

<u>Archaeological Services & Consultancy Ltd</u>

WATCHING BRIEF: HOLY TRINITY CHURCH OLD WOLVERTON MILTON KEYNES

NGR: SP 8042 4121

on behalf of the Wolverton Parochial Church Council



Carina Summerfield-Hill MSc

March 2012

ASC: 1495/OWH/1



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Site Data

ASC project code:	OWH		ASC Project No:	1495		
OASIS ref:	archaeol2-1	120062	Accession no:	AYBCM: 2012.15		
County:		Milton K	eynes Unitary Author	rity		
Village/Town:		Wolverto	on			
Civil Parish:		Wolverto	on			
NGR (to 8 figs):		SP 8042	4121			
Extent of site:		2000sqm				
Present use:		Churchya	ard			
Planning proposal:		Impleme	ntation of new draina	ge		
Local Planning Auth	ority:	-				
Planning application	ref/date:	-				
Date of fieldwork:		09/02/12-21/02/12				
Commissioned by:		Shenstone & Partners St Paul's Institute				
		302 The Highway				
		London E1W 3DH				
Cl:		Wolverton Parochial Church Council				
Client:		Holy Trinity Church				
		Old Wolverton Road				
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Internal Quality Check

Carina Summerfield-Hill	Date:	08/03/12
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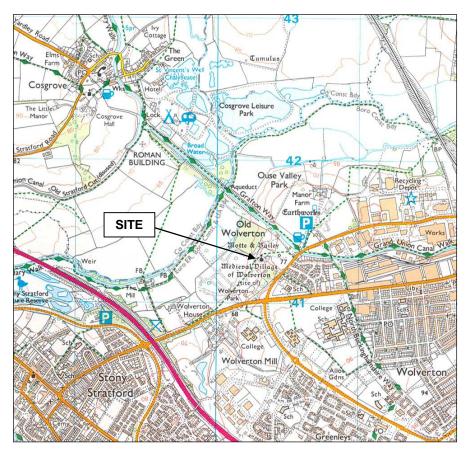


Figure 1: General location (scale 1:25,000)

Summary

In February 2012 a watching brief was carried out in the churchyard of Holy Trinity Church, Old Wolverton, Milton Keynes during the implementation of new drainage for the church. The excavations unearthed five articulated/partially articulated Christian burials, six skulls and disarticulated remains.

A motte and bailey castle is present to the east of the church. The church was rebuilt and the churchyard levelled in the 19th century. At this time the motte ditch was filled in where it bounded the churchyard. One of the trenches excavated during the project was in close proximity to the base of the motte that revealed a series of made-ground deposits that contained no finds. These deposits were part of the levelling of the churchyard and backfilling of the motte in the 19th century.

1. Introduction

1.1 In February 2012 Archaeological Services and Consultancy Ltd (ASC) carried out a watching brief at Holy Trinity Church, Old Wolverton, Milton Keynes. The project was commissioned by Shenstone & Partners on behalf of Wolverton Parochial Church Council, and was carried out according to a brief (Munby 2009) prepared by the Oxford Diocesan Archaeological Advisor (DAA).

1.2 Planning Background

This watching brief was required by the DAA, under the terms of a faculty from the Chancellor of the Diocese of Oxford.

1.3 Archaeological Services & Consultancy Ltd

ASC is an independent archaeological practice providing a full range of archaeological services including consultancy, field evaluation, mitigation and post-excavation studies, historic building recording and analysis. ASC is recognised as a *Registered Organisation* by the Institute for Archaeologists and is also accredited ISO 9001, in recognition of its high standards and working practices.

1.4 The Site

1.4.1 Location & Description

The site is located to the northwest of the main settlement of Wolverton, within the boundaries of Old Wolverton Medieval Village (DMV) (Fig. 1), at NGR SP 8042 4121.

Holy Trinity Church is a Grade II* listed building with medieval foundations that was rebuilt in the neo-Norman style by Henry Hakewill in 1809-14. It consists of a chancel, nave, transepts and a west tower. It is constructed in both sandstone and limestone ashlar and Welsh slate for the roof. The west tower incorporates some of the earlier structure with two blocked 14th century arches (Pevsner & Williamson 2000).

Access is from Old Wolverton Road, which runs to the southeast of the site (Fig. 2).

1.4.2 Topography & Geology

The soils of the area belong to the *Badsey 1 Association*, which are characterised as *well drained calcareous and non-calcareous fine loamy soils over limestone gravel. Some deep fine loamy soils and fine loamy soils over gravel, and similar but shallower soils affected by groundwater* (Soil Survey, 1983, 511h). The underlying geology comprises *Upper Estuarine Great Oolite Series limestone* (Geological Survey, 1969, Sheet 202). The site lies on the south side of the Great Ouse valley, *c*.1.5km south of the river, at an elevation of *c*.75m AOD, on ground steadily rising from north-west to south-east.

1.4.3 Proposed Development

The proposed development comprises the implementation of a new drainage system within the churchyard (Figs. 3 & 4).

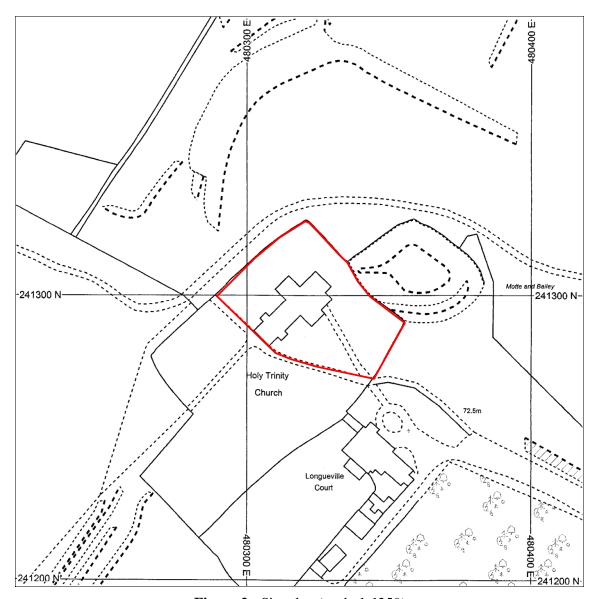


Figure 2: Site plan (scale 1:1250)

