

Archaeological evaluation on the south side of Holy Trinity Church, Old Town, Stratford-upon-Avon, Warwickshire



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Archaeological evaluation on the south side of Holy Trinity Church, Old Town, Stratford-upon-Avon, Warwickshire

Tom Vaughan

With contributions by Laura Griffin and Gaynor Western (Ossafreelance)

Summary

An archaeological evaluation was undertaken at Holy Trinity Church, Old Town, Stratford-upon-Avon, Warwickshire (NGR SP 2010 5428). It was undertaken on behalf of Holy Trinity Church Parish Office, who intends to construct an extension along the southern elevation of the church for which a DAC faculty has been obtained, and a planning application will be submitted.

The investigations comprised three trenches; two outside the south wall of the south aisle adjacent to the buttresses, and the third outside the south-east corner of the chancel. The former were excavated to determine the density and depth of burials; the latter was focussed solely on identifying the alignment and depth of existing drainage pipes.

Ten inhumations were identified within Trench 1 and seventeen within Trench 2. Of these eighteen were recorded and excavated for osteological assessment along with almost 1,000 fragments of disarticulated bone. In addition a small number of grave cuts were recorded, which were not fully excavated. Within Trench 1 a sequence of eight layers of burial were identified. Within Trench 2 there was a sequence of seven burials. Three of the earliest burials within the trenches were determined to predate the construction of the buttresses on the south side of the church in the early 14th century (c 1312-22), which provides a secure *terminus post quem*. A number of the upper burials were found to contain traces of decayed coffin wood with degraded metal coffin furniture (tin plates and iron handles), which are of probable Victorian date.

A limited osteological assessment of condition, completeness, age, sex and pathology was undertaken to quantify the material present in light of its potential for future analysis. The majority of the remains were found to be in good condition though relatively incomplete. Both adult individuals and sub-adult individuals were represented in the sample. A brief examination of dimorphic elements revealed that the males and females were present. The assessment indicates that there is potential for obtaining a significant amount of osteological data regarding age, sex, stature and presence of pathology from the population. This would include the age of 55.5% and sex of 73.3% of the individuals exhumed to date through both descriptive and metric analyses, stature estimation of 46.7% of adult individuals, the observation of non-metrics and pathology as well as quantification of pathology prevalence rates and the calculation of the minimum number of individuals represented by the disarticulated assemblage.

The assessment of the human remains excavated so far indicates that future osteological analysis would provide valuable complimentary archaeological data to other recently excavated assemblages in the region as well as to the historical records, particularly since the assemblage in part pre-dates the earliest burial registers for the church.

The artefactual assemblage included three sherds of 12th-13th century pottery, a 14th-15th century glazed floor tile, lead window comes, fragments of coloured glass, iron (coffin) nails, and general post-medieval debris, largely residual within the disturbed grave soils.

In order to mitigate potential damage to the in situ skeletal remains and archaeological horizons it is recommended that mitigation take the form of an archaeological excavation of all deposits within the footprint of the development, to the full depth of the construction horizon; a watching brief of other groundworks associated with the development; and osteological analysis of all skeletal remains excavated (articulated and disarticulated); concluded by production of an archaeological report and appropriate publication.

Report

1 Background

1.1 Reasons for the project

An archaeological evaluation was undertaken at Holy Trinity Church, Old Town, Stratford-upon-Avon, Warwickshire (NGR SP 2010 5428). It was commissioned by Holy Trinity Church Parish Office, who intends to construct an extension along the southern elevation of the church, for which a faculty has been obtained from Coventry Diocesan Advisory Committee (DAC) and a planning application will be submitted to Stratford-upon-Avon District Council.

The proposed development site is considered to include heritage assets and potential heritage assets with archaeological interest, the significance of which may be affected by the application (MWA 1022 and 1026).

The project conforms to a brief prepared by Coventry DAC Archaeological Advisor (Parkhouse 2014) and for which a project proposal (including detailed specification) was produced (WA 2014).

The project also conforms to the *Standard and guidance for archaeological field evaluation* (IfA 2008) and *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England* (Church of England & English Heritage 2005).

The project reference for this investigation, assigned by WA is P4326.

2 Aims

The aims and scope of the project are to provide information about the nature, date, extent, significance and state of preservation of deposits which will be damaged or destroyed by the development (Parkhouse 2014, section 1.2).

3 Methods

3.1 Personnel

The fieldwork was led by Andrew Mann (BA MSc); who joined Worcestershire Archaeology in 2004 and has been practicing archaeology since 2001. The report was prepared by Tom Vaughan (BA MA AlfA), who was also the project manager responsible for the quality of the project. Illustrations were prepared by Carolyn Hunt (BSc PG Cert MlfA). Laura Griffin (BA PG Cert AlfA) undertook the finds analysis. Gaynor Western (Ossafreelance, BA MSc), undertook the osteological assessment.

3.2 Documentary research

The archaeological background to the site is largely covered in the brief (Parkhouse 2013) and heritage statement (Edgar 2013) previously completed.

Prior to fieldwork commencing a search was made of the Historic Environment Record (HER).

3.3 List of sources consulted

Published and grey literature sources are listed in the bibliography (Section 12).

3.4 Fieldwork strategy

A detailed specification was prepared by Worcestershire Archaeology (WA 2014). In addition to the two trenches identified in the specification, the client instructed WA to excavate a third trench to locate the route of extant drainage pipes to the south-east of the chancel (as per Oliver Architecture Ltd. drawing Sk.05, dated June 2014).

Fieldwork was undertaken between 4 and 20 June 2014. The project reference number and site code assigned by WA is P4326.

Three trenches, amounting to just under 23.50m² in area, were excavated. The location of the trenches is indicated in Figure 2. Trench 3 was excavated specifically to locate the route of extant drainage pipes.

Deposits considered not to be significant were removed under archaeological supervision, using a 360° tracked excavator, employing a toothless bucket and. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012). On completion of excavation, trenches were reinstated by replacing the excavated material.

3.5 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

3.6 Artefact methodology, by Laura Griffin

3.6.1 Artefact recovery policy

The artefact recovery policy conformed to standard Service practice (WA 2012; appendix 2).

3.6.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. Where possible, a *terminus post quem* date was produced for each stratified context. The date was used for determining the broad date of phases defined for the site. All information was recorded on a pro forma Microsoft Access 2000 database.

The pottery was examined under x20 magnification and where, possible referenced as appropriate by fabric type and form to the *Warwickshire medieval and post medieval pottery type series* (Soden and Ratkai 1998).

3.6.3 Discard policy

The following categories/types of material will be discarded after a period of 6 months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- where unstratified
- modern pottery, and;
- generally where material has been assessed as having no obvious grounds for retention.

3.7 Environmental archaeology methodology

3.7.1 Sampling policy

Sampling was undertaken according to standard Worcestershire Archaeology practice (WA 2012). In the event no deposits were identified which were considered to be suitable for environmental analysis.

