thames Valley Food Site, Marlborough Road, Aldbourne, Winchester*, Post-excavation assessment report. Client report ref. 65081.01
- Whinney, R., 1999, '*Roman Villa*', Park Lane, Twyford, Winchester Museum Service (assessment and evaluation reports)

Internet sources:

English Heritage: HEEP, SHAPE, MoRPHE

[www.english-heritage.org.uk](http://www.english-heritage.org.uk)

BCC: Solent-Thames Research Framework:

[www.buckscc.gov.uk/bcc/get/assets/docs/archaeology](http://www.buckscc.gov.uk/bcc/get/assets/docs/archaeology)

## APPENDIX 1: CONTEXT SUMMARIES

Context	FO/FW	Type	Description	Findings	Date
1000		Topsoil	topsoil	LBA, post-med and modern pottery; animal bone; CBM; coin (3d); redeposited human bone; glass; burnt flint; slag - clinker; clay pipe; flint scraper; nails, iron knife (ON 118)	<i>modern</i>
1001		Natural	natural chalk		
1003	1004-5	Grave	Cut of E-W grave (skull at W)	4 sherds redep pottery	<i>Saxon</i>
1004	1003	Inhumation burial	Adult supine inhumation burial		<i>Saxon</i>
1005	1003	Backfill	grave backfill	residual LBA pottery	<i>Saxon</i>
1006	1007-8	Grave	Cut of N-S grave (skull at S)	2 knives (ON 100 & 103), 1 nail (ON 104) & 4 sherds of redeposited pottery	<i>7<sup>th</sup>/8<sup>th</sup> century</i>
1007	1006	Inhumation burial	Adult crouched inhumation burial		<i>7<sup>th</sup>/8<sup>th</sup> century</i>
1008	1006	Backfill	grave backfill	residual/intrusive Saxon and medieval pottery	<i>7<sup>th</sup>/8<sup>th</sup> century</i>
1009	1010	Posthole	Circular posthole		?
1010	1009	Fill	Fill of posthole		?
1011	1012	Posthole	Circular posthole		?
1012	1011	Fill	Fill of posthole		?
1013	1014	Posthole	Circular posthole		?
1014	1013	Fill	Fill of posthole		?
1015	1016	Posthole	Sub-circular		?
1016	1015	Fill	Fill of posthole	LBA pottery	? <i>Late Bronze Age</i>
1018	1019-20	Grave	Cut of E-W grave (skull at W)		? <i>Saxon</i>
1019	1018	Inhumation burial	Juvenile supine inhumation burial		? <i>Saxon</i>
1020	1018	Backfill	grave backfill		? <i>Saxon</i>
1021	1022	Pit	Rectangular pit		<i>Post-medieval</i>
1022	1021	Fill	Fill of pit	1 x medieval & 1 x modern pot - intrusive?; burnt flint; glass; iron nail (ON 101); animal bone; flint; post-med brick	<i>Post-medieval</i>
1023	1024	Pit	Sub-rectangular pit		?
1024	1023	Fill	Fill of pit	animal bone; flint; iron (ON 140);	?
1025	1026	Pit	Rectangular pit		<i>Early Iron Age?</i>
1026	1025	Fill	Fill of pit	flint; burnt flint; iron (ON 141); EIA pot	<i>Early Iron Age?</i>
1027	1028	Posthole	Sub-circular		?
1028	1027	Fill	Fill of posthole		?
1029	1030	Pit	Square pit		?
1030	1029	Fill	Fill of pit		?

1031	1032	Pit	Circular funerary marker?		?
Context	FO/FW	Type	Description	Finds	Date
1032	1031	Fill	Fill of pit		?
1033	1034	Pit	Possible tree throw, part of [1073]		Post-medieval?
1034	1033	Fill	Fill of pit	RB pot; iron nails (ON 105 & 145); animal bone	Post-medieval?
1035	1033	Fill	Fill of pit	medieval pot	Post-medieval?
1036	1037-8	Pit	Rectangular pit		Post-medieval
1037	1036	Primary fill	Primary fill of pit		Post-medieval
1038	1036	Secondary fill	Secondary fill of pit;	Post-med pot & CBM	Post-medieval
1039	1040-1	Tree throw	tree throw or pit		?
1040	1039	Fill	Fill of tree throw		?
1041	1039	Fill	Fill of tree throw		?
1042	1043	Pit	Cuts tree throw fill (1041). Irregular in shape		?
1043	1042	Primary fill	Primary fill of pit		?
1046	1042	fill	Secondary fill of pit		
1047	1048	Tree throw			
1048	1047	Fill	Fill of tree throw		
1049	1050-1	Grave	Cut of E-W grave (skull at W)		1. 5 <sup>th</sup> /6 <sup>th</sup> century
1050	1049	Inhumation burial	Adolescent supine inhumation burial	2 brooches (ON 106 & 107)	1. 5 <sup>th</sup> /6 <sup>th</sup> century
1051	1049	Backfill	grave backfill		1.5 <sup>th</sup> /6 <sup>th</sup> century
1052	1053-4	Tree throw			?
1053	1052	Fill	Fill of tree throw		?
1054	1052	Fill	Fill of tree throw		?
1055	1056	Posthole	Square posthole		?
1056	1055	Fill	Fill of posthole		?
1057	1058	Posthole	Oval posthole		?
1058	1057	Fill	Fill of posthole		?
1059	1060-1	Grave	Cut of E-W grave (skull at W)		Saxon?
1060	1059	Inhumation burial	Juvenile supine inhumation burial		Saxon?
1061	1059	Backfill	grave backfill;	1 sherd redeposited pottery (LBA)	Saxon?
1062	1063-4	Grave	Cut of E-W grave (skull at W)		7 <sup>th</sup> century
1063	1062	Inhumation burial	Adult supine inhumation burial	1 buckle (ON 109), 1 knife (ON 110), weapon- Seax (ON 111), a sheet frag (ON 144 iron), 19 animal bones pieces (redeposited)	7 <sup>th</sup> century