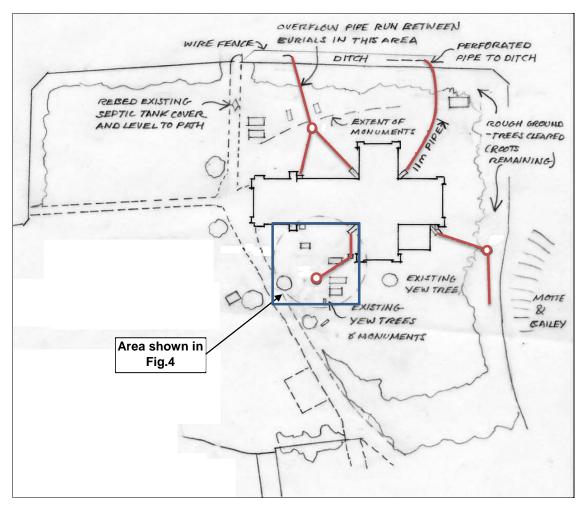


Figure 3: Proposed development (*not to scale*)

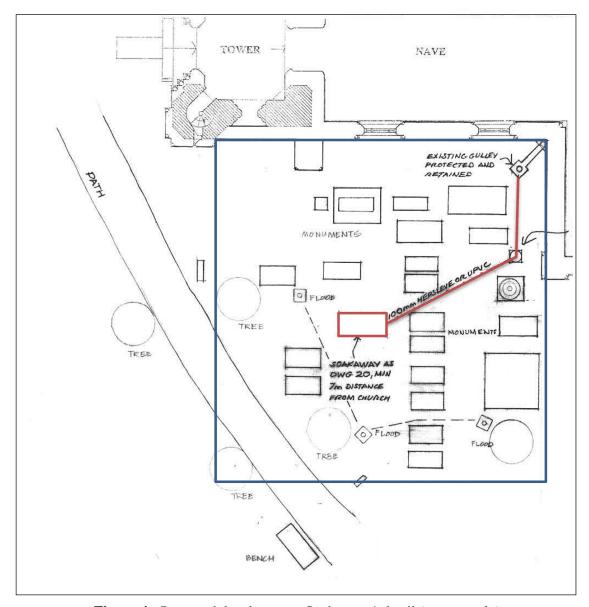


Figure 4: Proposed development, Soakaway 1 detail (not to scale)

2. Aims & Methods

2.1 *Aims*

As described in the brief, the aims of the watching brief were:

- To determine the extent to which human remains survive in the affected area;
- To generally observe the presence of burial vaults and graves;
- To identify any remains of earlier phases of the church;
- To signal, before work proceeds, the discovery of an archaeological find for which further action is required;
- To provide a report and ordered archive on the investigation.

2.2 Standards

The work conformed to the brief, to the relevant sections of the Institute for Archaeologists' *Code of Conduct* (IFA 2000) and *Standard & Guidance Notes* (IFA 2001), and to the relevant sections of ASC's own *Operations Manual*.

2.3 Methods

The work was carried out according to the brief, which described:

- Excavation of the trenches and soakaway pits by the contractor;
- Inspection of the open trenches and pits by the archaeologist to record any exposed remains of church fabric;
- Further excavation work carried out by the archaeologist following discovery of any burials;
- Cleaning up and photographic recording of any significant finds.

2.4 Constraints

The works were carried out in line with the brief, in good site conditions and with full co-operation of the client. Therefore no constraints were encountered.

3. Archaeological & Historical Background

3.1 The following section provides a summary of the readily available archaeological and historical background to the development site and its environs. The Wolverton area is one of considerable archaeological and historical importance, and a variety of archaeological sites are situated in the area. The archaeology and history of the parish are summarised in *The Changing Landscape of Milton Keynes* (Croft & Mynard 1993, 179-193).

This section has been compiled with information from readily available sources, including ASC's own library.

3.2 **Prehistoric** (before 600BC)

The earliest evidence of human activity in the Wolverton area is provided by a scatter of Mesolithic flints found in the Bradwell Brook valley at Bancroft Park, $c.2 \,\mathrm{km}$ southeast of the site. A late Neolithic to early Bronze Age settlement was excavated at Stacey Bushes, $c.2.5 \,\mathrm{km}$ southeast of the site (Green & Sofranoff 1985). Evidence of possible Bronze Age settlement was also located in excavations at the Wolverton Mill Training College, $c.0.5 \,\mathrm{km}$ to the south of the site (Preston 2007), and a late Bronze Age/early Iron Age farmstead was excavated at Blue Bridge, $c.2.5 \,\mathrm{km}$ east of the development site (Williams & Zeepvat 1994).

Common features of the prehistoric landscape of the Ouse valley are ring ditches, the ploughed out remains of burial mounds. This class of monument has been the subject of a detailed study (Field 1974; Green 1974). Three are recorded in the surrounding area, at Moon Street School, 1km west of the site, at the Training College, and at Warren Farm, 0.5km to the west. All have been excavated.

Occupation continued on the Blue Bridge site into the Iron Age. Excavations revealed a farmstead comprised of a large number of penannular hut gullies, suggesting buildings with a relatively short lifespan, associated with other features including pits, gullies and boundary ditches. In the late pre-Roman Iron Age a cremation cemetery was established on the south side of the site, containing at least eighteen burials. This is the only significant Iron Age site recorded to date in the area.

3.3 **Roman** (AD43-c.450)

During the Roman period the Milton Keynes area fell within the *civitas* (tribal area) of the *Catuvellauni*. The nearest towns to the development site were *Magiovinium* (Dropshort Farm, Fenny Stratford), 10km to the south-east, and *Lactodorum* (Towcester), 13km to the north-west. These were linked by the major Roman road, latterly known as *Watling Street*, which lies *c*.2km south-west of the site. The Roman landscape of the Milton Keynes area has been the subject of detailed study (Zeepvat 1987; Zeepvat 1991).