3.8 Statement of confidence in the methods and results

Although a number of modern services were revealed, which meant that the trench areas had to be reduced in scope, the methods adopted allow a high degree of confidence that the aims of the project have been achieved.

4 The application site

4.1 Topography, geology and archaeological context

The site is within the churchyard of Holy Trinity church, which has been closed to burials for over one hundred years, on the south side of the church. Holy Trinity is a Grade 1 listed building (ref. 366325). It lies to the south of the town centre, on the west bank of the River Avon, on a flat area at a height of approximately 37.75m AOD.

The soils belong to the Wick 1 Soil Association (541r), comprising deep well drained coarse loamy and sandy soils, locally over gravel. The soils along the River Avon (mainly on the east bank) belong to the Fladbury 1 Soil Association (813b), comprising stoneless clayey soils, in places calcareous (Soil Survey of England and Wales 1983). The superficial geology consists of alluvium, sand and gravel, over Mercia Mudstone (BGS 2014).

The archaeological and historical background to the site is largely covered in the brief (Parkhouse 2013) and heritage statement (Edgar 2013) previously completed. Archaeological monitoring of geotechnical test pits along the south of church was undertaken in 2012 (Tavener 2012), the results of which are summarised in the brief (Parkhouse 2014, section 2.6).

Archaeological observation was undertaken in late 1997 and 1998 of service trenches associated with a subterranean boiler in the corner of the south aisle and the south transept. The investigations revealed a mixed greyish brown sandy loam, considered to be a heavily disturbed grave soil, with a small quantity of pottery (13th-14th century and 19th century), fragments of medieval glazed floor tile, coffin furniture, window glass and frequent fragments of disarticulated human bone. A single articulated burial was noted, although the exact location and depth is unclear (although it was more than 0.52m deep) (Warwickshire Museum 1998; EWA 6937).

4.2 Current land-use

The site is comprised of a grassed area, and a pea-gravel path around the south side of the church. In the area south of Trenches 1 and 2 the grassed is raised above the level of the path. The path is edged with fragments of grave stones, thought to be of 18th century date (Warwickshire Museum, 1998).

5 Structural analysis

The trenches and features recorded are shown in Figs 2-5. The details of the individual articulated skeletal remains and other features are shown in Plates 2-13 and 16-29. The results of the structural analysis are presented in Appendix 1.

5.1.1 Phase 1: Natural deposits

The natural undisturbed geology comprised a slightly silty sand with sub-angular gravel and manganese flecks, at 1.17m depth, 36.80m AOD in Trench 1, 1.46m depth, 36.64mAOD in Trench 2, and approximately 0.62m depth in Trench 3.

The soils were found to have been heavily worked and disturbed, as was indicated by the large quantity of disarticulated human bone retrieved, so there was little defined topsoil, subsoil stratigraphy remaining, but rather a homogenous grave soil. Disturbed subsoil was noted at 37.05m AOD within Trench 1, (143), and Trench 2, (227).

5.1.2 Phases 2 and 3: Medieval and post-medieval deposits

Ten inhumations were identified within Trench 1 and seventeen within Trench 2. Of these eighteen were recorded, excavated and lifted for osteological assessment (Appendix 3). Frequently it was not possible to discern grave cuts, although four grave cuts were identified which were not fully excavated, so no skeletal remains were identified within these.

Within Trench 1 a stratigraphic sequence of eight layers of burial was identified, as follows (sequence runs from latest to earliest):

<i>Layer/context</i>	<i>Ordnance Datum</i>	<i>stratigraphic information</i>	<i>plate</i>
1/ Skeleton 117	37.59m AOD	truncated by service trench 105; below modern path	3
↓			
2/ Skeleton 125	37.59m AOD	below 117	6
↓			
3/ Grave 130 / 131	c 37.20m AOD	unexcavated, no skeletal remains identified	7
↓			
4/ Skeleton 133	37.08m AOD	truncated by 131	7
↓			
5/ Skeleton 136	37.17mAOD	truncated by 131 and cut for 133	7
↓			
6/ Skeleton 139	37.06m AOD	below 136; unexcavated	8 and 9
↓			
7/ Skeleton 142	36.97m AOD	below 139; unexcavated	10
↓			
8/ Skeleton 141	36.89m AOD	truncated by church buttress 110 and cut for 142	10

Within Trench 2 there was a stratigraphic sequence of seven burials, as follows:

<i>Layer/context</i>	<i>Ordnance Datum</i>	<i>stratigraphic information</i>	<i>plate</i>
1/ Skeleton 213/214	37.61m AOD	truncated by modern path and service trench 204	18
↓			
2/ Skeleton 217	37.40m AOD	truncated by service trench 204	20
↓			
3/ Skeleton 216	37.37m AOD	below 217	20
↓			
4/ Skeleton 223	37.20m AOD	below 216	23
↓			
5/ Skeleton 226	36.93mAOD	below 223	24
↓			
6/ Skeleton 228	36.76m AOD	truncated by church buttress 208	25
↓			
7/ Skeleton 232	36.64m AOD	below 228; unexcavated	26

Other burials were un-sequenced, or their relationships determined with only one or two others, so they do not appear in the sequences above.

One burial within Trench 1 (141) and one within Trench 2 (228) had been truncated by the church buttresses (110 and 208). Further, burial (232) lay stratigraphically below (228), so all three pre-date the construction of the buttresses in the 14th century.

A number of skeletons lay directly on top of one another, so may to have been placed within the same grave cut (albeit probably at different times) and therefore may be related. These were (103, 120 and 123; Plates 2, 4 and 5), (223 and 226; Plates 23 and 24), and possibly also (228 and 232; Plates 25 and 26).

Two juvenile skeletons (220 and 221) lay immediately adjacent, alongside an adult (219) which had been truncated by another juvenile (222). They lay at the same depth, 37-36-37.56mAOD, and may also be related (Plates 21 and 22).

A number of the later burials (236 and 239) were found to contain traces of decayed coffin wood with degraded metal coffin furniture (tin plates and iron handles, 234 and 240), which are of probable Victorian date (Plates).

The buttresses were determined to comprise various courses of irregular blue lias, green sandstone and Cotswold stone, stepped out to varying degrees, bedded directly on the natural sand and gravel, at 36.75m AOD in Trench 1 and 36.55m AOD in Trench 2 (Plates 13 and 29).

5.1.3 Phase 4: modern deposits

A number of 19th century and later services were revealed, within Trenches 1 and 2, generally aligned east to west alongside the church. These had frequently cut through and disturbed burials (Figs 3-5 and Plates 1, 13-20, 30). In addition the modern gravel path (100 and 200) was observed to lie directly over and truncate a number of the burials (103, 210, 212, 213).