Context	FO/FW	Type	Description	Finds	Date
1064	1062	Backfill	grave backfill	animal bone	7 <sup>th</sup> century
1065	1066	Ditch	Ring ditch		?
1066	1065	secondary fill of ditch.	secondary fill of ditch.	clinker/fuel ash slag; flint; burnt flint; animal bone	?
1067	1068-9	Ditch	Ring ditch		?
1068	1067	secondary fill of ditch.	secondary fill of ditch.	human bone; animal bone; burnt flint; flint; iron nail (ON 108)	?
1069	1067	Fill	Generic number for fill of ring ditch; excavated not recorded	clay pipe; animal bone; flint; burnt clay; iron nails (ON 112-114)	?
1070	1071-2	Grave	Cut of E-W grave (skull at W)		7 <sup>th</sup> century
1071	1070	Inhumation burial	Adult supine inhumation burial	Necklace group: 15 beads (1 amber, 12 glass, 2 stone); 12 cu alloy pendant frags; 6 silver wire rings; ONs 115, 128-138)	7 <sup>th</sup> century
1072	1070	Backfill	grave backfill		7 <sup>th</sup> century
1073	1074	Tree throw	cut of tree throw		?
1074	1073	Fill	Fill of tree throw		?
1075	1076-7	Grave	Cut of N-S grave (skull at S);		7 <sup>th</sup> /8 <sup>th</sup> century
1076	1075	Inhumation burial	Adult supine inhumation burial	1 knife (ON 116),	7 <sup>th</sup> /8 <sup>th</sup> century
1077	1075	Backfill	grave backfill	3 ?nails (ON 151); 4 sheet frags (ON 152), 1 flint (redeposited)	7 <sup>th</sup> /8 <sup>th</sup> century
1078	1079	Pit	Modern pit		modern
1079	1078	Fill	Fill of modern pit		modern
1080	1081-2	Grave	Cut of E-W grave (skull at W);		?Saxon
1081	1080	Inhumation burial	Adolescent supine inhumation		?Saxon
1082	1080	Backfill	grave backfill	1 flint - redeposited	?Saxon
1083	1084-5	Grave	Cut of E-W grave (skull at W)		?Saxon
1084	1083	Inhumation burial	Adolescent supine inhumation burial		?Saxon
1085	1083	Backfill	grave backfill		?Saxon
1086	1087-8	Grave	Cut of E-W grave;		?Saxon
1087	1086	Inhumation burial	Possible infant inhumation burial	one bar (ON 117)	?Saxon
1088	1086	Backfill	grave backfill		?Saxon
1089	1090	Pit	Irregular pit		Post-medieval
1090	1089	Fill	Fill of pit;	CBM - post-med brick & pot; animal bone;	Post-medieval
1091	1092	Pit	Rectangular pit		?
1092	1091	Fill	Fill of pit;	animal bone	?
1093	1094	Posthole	Oval posthole, poss. grave marker		?