The most significant site of this period in the parish of Wolverton was the extensive villa at Bancroft (Williams & Zeepvat 1994), c.2.5km east of the site. This was linked with an impressive 2nd-century temple-mausoleum (*ibid*), located on the adjoining Blue Bridge site. Both sites remained in use throughout the Roman period, and

Bancroft villa presumably formed the centre of a farming estate covering at least part of the later parish of Wolverton.

A number of native occupation sites are also known in the area, with examples at Kiln Farm, 2km southeast of the site, and near Stonebridge Farm, c.1.5km to the east. Evidence of a possible Roman building was also recovered from service trenches at Manor Farm Cottages, 0.5km northeast of the site, where Roman pottery and box tile was found in association with a stone wall. A small amount of Roman material, possibly originating from manure scatters, has also been found in recent excavations at the Training College (Thorne 2005), c.0.5km to the south of the site.

3.4 **Saxon** (c.450-1066)

Evidence of low-level early Saxon activity has been found at Bancroft and Blue Bridge, but little has been recorded elsewhere in the parish. Several burials, thought to be of Saxon date, were found $c.0.75\mathrm{km}$ to the southeast of the site in 1956, when the McCorquodale factory at the east end of Wolverton was extended (Green 1957). It is worth noting that a recent evaluation, undertaken by ASC in advance of the housing development at the north-west corner of the site, did not reveal any archaeological features (Fell 2000). A watching brief on services in the same area was also negative (Crank 2005).

In 1969, aerial photography revealed the existence of a rectangular enclosure in the area now occupied by the Wolverton Mill Training College, c.300m southwest of the site. Excavations by the Milton Keynes Archaeology Unit in 1971 revealed the east corner of the enclosure (Preston 2007). Other areas of the enclosure were examined by excavation in 1992 and 1994 (*ibid*), confirming it to be of middle Saxon date. Recent excavations (Thorne 2005) revealed two early to middle Saxon grubenhäuser predating the enclosure, and late Saxon plots containing timber buildings with associated pits, a well, cess pits and a malting/drying oven. One pit contained a smith's hoard of iron spears, nails and some slag, as well as the remains of three lava querns and two bone combs. Late Saxon finds, including coins and metalwork, have been found near Holy Trinity church itself. It is therefore suggested (Croft & Mynard 1993, 181) that mid to late Saxon settlement in the parish was centred on and to the north of the Training College enclosure.

Wolverton is mentioned in the Domesday Survey (1086), where it appears as *Wlverintone*. This place-name may be of 8th or 9th-century origin, and translates as 'Wulfhere's Tun' or 'Wulfhere's estate' (Croft & Mynard 1993, 191). At the time of the Domesday Survey, Wolverton was held by Mainou the Breton, along with Little Loughton, which lies to the south of Wolverton parish. It has been suggested (*ibid*) that this represents a survival of a Roman estate, which had Bancroft villa as its centre, and a satellite farm at Wymbush, which is in Little Loughton.

3.5 *Medieval* (1066-1500)

The medieval village of Wolverton is perhaps the best-preserved medieval village in Milton Keynes, and is a scheduled ancient monument. It lies to the north of the site and stretches for c.1.2km along the north side of Old Wolverton Road. It is centred on Holy Trinity parish church (MKHER 3015) and adjacent motte-and-bailey castle (SAM 13609), built by *Meinfelin*, baron of Wolverton, in the late 11th or early 12th

century. The church was originally granted to the priory of Bradwell by *Meinfelin the Breton* and the vicarage was ordained in the 12th or early 13th century (Page 1927).

The site of the medieval manor house is thought to be to the south of the motte. At the east end of the village is Manor Farm, believed from documentary evidence to be the site of a monastic grange, though a recent watching brief by ASC (Wilson & Abrams 2003) failed to reveal any evidence of medieval activity in the farmyard and adjoining areas.

In the west corner of the parish, where the road from Newport Pagnell and Wolverton meets Watling Street, the settlement of Stony Stratford grew up during the medieval period to service traffic and travellers using the latter road (Brown 1987). At this time the settlement was divided between the parishes of Wolverton and Calverton, the boundary between them passing up the centre of the High Street.

3.6 *Post-Medieval* (1500-1900)

During the post-medieval period the village of Wolverton declined, partly as a result of the continuing prosperity of Stony Stratford and partly as a result of piecemeal land enclosure by the Longville family, who held the manor. During the late 16th century a succession of complaints were made against the Longvilles for this, and for related reasons. It has been suggested (Croft & Mynard 1993, 191) that, as most of these complaints came from residents of Stony Stratford, Wolverton village must have been depopulated by this time. By the mid 17th century the Longvilles had taken the site of the village for parkland adjoining their manor house, which had been built in the 16th century.

By the early 18th century the Longville family were in financial difficulties, and in 1713 the manor of Wolverton was sold to Dr John Radcliffe of Oxford (CAT 1992, 8). He died the following year, and his Wolverton estate was put at the disposal of his executors to use as they thought best (Markham 1975, 28). Throughout the 18th and 19th centuries the Wolverton estate was administered by the Radcliffe Trust, and its income was used in building the Radcliffe Observatory and Library at Oxford, enlarging St Bartholemews Hospital in London, and supporting various medical scholarships.

The establishment of the modern town of Wolverton was brought about by the construction of the London to Birmingham Railway in the 1830s. At the time it was felt that engines and passengers could not survive the journey without a rest stop. As Wolverton lay about half way between the two termini, it was chosen as the site for a station and locomotive works, land being purchased from the Radcliffe Trust for this, and for railway workers' housing. Wolverton Works and the first Wolverton station opened in 1838. As the works expanded during the mid and late 19th century the Trust sold more of the estate to the railway for the expansion of Wolverton. In 1878 George McCorquodale opened a stationery and printing works in Wolverton to employ the wives and daughters of railway employees.

ASC carried out an archaeological evaluation of part of the site in 2008, prior to the construction of a new car park. The evaluation recorded a post medieval ditch below the impact level of the development. The function of the ditch was not determined,

although it was suggested it may have represented a former approach to the church (Rouse 2008).