A brick lined culvert (127) was observed around the outside of buttress (110) in Trench 1. The concave base comprised a single course of bricks at 37.50m AOD, three courses of bricks to the external side, blue lias and slate capping stones at 37.79m AOD. It had been truncated by service trench (105) to the south and may have been associated with a square brick buttress in the base of (105) at 37.26mAOD (Plates 8, 11-15, 20, 21, 23-25, 29 and 30). The culvert did not continue into Trench 2 to the west.

Ceramic service pipes were noted within Trench 3 at 0.12m, 0.50m and 0.72m depth below the present ground surface, within a disturbed soil horizon (301) (Plates 31 and 32).

5.2 Artefact analysis, by Laura Griffin

The artefactual assemblage recovered is summarised in Tables 1 and 3.

The assemblage consisted of 139 finds weighing 4375g and came from fifteen stratified contexts and the topsoil. The assemblage could be dated from the medieval period onwards (see Table 1). Using pottery as an index of artefact condition, this was generally fair with sherds displaying moderate levels of abrasion.

period	material class	material subtype	object specific type	total	weight (g)
	glass		window	4	6
	metal	copper alloy		1	1
	metal	iron		8	975
	metal	iron	handle	1	78
	metal	iron	nail	90	355
	metal	lead	strip	1	60
	metal	lead	window comes	6	49
	stone	sandstone		1	1502
medieval	ceramic	earthenware	floor tile	1	163
medieval	ceramic	earthenware	pot	3	80
post-medieval	ceramic	earthenware	brick	1	6
post-medieval	ceramic		clay pipe	2	12
modern	ceramic	earthenware	roof tile	1	43
modern	ceramic	stoneware	drain	1	217
modern	glass		vessel	6	778
modern	metal	tin	can	12	50

Table 1: Quantification of the assemblage

5.2.1 Summary of artefactual evidence by period

All material has been spot-dated and quantified. Where possible, pottery has been grouped and quantified according to fabric type (Table 2). Diagnostic sherds were dated by form type, whilst remaining sherds were datable by fabric type to their general period or production span.

Medieval

Material that could be confidently dated to the medieval period consisted of three sherds of pottery and a fragment of glazed floor tile.

All the pottery sherds were of sandy fabric types and came from cooking pot forms. Two of these sherds were diagnostic, being from a squared rim Worcester sandy ware cooking pot of late 11th–12th century date (context 201, fabric SQ08). The other rim sherd (context 130) was identified as coming from a cooking pot of local Warwick sandy ware (fabric SQ02) and datable to the 12th–13th century.

The remaining sherd (context 227), although undiagnostic was very distinctive being crudely handmade and noticeably thicker than the above cooking pot sherds. Analysis of the fabric indicates it to be Warwickshire fabric SQ201, a type forming only a small proportion of local assemblages and, therefore, not easily datable. However, the general appearance of the sherd and the context from which it came would suggest it to be of similar date to the other medieval pottery within the assemblage. This sherd was the only find from this particular grave fill and, therefore, provides a *terminus post quem* of 12th–13th century to the feature.

The piece of glazed floor tile was unstratified (context 200). This was plain with a dark green glaze and of 14th–15th century date.

Post-medieval and modern

Remaining finds were generally undiagnostic and from mixed deposits, the majority of which appear to have been disturbed during the Victorian period. These include lead window comes, highly corroded iron coffin nails and other coffin furniture, fragments of coloured window glass, bottle glass and fragments of ceramic building material including brick and drain pipe. It is possible that some of the coffin nails and the lead window comes are actually medieval in date but in the absence of clear stratigraphy, it is not possible to confirm this.

period	context	fabric code	fabric name	count	weight (g)
medieval	130	SQ02	Local Warwick sandy ware	1	23
medieval	201	SQ08	Worcester sandy ware	1	22
medieval	227	SQ201	-	1	35

Table 2: Quantification of the pottery by fabric type

context	material class	material subtype	object specific type	count	weight(g)	<i>terminus post quem</i>	period
0	metal	tin	can	12	50		
0	glass		vessel	2	599		
100	stone	sandstone		1	1502		
102	metal	iron	handle	1	78	19C	
102	metal	lead	window came	1	3		
102	metal	iron	nail	30	170		

102	metal	copper alloy		1	1		modern
103	metal	iron	nail	5	22	19C	modern
103	glass		window	1	1		
106	ceramic	stoneware	drain	1	217	19C	modern
106	ceramic		clay pipe	1	2		
106	metal	lead	window comes	5	46		
106	metal	iron		3	6		
106	metal	iron		2	183		
117	metal	iron	nail	8	27		
119	metal	iron	nail	10	54		
120	metal	iron	nail	1	1		
120	metal	iron	nail	1	1		
125	metal	iron	nail	1	1		
127	glass		vessel	4	179	19C	modern
127	metal	lead		1	60		
130	ceramic	earthenware	pot	1	23	13C	?medieval
200	ceramic	earthenware	floor tile	1	163		
200	ceramic	earthenware	roof tile	1	43		
200	ceramic		clay pipe	1	10		
201	ceramic	earthenware	pot	1	22		modern
201	metal	iron		3	786		
211	metal	iron	nail	21	24		
211	metal	iron	nail	2	6		
211	glass		window	1	1		
227	ceramic	earthenware	pot	1	35	13C	medieval
235	metal	iron	nail	2	22	19C	modern
235	glass		window	1	3		
235	ceramic	earthenware	brick	1	6		
236	metal	iron	nail	1	1		
241	metal	iron	nail	6	17		
241	metal	iron	nail	2	9		

241	glass		window	1	1		
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Table 3: Summary of context dating based on artefacts

6 Synthesis, by Tom Vaughan and Gaynor Western

Ten inhumations were identified within Trench 1 and seventeen within Trench 2. Of these eighteen were recorded and excavated for osteological assessment along with almost 1,000 fragments of disarticulated bone. In addition a small number of grave cuts were recorded, which were not fully excavated. Within Trench 1 a sequence of eight layers of burial were identified. Within Trench 2 there was a sequence of seven burials. Three of the earliest burials within the trenches were determined to predate the construction of the buttresses on the south side of the church in the early 14th century (c 1312-22), which provides a secure *terminus post quem*. A number of the upper burials were found to contain traces of decayed coffin wood with degraded metal coffin furniture (tin plates and iron handles), which are of probable Victorian date.

A limited osteological assessment of condition, completeness, age, sex and pathology was undertaken to quantify the material present in light of its potential for future analysis. The majority of the remains were found to be in good condition though relatively incomplete. Both adult individuals and sub-adult individuals were represented in the sample. A brief examination of dimorphic elements revealed that the males and females were present. The assessment indicates that there is potential for obtaining a significant amount of osteological data regarding age, sex, stature and presence of pathology from the population. This would include the age of 55.5% and sex of 73.3% of the individuals exhumed to date through both descriptive and metric analyses, stature estimation of 46.7% of adult individuals, the observation of non-metrics and pathology as well as quantification of pathology prevalence rates and the calculation of the minimum number of individuals represented by the disarticulated assemblage.