<b>Context</b>	<b>FO/FW</b>	<b>Type</b>	<b>Description</b>	<b>Finds</b>	<b>Date</b>
1094	1093	Fill	Fill of posthole		?
1095	1096-7	Grave	Cut of E-W grave (skull at W);		?Saxon
1096	1095	Inhumation burial	Adult flexed inhumation burial		?Saxon
1097	1095	Backfill	grave backfill	1 nail (ON 143), 1 redeposited flint	?Saxon
1098	1099	Posthole	Sub-circular posthole		?
1099	1098	Fill	Fill of posthole		?
1100	1101	Posthole	Sub-rectangular posthole		?
1101	1100	Fill	Fill of posthole		?
1102	1103	Posthole	Sub-rectangular posthole		?
1103	1102	Fill	Fill of posthole	burnt flint	?
1104	1105	Posthole	Sub-circular posthole		?
1105	1104	Fill	Fill of posthole	flint	?
1106	1107-8	Grave	Cut Of SW-NE grave (skull at NE);		Saxon
1107	1106	Inhumation burial	Adult supine inhumation burial	shield boss (ON 119)	Saxon
1108	1106	Backfill	grave backfill	1 nail (ON 120); redeposited - 1 flint, 1 pottery sherd	Saxon
1109	1110	Pit	Sub-circular pit		?
1110	1109	Fill	Fill of pit		?
1111	1112-3	Pit	Sub-square waste pit		Post-medieval
1112	1111	Fill	Fill of pit		Post-medieval
1113	1111	Fill	Fill of pit;	post-med & medieval pot; animal bone; glass; flint; clinker/fuel ash slag; iron nail (ON 146)	Post-medieval
1114	1115-6	Grave	Cut of N-S grave (skull S);	1 stone bead (ON 139), 1 nail (ON 149) & 1 unidentified (ON 150); redeposited - 1 flint	Saxon
1115	1114	Inhumation burial	inhumation burial		Saxon
1116	1114	Backfill	grave backfill		Saxon
1117	1118	Pit	Sub-circular pit		?
1118	1117	Fill	Fill of pit; burnt flint;	clinker/fuel ash	?Post-medieval?
1119	1120	Pit	Circular pit		Post-medieval
1120	1119	Fill	Fill of pit;	RB pot; post-med brick and tile	Post-medieval
1121	1122	Pit	Circular pit		Post-medieval
1122	1121	Fill	Backfill	medieval pot; flint; animal bone; iron nail (ON 142); iron knife (ON 121); CBM	Post-medieval
1123	1124-5	Grave	Cut of SW-NE		?Saxon

Context	FO/FW	Type	Description	Findings	Date
			grave		
1124	1123	Inhumation burial	Infant inhumation burial		?Saxon
1125	1123	Backfill	grave backfill	2 metal frags (ON 122); redeposited - 1 piece animal bone	?Saxon
1126	1127-8	Grave	Cut of N-S grave (skull at S)		?Saxon
1127	1126	Backfill	grave backfill	1 nail (ON 147); redeposited - 2 sherds pottery -medieval (intrusive?); 1 lead waste	?Saxon
1128	1126	Inhumation burial	Adult supine inhumation burial	shield boss & 2 rivets (ONs 123 & 126),	?Saxon
1129	1147	Cut	Modern pipe		modern
1130	1131-2	Grave	Cut of N-S grave (skull at S);		?Saxon
1131	1130	Inhumation burial	Adult supine inhumation burial	1 toilet implement (ON 125); 1 unidentified (ON 124);	?Saxon
1132	1130	Backfill	grave backfill	redeposited - 6 sherds pottery - RB & Saxon; 3 flint	?Saxon
1133	1134	Posthole	Circular posthole		?
1134	1133	Fill	Fill of posthole		?
1135	1136	Posthole	Circular posthole		?
1136	1135	Fill	Fill of posthole		?
1137	1138	Posthole	Sub-circular, possible funerary marker		Post-medieval
1138	1137	Fill	Fill of posthole	Post-med pot & CBM; clinker/fuel ash; human bone; nail (ON 148)	Post-medieval
1139	1140	Cut	Modern pipe trench		modern
1140	1139	Fill	Modern backfill		modern
1141	1142	Posthole	Sub-rectangular		?
1142	1141	Fill	Fill of posthole		?
1143	1144-5	Grave	Cut of E-W grave (arms at W)		7 <sup>th</sup> /8 <sup>th</sup> century
1144	1143	Inhumation burial	Adult supine inhumation burial	1 knife (ON 127)	7 <sup>th</sup> /8 <sup>th</sup> century
1145	1143	Backfill	grave backfill	redeposited - 1 pot sherd (RB)	7 <sup>th</sup> /8 <sup>th</sup> century
1146	1143	Inhumation burial	Possible juvenile inhumation burial		7 <sup>th</sup> /8 <sup>th</sup> century
1147	1129	Fill	Modern backfill		modern
1148		Layer	made ground		modern

## APPENDIX 2: OBJECTS SELECTED FOR CONSERVATION TREATMENT

NB. Any organic remains may need consolidation once they have been revealed. Objects may need to be seen by specialist before consolidation is carried out.

Obj No	Context	Material	Object type	Comments	Treatment Proposal
		<b>NON-FERROUS</b>			
106	1050	copper alloy, iron	brooch	- surface suggestive of white metal plating - corrosion very thin in places	- remove soil and some corrosion
107	1050	copper alloy, iron, white metal, enamel?	brooch	- white metal coating preserved in decoration - remains of enamel in centre? - poorly preserved mineralised organics on front	- remove soil and some corrosion - consolidate organics/ enamel (depends on condition after cleaning)
125	1131	copper alloy	pin	- possible mineralised organics on broken ring	- remove soil and some corrosion
131	1071	silver	wire fragments x 6 (loops)	- very fragile	- remove soil and some corrosion
138	1071	copper alloy	necklace components & fragments x 12		
		<b>FERROUS</b>			
100	1007	iron	knife	- mineralised organic material on tang and blade. Tang material has structure, blade material may not.	- clean to reveal mineralised organic material on tang and blade - airbrade a cross-section to confirm shape of blade - airbrade tip to investigate striations on x-ray (could be artefacts of x-ray and not real)
103	1007	iron	knife	- mineralised organics present on both tang and blade. May be more structure to material on tang.	- clean to reveal mineralised organic material - airbrade section at junction between tang and blade as there appears to be a construction line running down the middle of the blade here. This would also confirm shape of blade.
110	1063	iron	knife	- x-ray shows knife to be extensively corroded - mineralised organic remains present on both tang and blade with structure visible	- clean to reveal mineralised organic material - airbrade section to confirm shape of blade - airbrade end (avoiding mineralised material) to confirm whether end is rounded
111	1063	iron	Seax	- x-ray shows double/ triple construction lines running down length of blade. Visible on object - blade may be 'backed' - mineralised leather remains on blade - mineralised horn on handle	- airbrade to reveal organic remains and constructional details