3.7 *Modern* (1900-present)

The railway works, McCorquodales and Wolverton continued to expand during the first half of the 20th century. By the Edwardian period, housing on the south side of Stratford Road had reached the east boundary of the assessment site. After the 1940s Wolverton appears to have changed little until the advent of Milton Keynes in the early 1970s, when Great Monks Street was built to the south of the site.

Holy Trinity Church was largely rebuilt in 1809-14, and incorporates two 14th century arches in the west tower (Pevsner & Williamson 2000; Page 1927). The motte ditch was affected by the rebuilding of the church. Account of the works record that the churchyard was levelled and the motte ditch filled in where it bounded the churchyard (Croft & Mynard 1993).

4. Results

4.1 *Introduction*

A series of new gullies and soakaways were excavated mechanically, with a 0.3-0.6m toothless ditching bucket, and by hand. The works uncovered five articulated/partially articulated human burials, six skulls, and disarticulated remains.

A total of four site visits were made, the details of which are presented in Appendix 1. Burial and osteological analysis is presented in Appendix 3.

4.2 Stratigraphy

The site stratigraphy comprised:

0-0.23m BGL (below ground level) of topsoil (100), comprising mid-dark, loose, silty material;

0.23-0.93m BGL of cemetery soil (101) comprising mid grey brown, soft silty clay with occasional small sub-angular stones;

0.93m+ BGL of natural strata (103) consisting of light mottled grey and yellow clay.

4.3 Soakaway 1 & Associated Drainage Gully (Figs. 1&2; Plates 1-4)

Soakaway 1 and the associated drainage gully were excavated at the southern end of the churchyard.

The drainage gully ran parallel to the church before turning south. It measured c.0.3m wide and c.0.35-0.48m deep. The gully revealed the remains of an earlier brick drain, orientated NW-SE, that was constructed of unfrogged red bricks, bonded with white lime mortar (Plate 1). Each brick measured $22\times10\times6.5$ cm (L×W×D). The gully also exposed the corner of a gravestone (Plate 2) and a fragment of footstone which read JW 1795.

Soakaway 1 measured $c.2.17 \times 1.23 \times 1.12$ m, and was excavated into the natural strata (Plate 3).

It contained five articulated/partially articulated burials (SK1-5), five skulls (Skulls 1-5), and a moderate level of disarticulated remains.

The articulated burials were laid out in a typically Christian manner; extended, supine position, and orientated west-east, with the head to the west. The level at which the articulated burials were found ranged between c.0.91-1.12m BGL (Plate 4).

The grave cuts could not be distinguished for the majority of the burials as they were within the cemetery soil. However, two of burials revealed a visible grave cut that cut into the natural strata (SK1&3).

One burial, SK2 was clearly a coffin burial, as metal coffin fittings and a decorative coffin fitting with a flower motif were associated with it. The cemetery soil also revealed further evidence for coffin burials as coffin nails, a coffin handle, and further pieces of decorative metal coffin fittings were found.

The level at which the five skulls were found ranged between *c*.0.38-0.7m BGL. Three of these (Skulls 3-5) were visible only in the trench section, and in the case of Skull 3 it is possible that the burial was intact. Skull 3 was also associated with a coffin nail suggesting a coffin burial.

4.4 Soakaway 2 & Associated Drainage Gully (Figs. 1&3; Plates 5&6)

Soakaway 2 and its associated drainage gully were excavated at the eastern end of the churchyard.

The drainage gully was orientated NW-SE and was c.0.3m wide and c.0.43m deep. No archaeological finds, features or deposits were identified (Plate 5).

Soakaway 2 measured $c.1.7 \times 1.3 \times 1.1$ m (Plate 6). It was excavated just beyond the base of the motte, which forms part of the motte and bailey castle to the east of the churchyard. The stratigraphy of the soakaway comprised a series of made ground deposits that consisted of:

0-0.2m BGL of topsoil (100; see above for description);

0.2-0.87m BGL of cemetery soil (101; see above for description);

0.5-1.1m+ BGL of deposit (109) comprising light yellow, loose, sandy material;

0.82-1.1m+ BGL of deposit (110) that consisted of light yellow/grey, soft, silty clay.

The deposits contained no finds, and only two fragments of disarticulated human bone were recovered from the soakaway.

4.5 Soakaway 3; Associated Drainage Gullies & Drainage Gully 4 (Fig.1; Plates 7&8)

Soakaway 3 and associated drainage gullies were excavated at the north-western end of the churchyard (Plate 7).

Three drainage gullies associated with Soakaway 3 were excavated. They were orientated E-W and SE-NW and were c.0.3m wide and c.0.33-0.45m deep. No archaeological finds, feature or deposits were identified.

Soakaway 3 measured $c.2.2 \times 1.1 \times 0.78$ m. It consisted of topsoil (100) and cemetery soil (101; Plate 8). Fragments of a skull (Skull 6) were visible in the trench section at c.0.5m BGL that may have formed an intact burial.

A further drainage gully (Gully 4) was excavated at the northern end of the churchyard. It was orientated NW-SE and wasc.0.3m wide and c.0.4m deep. No archaeological finds, features or deposits were noted.



Plate 1: Brick drain uncovered in drainage gully, looking NW (scale 1m)



Plate 2: Corner of gravestone uncovered in drainage gully, looking west (scale 500mm)



Plate 3: Soakaway 1, looking SW (scale $2 \times 1m$)



Plate 4: Example of articulated burials, SK1&2, looking SW (scale 500mm)



Plate 5: Drainage gully associated with Soakaway 2, looking SE (scale 1m)