The artefactual assemblage included three sherds of 12th-13th century pottery, a 14th-15th century glazed floor tile, lead window comes, fragments of coloured glass, iron (coffin) nails, and general post-medieval debris, largely residual within the disturbed grave soils.

7 Significance

7.1 Nature of the archaeological interest in the site

The archaeological interest in the site lies chiefly in the burials and the extant skeletal remains.

7.2 Relative importance of the archaeological interest in the site

The good preservation of the skeletal assemblage indicates that they have a high potential for a significant amount of osteological data regarding age, sex, stature and presence of pathology from the population, which spans the earlier medieval (pre-14th century) through to the Victorian period (Appendix 3). Whilst not rare *per se* - medieval and post-medieval churchyards exist in most towns and villages throughout the country – the opportunity to investigate such an assemblage is rare.

7.3 Physical extent of the archaeological interest in the site

A sequence of eight and seven layers of burials were found in Trenches 1 and 2 respectively, with skeletal remains extant from just below the modern gravel path, down to more than 1.65m depth (Figs 3-5).

8 The impact of the development

The exact extent of the development is to be determined. However skeletal remains have been found at a very shallow depth below the present ground surface (Fig 5) and across all areas archaeologically investigated (Figs 3 and 4; see also Tavener 2012). They are therefore vulnerable to any intrusive groundworks associated with development of the site.

The historic environment is a non-renewable resource and therefore cannot be directly replaced. However mitigation through recording and investigation also produces an important research

dividend that can be used for the better understanding of the area's history and contribute to local and regional research agendas (cf NPPF, DCLG 2012, section 141).

9 Recommendations

In order to mitigate the impacts identified above, the following actions are recommended:

- Archaeological excavation of all deposits within the footprint of the proposed new building, down to the full depth of the construction horizon;
- Watching brief of other groundworks associated with the development (i.e. service trenches and landscaping);
- Osteological analysis of all skeletal remains excavated from the site (Appendix 3, Section 8)

The scope and specification of mitigation works will be agreed with Anna Stocks, Warwickshire County Council Planning Archaeologist and Jonathan Parkhouse, Coventry DAC Archaeological Advisor.

Any site investigation works or watching briefs required would be concluded by production of an archaeological report (and appropriate publication) to be deposited for public consultation with Warwickshire Historic Environment Record (HER) and a project archive to be deposited at a local museum.

10 Publication summary

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

An archaeological evaluation undertaken on behalf of Holy Trinity Church Parish Office at Holy Trinity Church, Old Town, Stratford-upon-Avon, Warwickshire (NGR SP 2010 5428).

The investigations comprised three trenches; two outside the south wall of the south aisle adjacent to the buttresses, and the third outside the south-east corner of the chancel. The former were excavated to determine the density and depth of burials; the latter was focussed solely on identifying the alignment and depth of existing drainage pipes.

Ten inhumations were identified within Trench 1 and seventeen within Trench 2. Of these eighteen were recorded and excavated for osteological assessment along with almost 1,000 fragments of disarticulated bone. In addition a small number of grave cuts were recorded, which were not fully excavated. Within Trench 1 a sequence of eight layers of burial were identified. Within Trench 2 there was a sequence of seven burials. Three of the earliest burials within the trenches were determined to predate the construction of the buttresses on the south side of the church in the early 14th century (c 1312-22), which provides a secure terminus post quem. A number of the upper burials were found to contain traces of decayed coffin wood with degraded metal coffin furniture (tin plates and iron handles), which are of probable Victorian date.