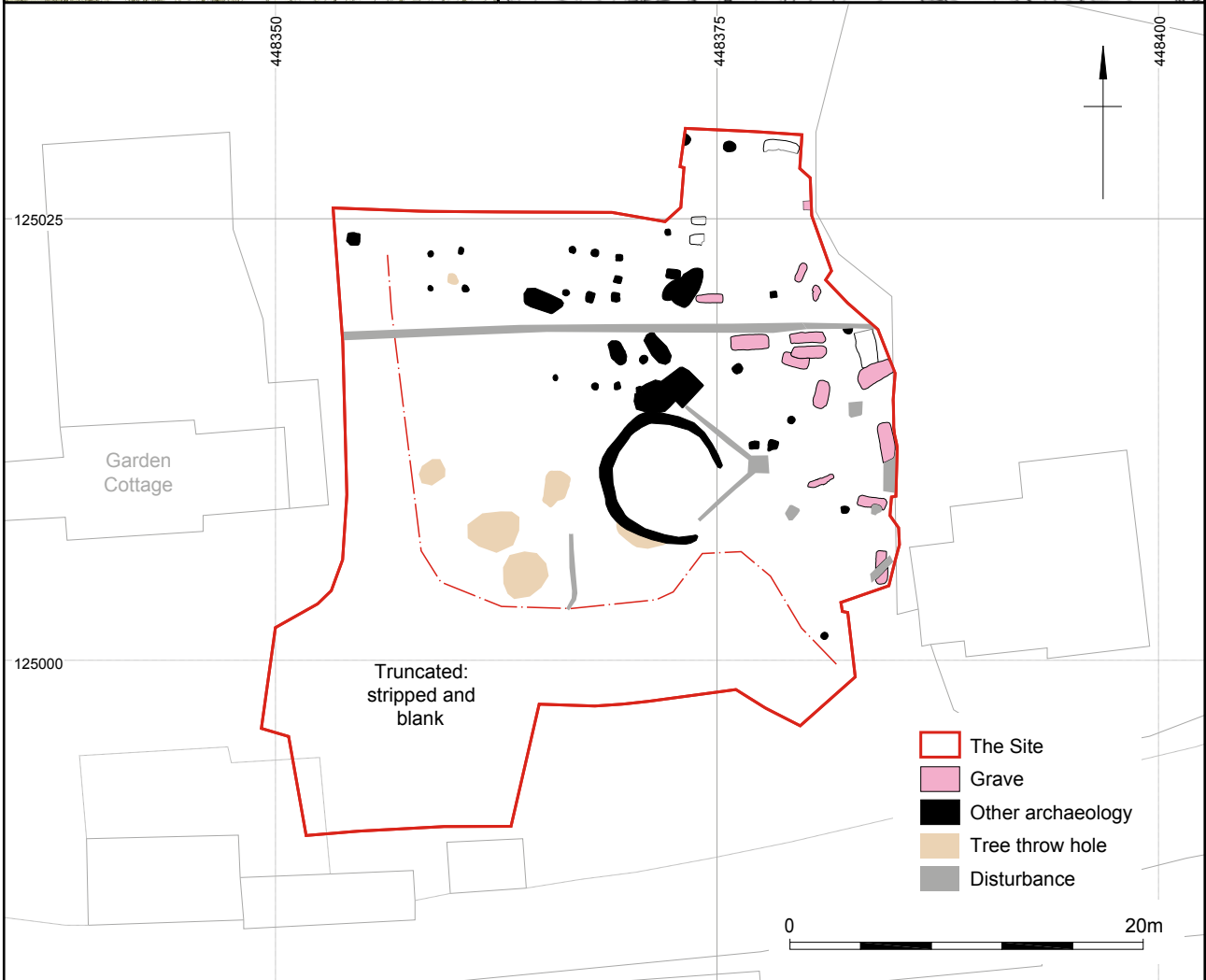
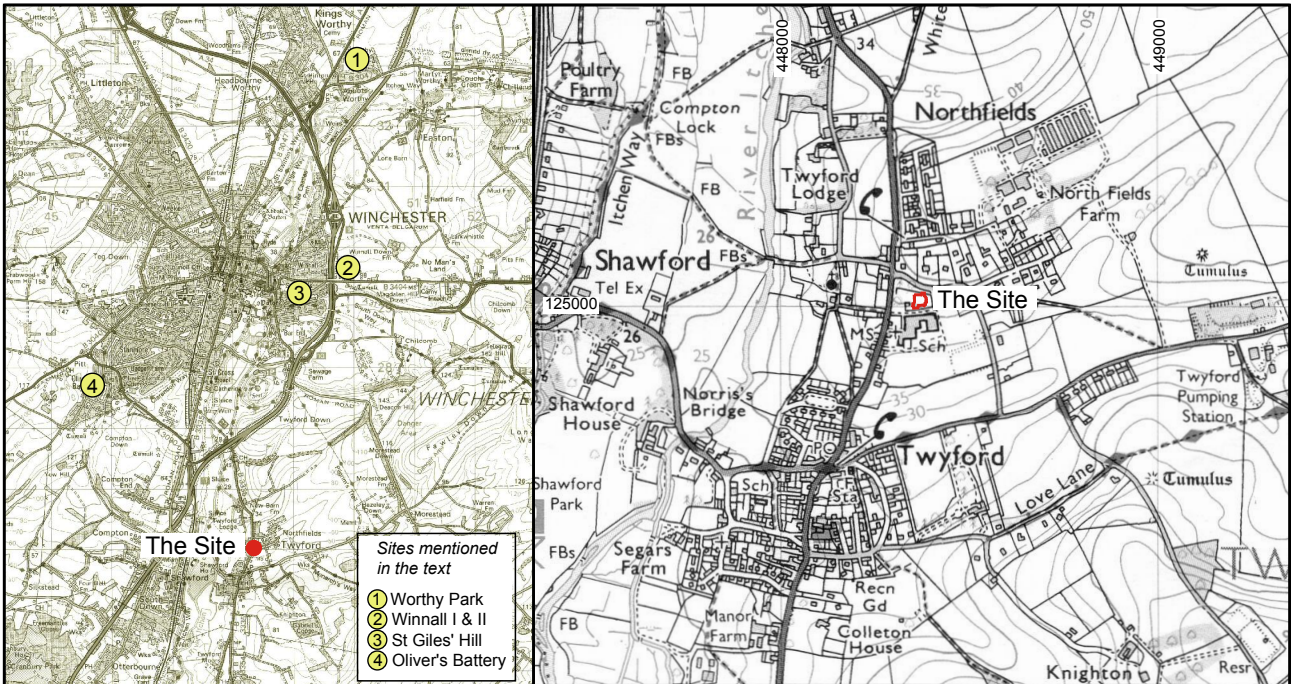
Obj No	Context	Material	Object type	Comments	Treatment Proposal
116	1076	iron	knife	- mineralised organic remains present but little with any structure	- clean to reveal mineralised organic remains - airbrade point to confirm shape seen on x-ray (normal point)
117	1087	iron	'bar'	- x-ray shows 2 holes, one of which may contain material - possible mineralised organic material on one side	- clean to confirm presence of holes - clean to reveal any mineralised organics
118	1000	iron	knife		- airbrade section to confirm shape of blade
119	1107	iron	shield boss	- includes shield grip - possible mineralised organic remains but no obvious structure	- airbrade to reveal object better - may need patching to support damaged areas - limited reconstruction may be possible
121	1122	iron	knife	- possibly mineralised organic material with no structure	- airbrade to confirm what is happening where tang and blade join - airbrade section to confirm shape of blade - airbrade section to confirm shape of tang
123	1127	iron	shield boss	- x-ray suggests rivet heads tinned or silvered - reconstruction unlikely - is twisted wire part of object?	- airbrade to reveal object better - airbrade twisted wire to reveal detail if it is important
124	1131	iron	object	- possibly mineralised organics at one end	- airbrade to identify object
126	1128	iron	rivet	- cleaning may not reveal much more information	- airbrade to confirm identification
127	1144	iron	knife	- substantial mineralised organic remains on blade and tang. Possibly horn handle	- clean to reveal mineralised organics - airbrade section to confirm shape of blade
151	1076	iron	nail x 3	- x-ray suggests at least 1 fragment not a nail	- clean to confirm identification