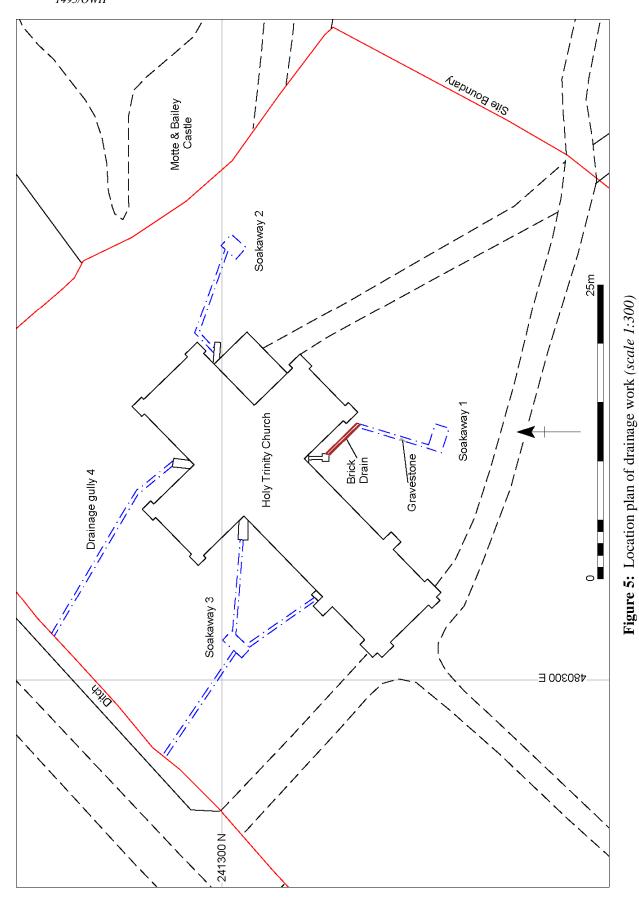
Plate 6: Soakaway 2, looking SE (scale 1m)



Plate 7: Soakaway 3 and associated drainage gullies, looking NW (*scale* $2 \times 1m$)



Plate 8: Soakaway 3, looking SE (*scale* $2 \times 1m$)



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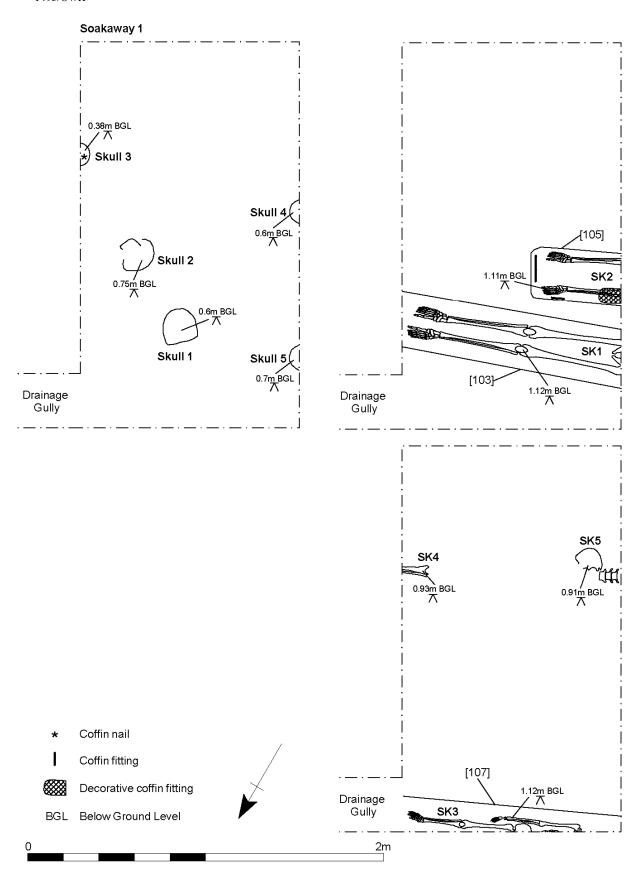


Figure 6: Soakaway 1: plan of human remains (scale 1:20)

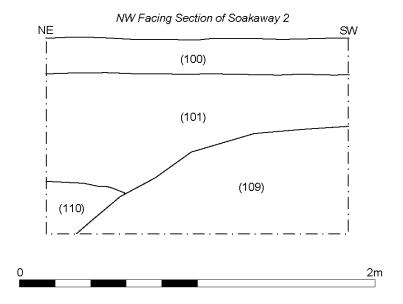


Figure 7: Section drawing of Soakaway 2 (*scale 1:20*)

5. Conclusions

5.1 The excavation uncovered a total of five articulated/partially articulated burials, six skulls and disarticulated human remains.

A moderate level of disarticulated remains were recovered from Soakaway 1 to the south of the church, with only a few fragments being recovered from Soakaway 2 and 3 towards the east and north-west of the church. The drainage gullies did not reveal any human remains, which is likely due to their shallow depth.

The articulated burials comprised one 18-45 year old male, one 30-45 year old male, and three 18+ year olds of undetermined sex. The six skulls were all 18+ years old and comprised one female, one male and three of undetermined sex.

The burials were typically Christian. They were orientated W-E, with the head to the west, in an extended, supine position with no grave goods. Three of the individuals were thought to be coffin burials as traces of iron nails and a metal decorative coffin fitting were recovered. Due to the lack of dateable finds it was not possible to determine an actual date for the burials, but it is probable that they are post-medieval.

As all the burials extended beyond the limit of excavation, no complete burials were recovered. From such a small number of burials, no detailed statistical analysis can be carried out, and no full conclusion as to the demography and health of the population may by commented upon. The exact cause of death of individuals is not generally apparent, as no traces are present on the skeletons. The pathological analysis of the burials did identify osteoarthritis and dental pathologies of ante-mortem tooth loss and heavy calculus that are linked to activity, diet and oral hygiene.

The most interesting burial was SK1, an adult male in his prime and of good stature. SK1 had osteoarthritis to his left hand and wrist. Pronounced muscle markings were also present on his legs suggestive of a more active physical lifestyle which may also be linked to the osteoarthritis in his hand.

5.2 On the east side of Holy Trinity Church is a motte and bailey castle. Soakaway 2 was excavated in close proximity to the base of the motte. The stratigraphy of the trench revealed a number of made-ground deposits with no finds, which were part of the levelling of the churchyard and backfilling of the motte in the 19th century.

5.3 Confidence Rating

The works were carried out in line with the requirements of the DAA, with full cooperation of the client and in good site conditions. Therefore the results are given a high confidence rating.