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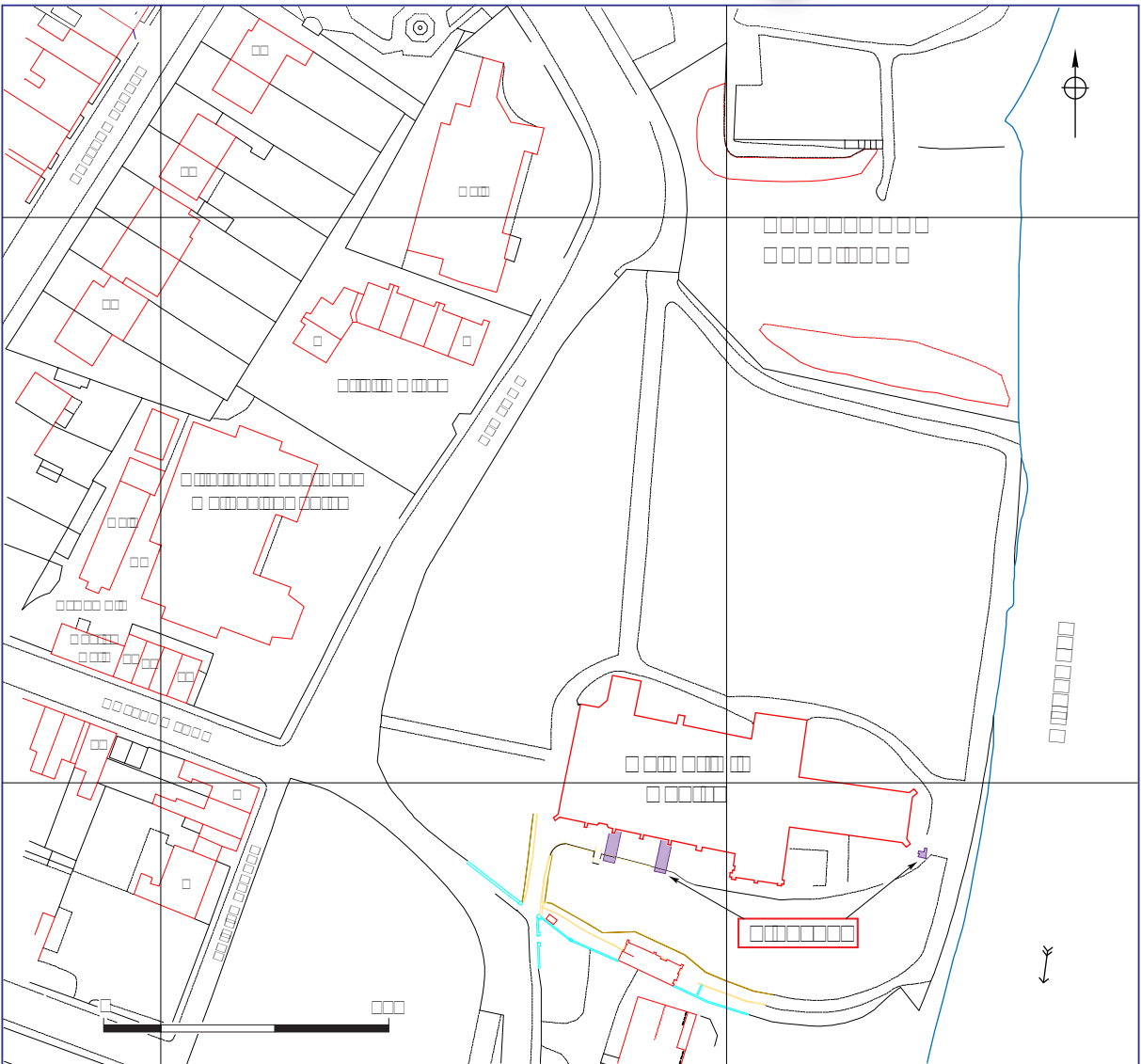
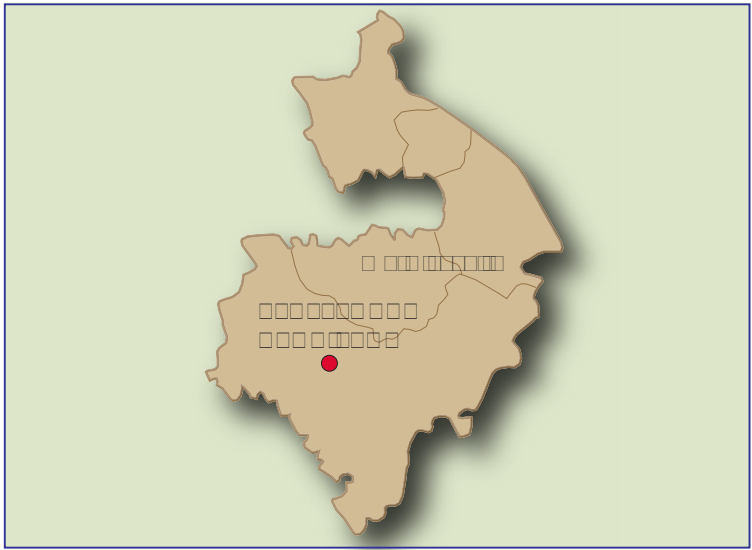
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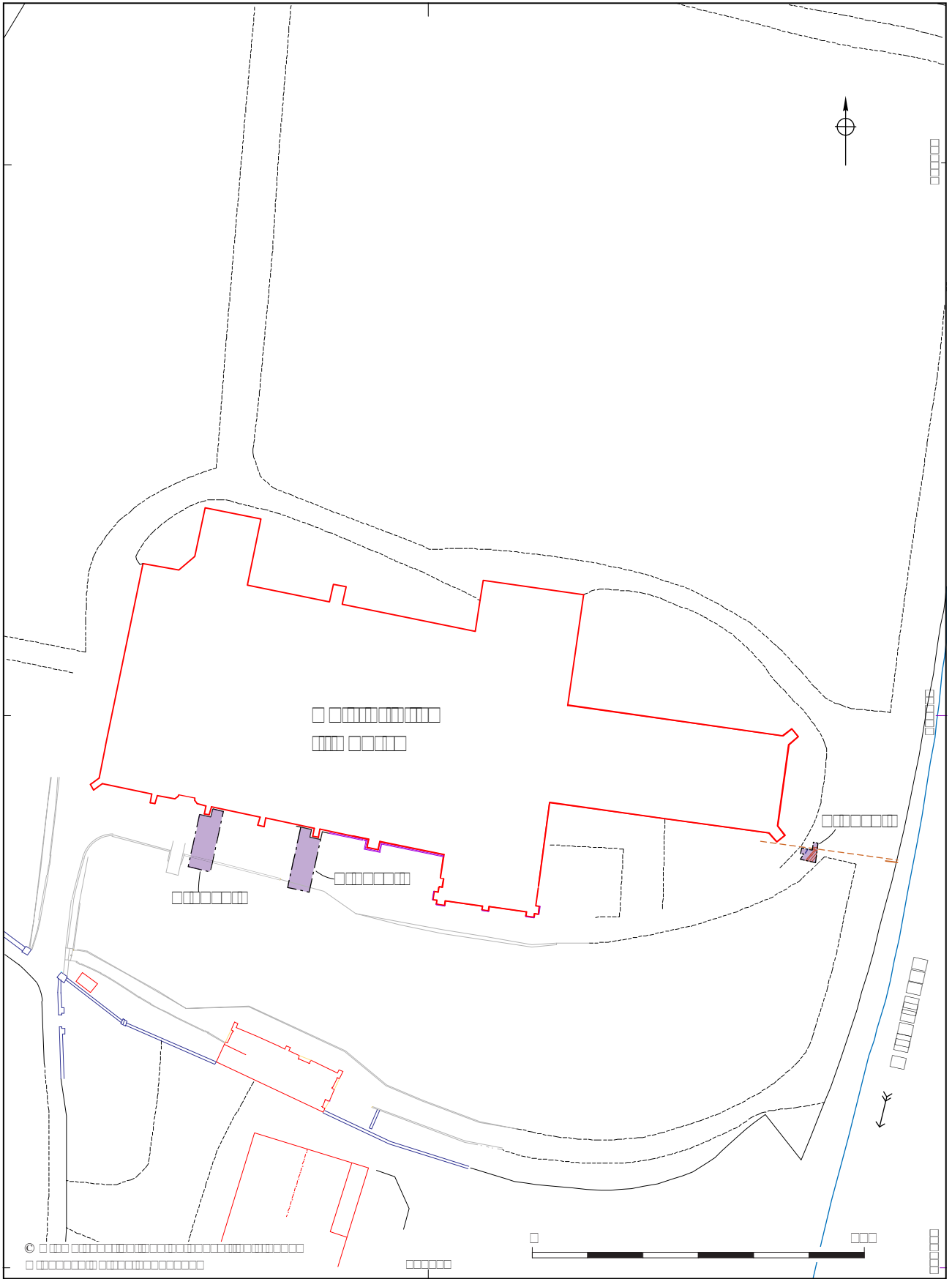
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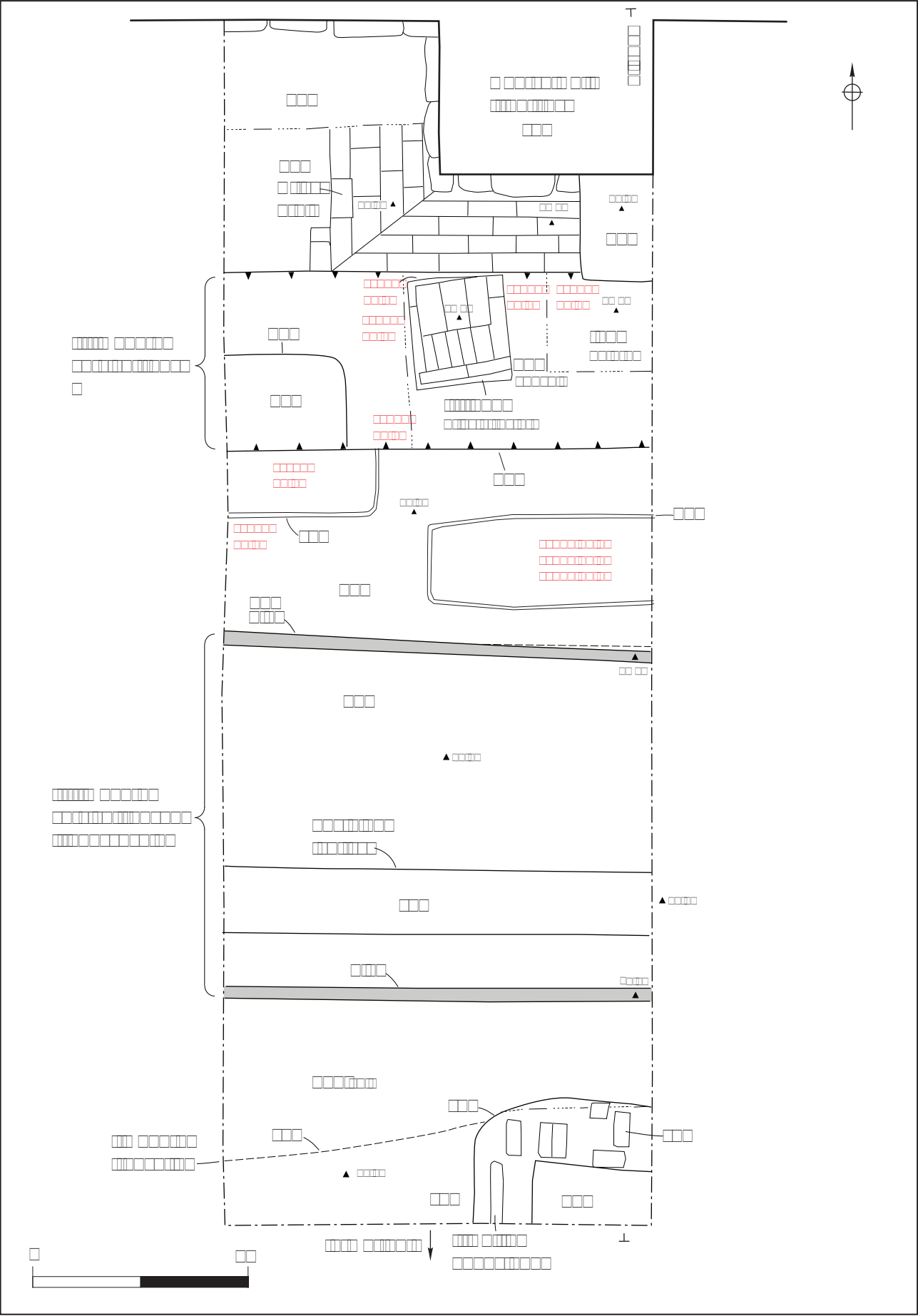