### APPENDIX 3: ENVIRONMENTAL TABLE

#### Assessment of the charred plant remains and charcoal

Feature type/no.	Context	Sample	Size litres	Flot							Charcoal >4/2mm	Other comments
				Flot size ml	% roots	Grain	Chaff	Weed seeds	Other	Comments		
? Iron Age												
Pit												
1025	1026	12	10	70/5	-	-	C	-	<i>Rumex</i>	5/5	Clinkered mass, coal. Moll A**	
Saxon												
Burial												
1003	1005	9	2	10/10	-	-	-	-	-	5/3	Clinkered mass. Coal. Moll A**	
Ditch												
1065	1066	46	20	50/15	-	-	-	C	<i>Carpinus sp.</i>	-	Clinkered mass. Moll A**	
Undated												
Ditch												
1067	1068	47	20	110/20	C	-	-	C	<i>Hordeum, indet Corylus Carpinus sp.</i>	5/5	Clinkered mass. Moll A**	
Pit												
1021	1022	10	20	30/5	-	-	-	-	-	30/20	Clinkered mass, coal, recent seeds, Moll A**	
1023	1024	11	10	70/10	-	-	C	-	<i>Galium ap.</i>	10/5	Clinkered mass, coal, recent ants. Moll A**	
1033	1034	13	20	110/20	-	-	-	-	-	5/10	Clinkered mass, coal, metal res. Moll A**	
1111	1113	74	10	65/10	-	-	-	-	-	10/15	Clinkered mass. Moll A**	