6. Acknowledgements

The project was commissioned by Shenstone & Partners on behalf of Wolverton Parochial Church Council. The writer is grateful Michael Poteliakhoff for his assistance. The project was monitored by Julian Munby the *Diocesan Archaeological Advisor of Oxford* (DAA). Thanks are also due to site ground worker, Richard Lyons.

The project was managed for ASC by Bob Zeepvat BA MIFA. Fieldwork was carried out by Carina Summerfield-Hill MSc. The report was prepared by Carina Summerfield-Hill MSc and edited by Karin Semmelmann MA MIFA.

7. Archive

- 7.1 The project archive will comprise:
 - 1. Brief
 - 2. Initial Report
 - 3. Clients site plans
 - 4. Site Monitoring Sheets
 - 5. Site record drawings
 - 6. List of photographs
 - 7. B/W prints & negatives
 - 8. Original specialist reports and supporting information
 - 9. CDROM with copies of all digital files.
- 7.2 The archive will be deposited with *Buckinghamshire County Museum* (AYBCM: 2012.15)

8. References

Standards & Specifications

- EH 1991 *The Management of Archaeological Projects*, 2nd edition. English Heritage (London).
- IFA 2000a Institute of Field Archaeologists' Code of Conduct.
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Appendix 1: Monitoring Sheets

A.S.C. LTD	WATCHING BRIEF RECORD
Project: Holy TRINITY CHURCH	Project No/Code: 1495 / OWH Sheet: of 7
OD WOWERTON	Date of visit: 9/02/12
Client/Developer	
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A.S.C. LTD	WATCHING BRIEF RECORD
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Appendix 2: List of Photographs

SITE NAM	ME: Holy	Trinity Ch	urch, Old Wolverton, Milton Keynes SITE NO/CODE: 1495/OWH				
Shot	B&W	Digital	Subject				
1	√	V	Drainage gully, earlier brick drain, looking NW (scale 1m) 15/02/12				
2		√	Drainage gully, looking SW (scale 1m) 15/02/12				
3	$\sqrt{}$	√	Drainage gully, stratigraphy, looking NW (scale 1m) 15/02/12				
4		V	Corner of gravestone, looking NW (scale 500mm) 15/02/12				
5		√	Footstone fragment (scale 500mm) 15/02/12				
6	$\sqrt{}$	√	Soakaway 1: Skull 2, looking NW (scale 500mm) 15/02/12				
7	$\sqrt{}$	√	Soakaway 1: Skull 3, looking NW (scale 500mm) 15/02/12				
8	√	V	Soakaway 1: SK1 & 2, looking SW <i>(scale 500mm)</i> 15/02/12				
9	√	√	Soakaway 1: SK1 & 2, looking SW (scale 500mm) 15/02/12				
10	√	√	Soakaway 1: SK4 & 5, looking SW (scale 500mm) 15/02/12				
11	√	V	Soakaway 1: SK3, looking NW (scale 500mm) 15/02/12				
12		√	Soakaway 1: coffin fittings (scale 50mm) 15/02/12				
13		√	Soakaway 1: coffin fittings (scale 50mm) 15/02/12				
14		√	Soakaway 1: coffin fittings (scale 50mm) 15/02/12				
15		√	Soakaway 1: coffin fittings (scale 50mm) 15/02/12				
16	$\sqrt{}$	√	Soakaway 1: post-ex, looking SW (scale 2x1m) 15/02/12				
17			Soakaway 1: post-ex, looking SW (scale 2x1m) 15/02/12				
18		√	General shot of drainage gully, looking NW 15/02/12				
19		√	General shot of drainage gully, looking NW 15/02/12				
20		√	General shot of drainage gully and soakaway 1 15/02/12				
21	$\sqrt{}$	√	Drainage gully, looking SE (scale 1m) 16/02/12				
22		√	Drainage gully, stratigraphy, looking NE (scale 1m) 16/02/12				
23		$\sqrt{}$	Drainage gully, looking NW (scale 1m) 16/02/12				
24		V	Drainage gully, looking SE (scale 1m) 16/02/12				
25	√	V	Soakaway 2, stratigraphy, looking SE (scale 1m) 16/02/12				
26		V	Soakaway 2, looking NW (scale 1m) 16/02/12				
27		V	Holy Trinity Church, looking NW				
28		V	Holy Trinity Church, looking NW				
29		V	Holy Trinity Church, looking W				
30		7	Holy Trinity Church, looking N				
31		√	Drainage gully 4, looking SE (scale 1m) 21/02/12				
32		√	Drainage gully 4, looking NW (scale 1m) 21/02/12				
33		√	Drainage gully 4, backfilled, looking SE 21/02/12				
34	√	√	Drainage gully and soakaway 3, looking SE (scale 1m) 21/02/12				
35	√	√	Drainage gully, stratigraphy, looking SW (scale 1m) 21/02/12				
36	$\sqrt{}$	√	Soakaway 3, stratigraphy, looking SE (scale 2×1m) 21/02/12				
37		√	Soakaway 3, stratigraphy, looking SE (scale 2×1m) 21/02/12				
38		√	Soakaway 3 and drainage gully, looking NW (scale 2×1m) 21/02/12				
39	$\sqrt{}$	√	Soakaway 3 and drainage gully, looking NW (scale 2×1m) 21/02/12				
40		√	Soakaway 3 and drainage gully, looking E (scale 1m) 21/02/12				
41		√	Soakaway 2 and drainage gully, looking SE (scale 1m) 21/02/12				
42		√	Soakaway 2 and drainage gully, looking SW (scale 1m) 21/02/12				
43		√,	Metal decorative coffin fitting, flower detail (scale 50mm)				
44		√	Metal decorative coffin fitting, flower detail (scale 50mm)				

Appendix 3: Specialist Report – Burial & Human Osteology

Introduction

Five articulated/partially articulated human burials, six skulls and disarticulated human remains were unearthed. All but one of the individuals, Skull 6, derived from Soakaway 1. A detailed list of the assemblage appears in Tables 1-4.