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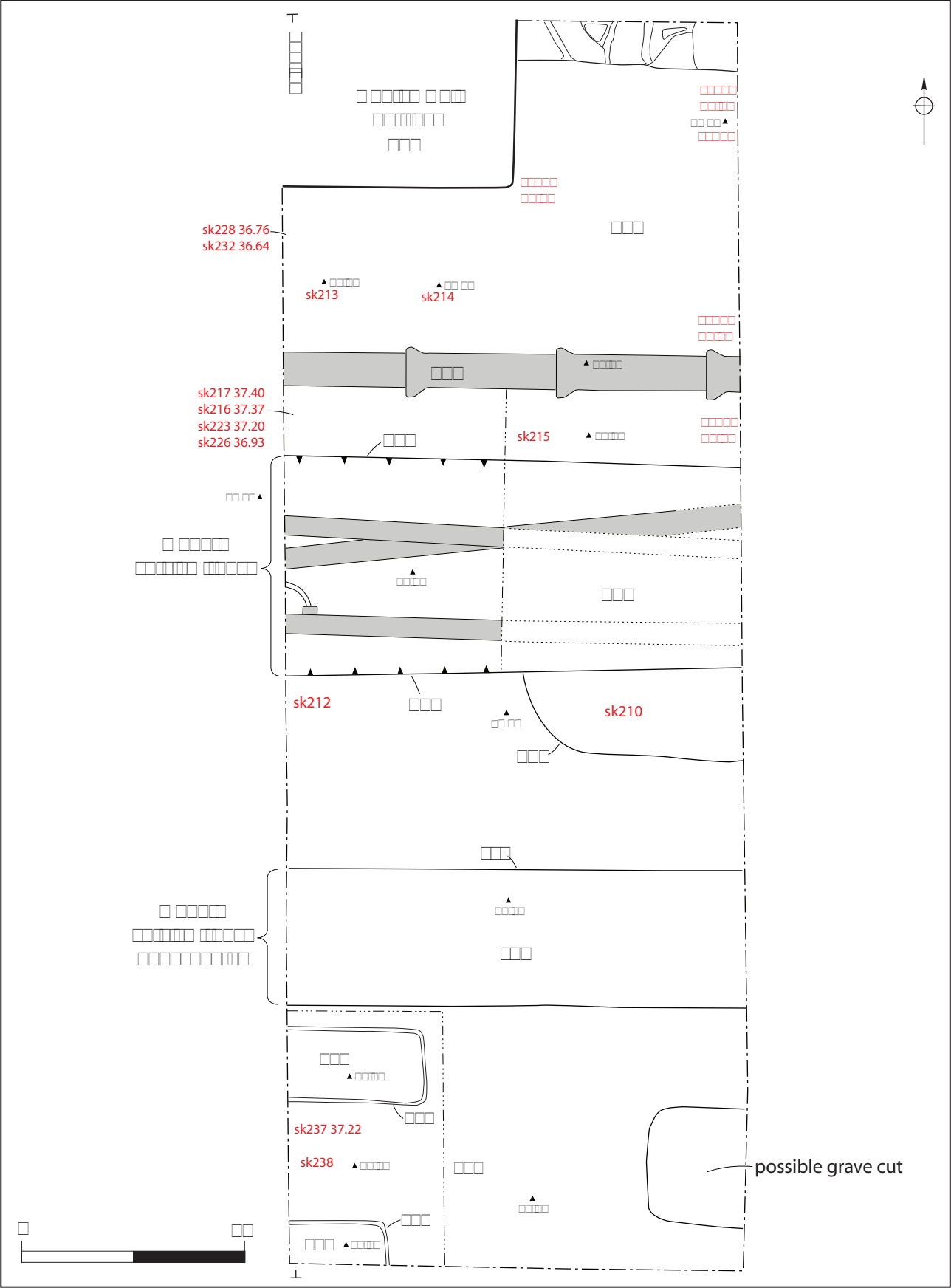
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Archaeological site plan