KEY: A\*\*\* = exceptional, A\*\* = 100+, A\* = 30- 99, A = ≥10 items, B = 9 - 5 items, C = < 5 items, sab/f = small animal/fish bones; Moll-t = terrestrial molluscs Moll-f = freshwater molluscs; Analysis: C = charcoal, P = plant, M = molluscs, C14 = radiocarbon suggestions



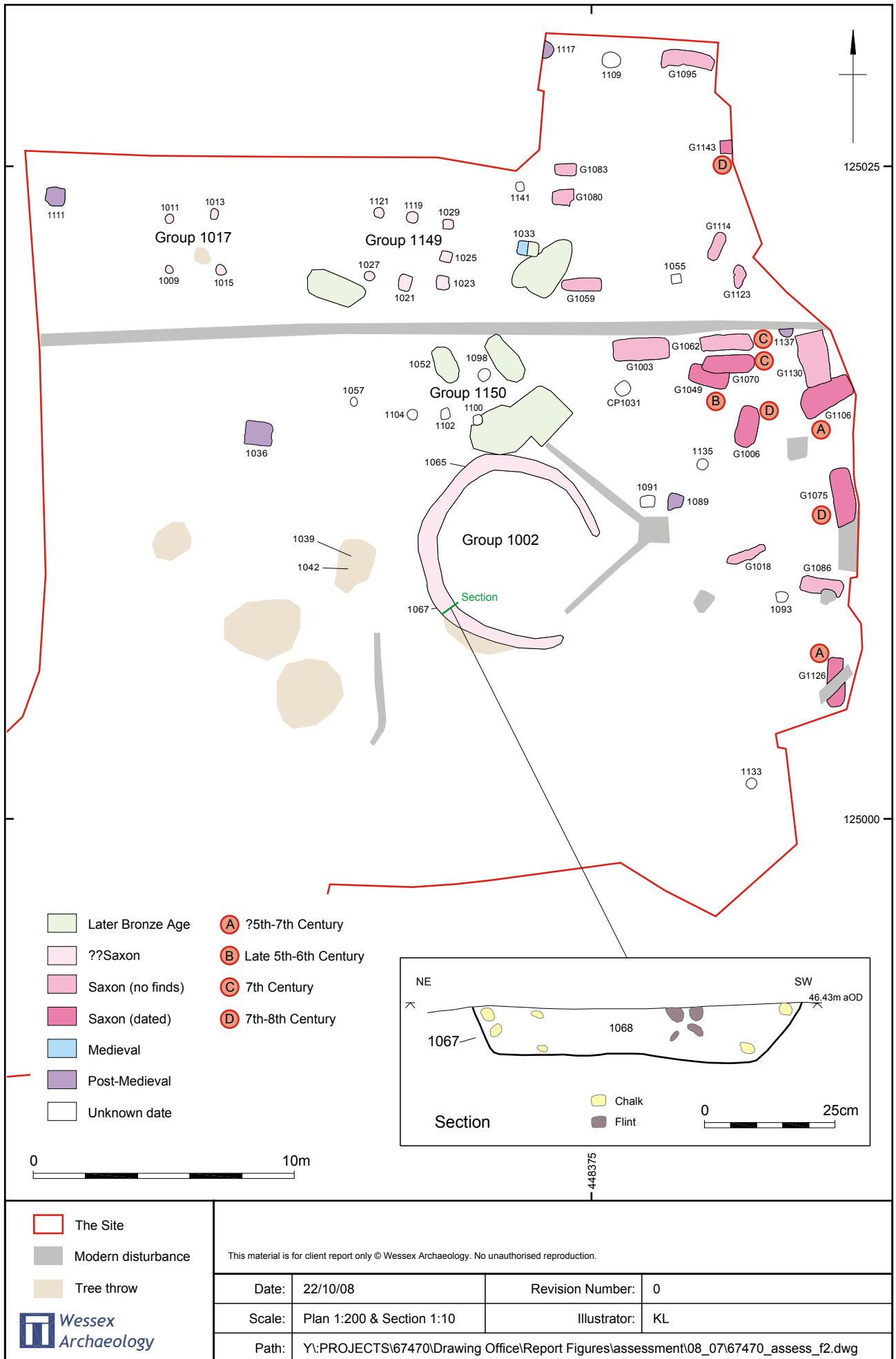
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Site location showing area of excavation