The assessment of the sex of the individuals was based, where possible, on the morphological characteristics of the skull and pelvic regions (Schwartz 1995: 280-281; Buikstra and Ubelaker 1994). Individuals that could not be confidently sexed, due to a lack of preservation or where the burial extended beyond the limit of excavation, are termed 'Sex Unknown'. The assessment of the age of the individuals was based primarily on epiphyseal fusion of the long bones (Schwartz 1995: 185-222), and where possible the auricular surface (Lovejoy *et al.* 1985), pubic symphysis (Brooks and Suchey 1990), and dental development (Ubelaker 1978). For this report ages are categorized adult (18+), young adult (18-29), prime adult (30-45) and mature adult (45-85). Note the term adult is used when preservation does not allow a more precise age range to be assigned. Finally the assessment of stature, where possible, was based from Fully's method using the following formula: length of femur × 3.74mm (Fully 1956).

Articulated/partially articulated burials

The articulated/partially articulated burials, and skulls, were the only remains to be osteologically analysed, whilst the disarticulated human remains were merely collected. Disarticulated remains are of little scientific value as it is not possible to carry out full analysis and combine data on such remains.

Preservation & Completeness

Generally the bones show evidence of fairly good surface preservation, the bone being hard and dry with some evidence of cracking and breakage. The majority of the burials found in Soakaway 1 were fairly intact and in their original position.

In all cases the burials extended beyond the limit of excavation, therefore no complete burials were recovered.

Depth

The articulated burials were found c.0.91-1.12m BGL. See Table 3&4 for full details.

The level at which the six skulls were found ranged between c.0.38-0.7m BGL. Three of these (Skulls 3-5) were visible only in the trench section. Skulls 3 and 6 may have been fully intact burials as they were found to the west.

Burial Position, Grave type & Date

The burials all displayed the typical layout of Christian burials being extended, supine, no grave goods and orientated W-E, with the head to the west.

The actual grave cut could not be distinguished for the majority of the burials as they were within the cemetery soil. However, three of burials revealed a visible grave cut that cut into the natural strata (SK1-3).

One burial was clearly a coffin burial, SK2, as a decorative metal coffin fitting was associated with it (Plate 9). The decorative coffin fitting displayed a flower moulded into the metal and

a black coating applied to its surface. Skull 2 was associated with a metal decorative coffin fitting and a green staining was present on the mandible, a result of copper-alloy coming into contact with the bone. This staining was either associated with a coffin or possibly a shroud pin. Skull 3 was also associated with a coffin nail suggesting a coffin burial.

Soakaway 1 revealed further evidence for coffin burials as iron coffin nails, a coffin handle, and further pieces of decorative coffin fittings were found within the cemetery soil (Plate 10).

Due to the lack of dateable finds it was not possible to determine an actual date for the burials, but it is probable that they are post-medieval.

Age and Sex

The age and sex categories of the five articulated/partially articulated individuals comprise the following (Table 1):

- Young-prime adult 1
- Prime adult 1
- Adult/sex unknown 3

The age and sex categories for the six skulls comprise the following (Table 2):

- Adult female 1
- Adult male 1
- Adult/sex unknown 4

Pathology

The identification of any abnormalities present on the bone/teeth of the individuals was assessed in order to build up a fuller picture of the health of past populations (Table 1&2). Two of the burials showed signs of pathology. They are as follows:

SK1: A prime adult male with macro porosity and bony spurs present around the joint margins of the left hand/wrist. This was visible on the carpals, metacarpals and phalanges. Slight bony lipping was also present around the joint margins of the distal ends of the left radius and ulna. Such porosity and extra bone growth indicates osteoarthritis which is linked to physical activity and age of the individual (Roberts & Manchester 2005).

Skull 2: An adult male, with the dental pathology of ante-mortem tooth loss (AMTL), which is the loss of a tooth during lifetime. AMTL was seen on the lower dentition of this individual (RI₁, LI₁, LPM₂ & LM₁). The bone had fully healed indicating that the tooth loss had occurred some time before death. The condition is very common and is linked to the age, diet and oral hygiene of the individual (Roberts and Manchester 2005). Heavy calculus (plaque) was also present on the LM¹, again related to the dental hygiene.

Stature

The stature of an individual is linked to genetics and nutrition. The left femur of SK1, prime adult male, was complete and using Fully's stature method, this individual was estimated at a good height of c.6ft 1inch.

Muscular Skeletal Markings

The muscular skeletal markings present on the bone gives an indication of the type of lifestyle the individual had. Very pronounced muscle markings, indicate a more active lifestyle of physical activity thus resulting in the muscles becoming more fully developed. SK1 had

pronounced muscle markings along the linea aspera of the left femur and the soleal line on the left and right tibia. Unfortunately only the distal end of the right femur was present, so this bone could not be analysed for muscle markings.

Conclusion

The work uncovered five articulated/partially articulated human burials, six skulls, and disarticulated human remains. The individuals were laid out in an extended, supine position, orientated W-E, with the head to the west.

Three of the individuals were coffin burials (SK2, Skull 2&3). However, due to the lack of dateable finds none of the burials could be accurately dated, but it is probable that they are post-medieval.

No evidence for the causes of death was present on the skeletons. This is common as disease and internal organ failure will often leave no trace on the bone. From such a small sample no comments can be made regarding the health of the population. Overall the sample contained evidence of osteoarthritis and dental pathologies including evidence of poor oral hygiene as heavy calculus was found.

The most interesting burial was SK1, an adult male in his prime and of good stature. SK1 had osteoarthritis to his left hand and wrist. Pronounced muscle markings were also present on his legs suggestive of a more active physical lifestyle which may also be linked to the osteoarthritis in his hand.

Upon completion of the project the human remains and any coffin items were reburied within the cemetery.