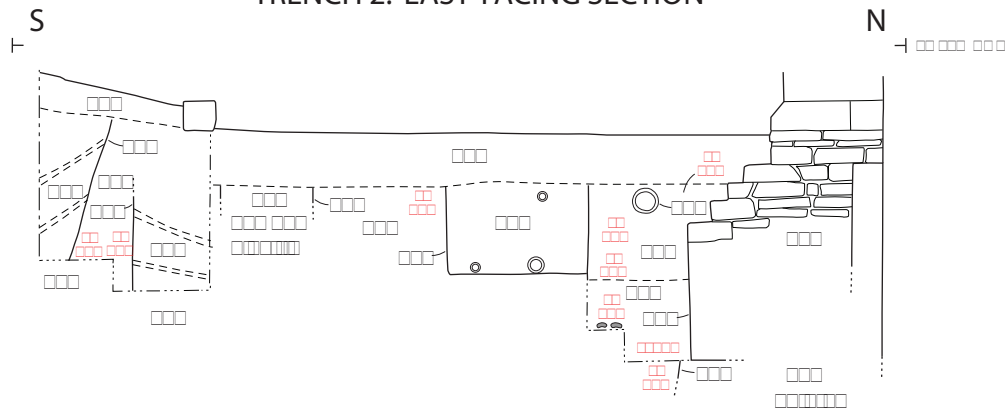
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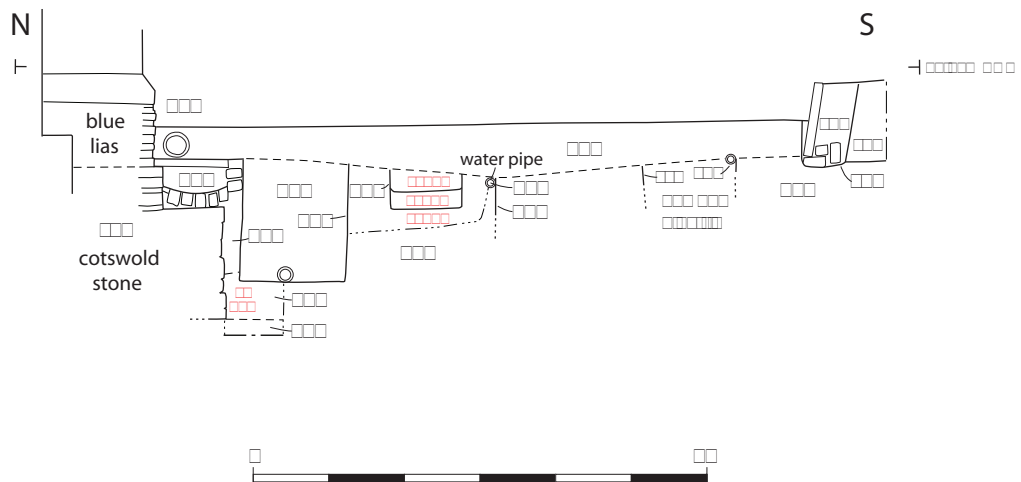
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TRENCH 2: EAST-FACING SECTION



TRENCH 1: WEST-FACING SECTION



Plates



Plate 1 Trench 1, during initial excavation, view north



Plate 2 Skeleton 103



Plate 3 Skeleton 117



Plate 4 Skeleton 120



Plate 5 Skeleton 123



Plate 6 Skeleton 125 with disarticulated skull 126 adjacent



Plate 7 Skeletons 133 and 136 and grave 131 with extensive disarticulated bone



Plate 8 Skeleton 139 below skeletons 133 and 136 and grave 131 with extensive disarticulated bone



Plate 9 Skeleton 139



Plate 10 Skeletons 139, 141 and 142, and natural sand and gravel 144, view south



Plate 11 General view to buttress 110 and culvert 127



Plate 12 East section, view of general grave soils 101 143 and natural 144



Plate 13 Buttress 110 and culvert 127, view north-east



Plate 14 Trench 1 general view north on completion of excavation



Plate 15 Trench 2, during initial excavation, view north



Plate 16 Service trench 204, view east



Plate 17 Skeletons 210 (foreground) and 212 (background)



Plate 18 Skeleton 213/214



Plate 19 Skeleton 215



Plate 20 Skeletons 216, 217, 219 and disarticulated skull 218, general view north-north-west



Plate 21 Skeletons 219, 220, 221 and 222, general view north



Plate 22 Skeletons 219, 220, 221 and 222



Plate 23 Skeleton 223



Plate 24 Skeleton 226 and skull of skeleton 228 to north



Plate 25 Skeleton 228



Plate 26 Skeleton 232



Plate 27 Skeletons 237 (north) and 238 (south)



Plate 28 Graves 236 (south) and 239 (north)



Plate 29 Buttress 208



Plate 30 Trench 2, general view north on completion of excavation



Plate 31 Trench 3, general shot, work in progress, view west



Plate 32 Trench 3, general shot upon completion of excavation, view south

Appendix 1 Trench descriptions

Main deposit descriptions

Trench 1

Maximum dimensions: Length: 5.60m Width: 2.00m Depth: 1.25m

Orientation: north to south

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
100	Modern path	Mixed gravel and road stone layer around south side of church wall; same as 200 and 300	37.82mAOD / 0.00-0.32m
101	Topsoil / graveyard soil	Mid-light brown sandy loam; soft and friable; occasional small-medium rounded stones, charcoal, clay pipe fragments ; moderate root activity; same as 115 to south, 201 and 301	0.24m+
102	Grave fill	Fill of 104; contains skeleton 103; Mid-light brown very sandy loam; soft and friable; occasional small-medium rounded stones, occasional charcoal, iron coffin nails and coffin handle; frequent disarticulated bone; coffin wood stain visible around edge; similar to 101; sealed by 100	0.29-0.44m
103	Skeleton	Partial – skull, torso, both arms, right hand against pelvis, upper legs; extends into east trench baulk; aligned east to west; supine; within cut 104; sealed by 102 1st layer of burial	37.59mAOD
104	Grave cut	Filled by 102 and skeleton 103; parallel vertical sides to flat base; associated with 120 and 123 below; sealed by and cut by 100	0.29-0.44m
105	Service trench	Filled by 106; and 6" iron water pipe; aligned east to west; parallel vertical sides to flat base; cuts 101, 116, 143; butts 127; same as 204	0.21-1.03m
106	Fill of service	Fill of cut 105; mid-light brown sandy loam; soft and loose; moderate ceramic building material (CBM), modern brick, lime mortar fragments; frequent disarticulated bone; sealed by 100	0.21-1.03m
107	Service pipe	Modern ceramic drain pipe; within 100; over 127; same as 203; no visible cut or fill	0.04-0.20m
108	Service trench	Modern service trench; aligned east to west; filled by 109; same as 204; unexcavated	0.29m+
109	Fill	Fill of cut 108; mid-light brown sandy loam; soft and loose; moderate ceramic building material (CBM), modern brick, lime mortar fragments	0.29m+
110	Structure	Stone foundations for southern wall of church buttress; stepped out twice; 9-10 irregular courses of rough Cotswold stone; below 3-4 courses of thinner blue lias below faced ashlar sandstone blocks; cut by 127; bedded directly on natural 144; butted by 101 and 143; cuts 141; same as 208	0.00-1.41m
111	Service cut	Multiple modern services trench; aligned east to west; 0.35m wide; parallel sides; same as 206; unexcavated	0.25m+