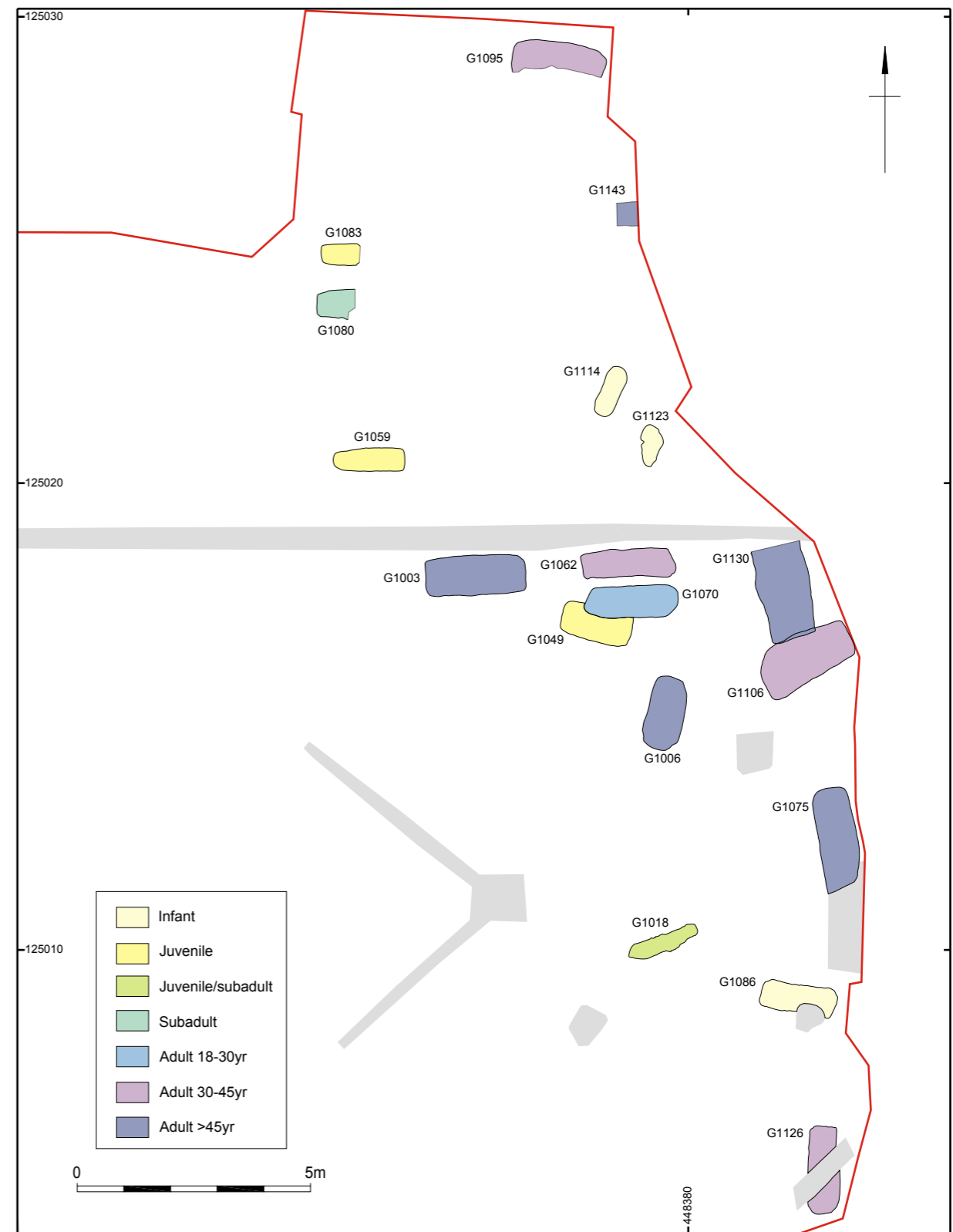
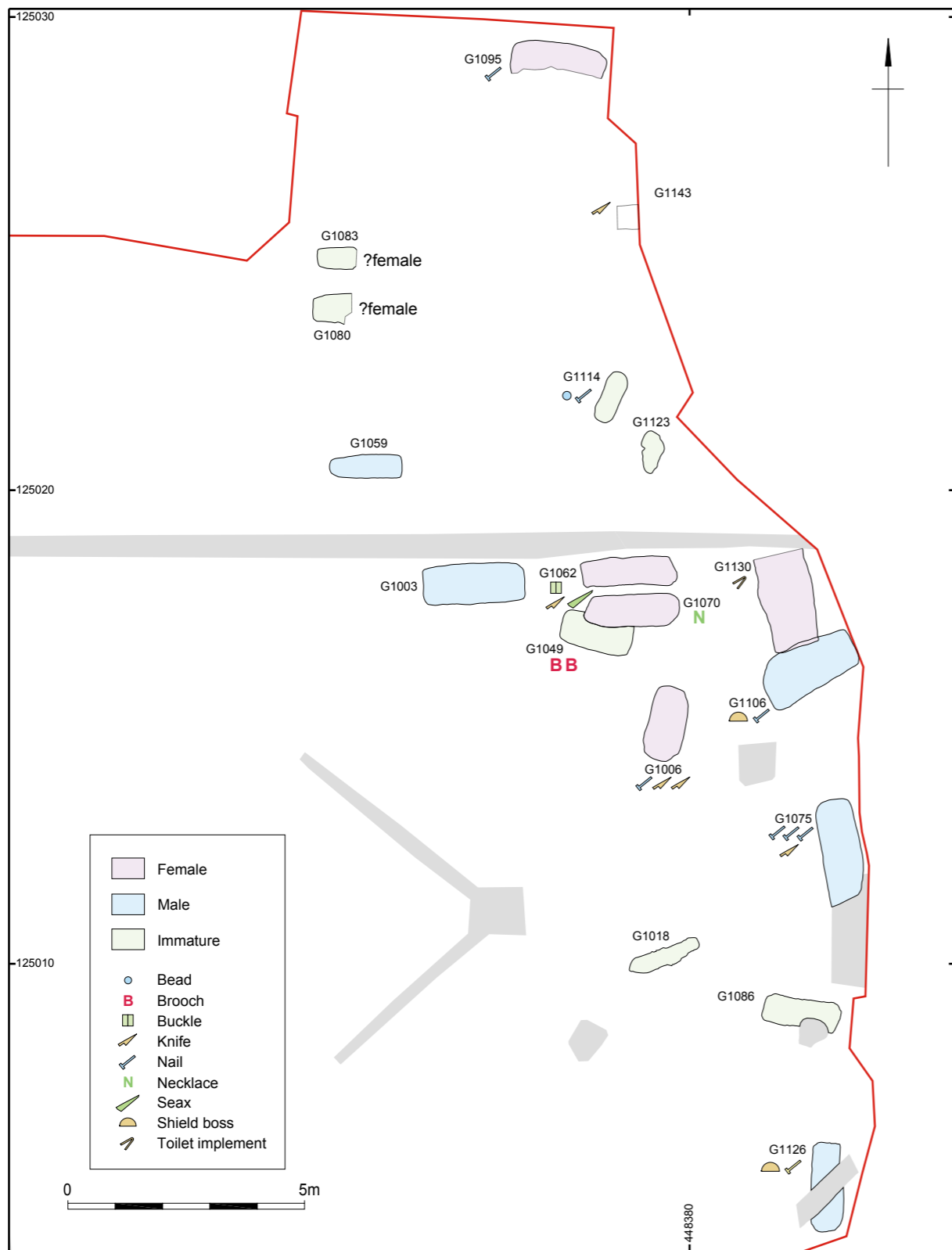
Figure 1