Plate 9: Metal decorative coffin fitting with flower moulded into the metal, and a black coating applied over the surface (*scale 5cm*)



Plate 10: Soakaway 1: iron coffin nail, iron coffin handle and metal decorative coffin fittings recovered from cemetery soil (*scale 5cm*)

Table 1: Articulated/partially articulated burials

Sk	Preservation/ Disturbance	%	Age	Sex	Ageing Methods/ Pathology/Other
1	Good bone preservation. Partial disturbance to the right femur	25% visible	Prime adult	M	Aging Bones fully fused = 18+ years old Pubic symphysis (left & right) = Phase III: Mean Age S.D 95% range 28.7 6.5 21-46 Pathology Macro porosity and bony spurs present around joint margins of left hand. Visible on carpals, metacarpals and phalanges - osteoarthritis Slight bony lipping around joint margins at distal ends of left radius and ulna – osteoarthritis Stature Left femur – 495 x3.74mm = 185cm (c.6ft 1 inch) Other Pronounced muscle markings present along the linear aspera of the left femur and on the soleal line of the right and left tibia suggestive of manual activity and building up of
2	Good bone preservation	15%	Adult	?	muscle strength Aging
	•	visible			Bones fully fused = 18+ years old
3	Good bone preservation. Right side of body disturbed by machine	20% visible	Adult	?	Aging Bones fully fused = 18+ years old
4	Good bone preservation. Highly disturbed	<5% visible	Adult	?	Aging Bones fully fused = 18+ years old
5	Good bone preservation with some breakage. Highly disturbed	<5% visible	Young- prime adult	M	Aging Bones fully fused = 18+ years old Vertebrae in good condition with no pathology suggesting a younger adult

Table 2: Skulls

Skull	Condition	Age	Sex	Ageing/Pathology/Other
1	Fair bone preservation with breakage – disarticulated skull	Adult	F	Aging Skull fully developed and fused = 18+ years old
2	Good bone preservation with some breakage – disarticulated skull & mandible	Adult	М	Aging Skull fully developed and fused = 18+ years old Pathology Left upper dentition – M¹ heavy calculus, PM¹&² post mortem tooth loss. Lower dentition – RI₁, LI₁, LPM₂, LM₁ – ante-mortem tooth loss and bone fully healed.
3	Good bone preservation – possibly intact burial	Adult	M	Aging Skull fully developed and fused = 18+ years old
4	Good bone preservation – disarticulated skull	Adult	?	Aging Skull fully developed and fused = 18+ years old
5	Good bone preservation – disarticulated skull	Adult	?	Aging Skull fully developed and fused = 18+ years old
6	Fair bone preservation, some breakage – possibly intact burial	Adult	?	Aging Skull fully developed and fused = 18+ years old

Table 3. Articulated burial – Grave type, finds and levels

SK	Grave Type/Finds	BGL* SKULL	BGL* SACRUM	BGL* FEET	BGL* OTHER
1	Coffin?			1.12m	Knee – 1.12m
	Visible grave cut [103]				
2	Coffin			1.11m	
	Visible grave cut [105], coffin fittings, decorative coffin fitting				
3	Coffin?				Right lower arm –
	Visible grave cut [107]				1.12m
4	Coffin?				Tibia – 0.93m
5	Coffin?				Pelvis – 0.91m

^{*}BGL – below ground level

Table 4. Skulls – Grave type, finds and levels

SK	Grave Type/Finds	BGL* SKULL	BGL* SACRUM	BGL* FEET	BGL* OTHER
1	?	0.6m			
2	Coffin	0.75m			
	Metal decorative coffin fitting. Green staining due to copper-alloy, was also present on the ascending ramus of the right side of the mandible, likely associated with coffin				
3	Coffin Coffin nail	0.38m			
4	?	0.6m			
5	?	0.7m			
6	?	0.5m			

^{*}BGL – below ground level

Appendix 4: ASC OASIS Form

PROJECT DETAILS					
Project Name:	Holy Trinity Church, Old Wolverton,		OASIS reference:	archaeol2-120062	
·	Milton Keynes				
Short Description:	In February 2012 a watching brief was carried out in the churchyard of Holy Trinity Church, Old Wolverton, Milton Keynes during the implementation of new drainage for the church. The excavations unearthed five articulated/partially articulated Christian burials, six skulls and disarticulated remains.				
	A motte and bailey castle is present to the east of the church. The church was rebuilt and the churchyard levelled in the 19 th century. At this time the motte ditch was filled in where it bounded the churchyard. One of the trenches excavated during the project was in close proximity to the base of the motte that revealed a series of made-ground deposits that contained no finds. These deposits were part of the levelling of the churchyard and backfilling of the motte in the 19 th century.				
Project Type:	Watching Brief				
Previous work: (eg. SMR refs)	MKHER 3015		Site status: (eg. none, SAM, listed)	Grade II* Listed	
Current land use:	Churchyard		Future work: (yes/no/unknown)	No	
Monument type:	Church		Monument period:	Medieval foundations, rebuilt in 19th Century	
Significant finds: (artefact type & period)	Burials				
PROJECT LOCATION					
County:	Milton Keynes	OS reference: (8 figs min)		SP 8042 4121	
Site address: (+ postcode if known)	Holy Trinity Church, Old Wolverton, Milton Keynes, MK12 5NH				
Study area: (sq. m. / ha)	2000sqm Height (DD: (metres)	c.75m AOD	
PROJECT CREATORS					
Organisation: Archaeological Services & Consultancy Ltd					
Project brief originator:	Julian Munby	Project	design originator:	N/a	
Project Manager:	Bob Zeepvat BA MlfA	Supervisor:		Carina Summerfield-Hill MSc	
Sponsor / funding body:	Wolverton Parochial Church Council				
PROJECT DATE					
Start date:	09/02/12	End dat	e:	21/02/12	
PROJECT ARCHIVES					
	Location (Accession no.)	Content (eg. pottery, animal bone, files/sheets)			
Physical:	Duelde shamaking County	None			
Paper:	Buckinghamshire County Museum (AYBCM: 2012.15)	Brief, report, site records, plans, b&w photographs and negatives			
Digital:	CD containing all data including digital photographs			ng digital photographs	
BIBLIOGRAPHY (Journal/monograph, published or forthcoming, or unpublished client report)					
Title:	Watching Brief: Holy Trinity Church, Old Wolverton, Milton Keynes, MK12 5NH				
Serial title & volume:	ASC Ltd Report ref. 1495/OWH				
Author(s):	Carina Summerfield-Hill MSc				
Page nos	37	Date:	Date: 08/03/12		