Area of excavation showing all archaeological features; section through penannular ditch 1002

Figure 2





The Site  
 Modern disturbance

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Plate 1: General site photograph (pre-excitation)



Plate 2: Penannular ditch 1002



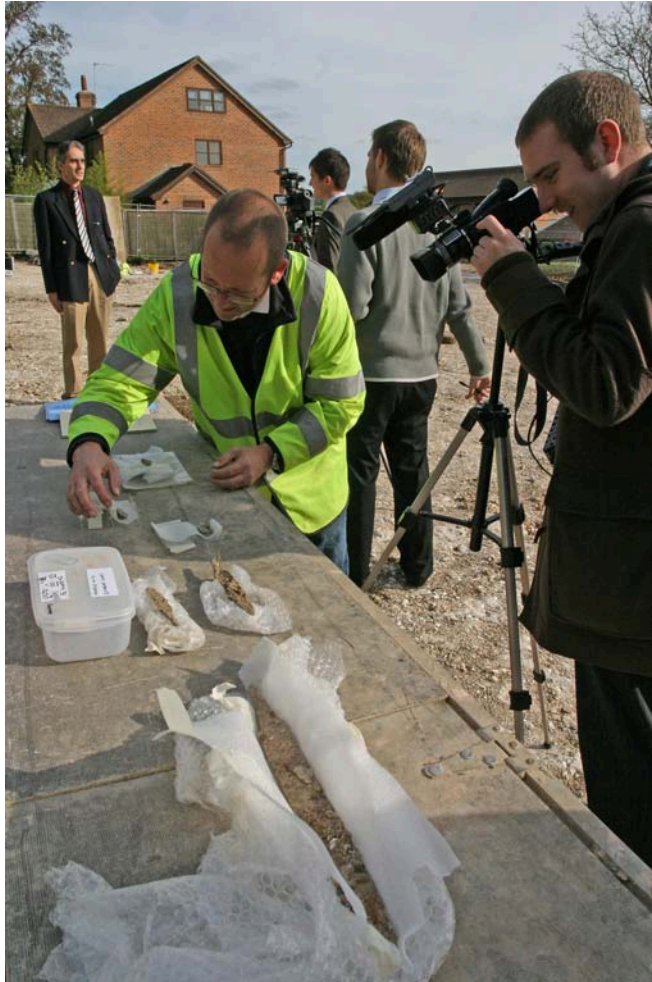
Plate 3: Beads and burial in grave 1070



Plate 4: Grave 1062 showing *Seax in situ*



Plate 5: Detail of *Seax in situ* in grave 1062



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