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
112	Fill of service	Fill of cut 111; dark brown sandy loam; soft and friable; similar to 106 and 109; same as 207; unexcavated	0.25m+
113	Foundation trench	Cut for low revetment wall 114; cuts 101 and 115; aligned east to west	0.00-0.57m
114	Structure	Wall of modern bricks and re-used grave stones; butts and revets 115 to south	0.00-0.57m
115	Topsoil	Observed within raised south edge of trench; butted by 114; dark brown sandy loam; occasional small to medium sub-rounded stones; frequent roots; similar to 101, but more organic; occasional disarticulated bone; possibly redeposited when path 100 to north was laid; same as 202	0.00-0.55m+
116	Grave cut	Filled by 118 and skeleton 117; aligned east to west; rectangular in plan; vertical sides to flat base; cut by gravel path 100 and 105	37.59mAOD
117	Skeleton	Partial – lower right leg and foot; aligned east to west; fill of 116; sealed by 118; cut by 105; extends into west trench baulk; same level as 123 1st layer of burial	37.59mAOD
118	Grave fill	Fill of 116; contains skeleton 117; mid-light brown sandy loam; soft and friable; occasional small-medium rounded stone; coffin wood stain visible around edge; iron coffin nails in south-west corner; below 101; cut by 105	37.59mAOD
119	Grave fill	Fill of 121; contains skeleton 120; soft, mid grey brown sandy silt; occasional small rounded and angular stones; cut by 104; coffin wood stain visible around edge	37.59mAOD
120	Skeleton	Partial – lower jaw, torso, upper right arm, hands over right pelvis and upper right leg; aligned east to west; supine; fill of 121; sealed by 119; extends into west trench baulk; below and associated with 103; cut by 104 2nd layer of burial	37.55mAOD
121	Grave cut	Filled by 119 and skeleton 120; rectangular in plan; rounded corners; sharp break of slope; vertical sides to flat base; aligned east to west; cut by and directly below 104	37.55mAOD
122	Grave fill	Fill of 124; contains skeleton 123; below 101; mid-light brown sandy loam; soft and friable; very occasional small-medium rounded stone	37.51mAOD
123	Skeleton	Partial – skull, right arm over torso, left hand, right pelvis; young juvenile; supine; aligned east to west; fill of 124; sealed by 122; below and associated with 103 and 120; cut by 121; extends into east trench baulk; same level as 117 3rd layer of burial	37.51mAOD
124	Grave cut	Filled by 122 and skeleton 123; cut by 116; only base visible; gradual sloping sides curving to a flat base; extends into east	37.51mAOD

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
		trench baulk	
125	Skeleton	Partial – lower legs and feet; aligned east to west; supine; extends into west trench baulk; associated with 126; iron coffin nails around feet; no visible cut; within 101; same level as 123; cut by 116? 2nd layer of burial	37.59mAOD
126	Disarticulated skull	Adjacent to skeleton 123; within 101; possibly within fill of grave for skeleton 125; facing down – not in situ	37.59mAOD
127	Structure	Culvert around buttress 110; cut by 105; above 110; butted by 101 and 143; sealed by 100; bricks 24x11x7cm, handmade and unfrogged, stretcher bond on the base & vertical sides; no mortar; blue lias and slate capping; stones 45x55x7cm	37.51mAOD
128	Structure	Brick buttress for 127; possibly within 105; bricks handmade and unfrogged, 24x12x8cm, irregular coursing, no mortar	37.26mAOD
129	Foundation cut	Filled by 128; square sides; cut by 105; cuts 143	37.26mAOD
130	Grave fill?	Fill of 131; soft mid brown sandy silt; extensive disarticulated bone and a medieval pottery sherd in surface; unexcavated; cut by 105	c 37.20mAOD
131	Grave cut?	Filled by 130; aligned east to west; rectangular in plan; cuts 132, 133, 134, 135, 136, 137; 3rd layer of burial ; unexcavated - no skeleton identified	c 37.20mAOD
132	Grave fill	Fill of 134; contains skeleton 133; mid grey brown sandy silt	37.08mAOD
133	Skeleton	Partial – torso, lower skull and left arm; juvenile; supine; aligned east to west; fill of 134; sealed by 132; cut by 131 4th layer of burial ; unexcavated	37.08mAOD
134	Grave cut	Filled by 132 and skeleton 133; cut by 129 and 131	37.08mAOD
135	Grave fill	Fill of 137; contains skeleton 136; dark grey brown sandy silt; cut by 129, 131 and 134; unexcavated	37.17mAOD
136	Skeleton	Partial – pelvis, lower spine and left arm alongside; adult; supine; aligned east to west; fill of 137; sealed by 135; cut by 129, 131 and 134 5th layer of burial ; unexcavated	37.17mAOD
137	Grave cut	Indistinct; filled by 135, skeleton 136 and possibly 139; Cut by 129, 131 and 134;	37.17mAOD
138	Layer	Lower soil layer or possible grave fill of 140; same as 143?; mid grey brown silty sand; same as 143?; below 136	37.06mAOD
139	Skeleton	Partial – lower left leg; supine; aligned east to west; right leg truncated by 105 and 128; upper body may survive below 136;	37.06mAOD

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
		sealed by 138 6th layer of burial ; unexcavated	
140	Grave cut	Indistinct; filled by 138, 139 and 143?	37.06mAOD
141	Skeleton	Partial – right leg only; poor state of preservation – ends entirely rotten; heavily stained and dark in comparison with other overlying skeletons; no other bones; truncated by cut for skeleton 142; cut by 14 th C. buttress 110; continues into south trench baulk; observed within deep sondage at north-east end of trench adjacent to buttress 8th layer of burial	36.89mAOD
142	Skeleton	Partial – lower leg and ankle plus another long bone and rib – disarticulated?; observed within deep sondage at north-east end of trench adjacent to buttress; within 143; below 139; very wet; reasonable state of preservation; 7th layer of burial ; unexcavated	36.97mAOD
143	Subsoil / Grave soil	Moderately compact; light brownish grey; silty sand; very occasional small sub-angular pebble gravel; very wet; cut by service 105; contains skeletons 141 and 142; defined boundary with 144 below; observed within deep sondage at north-east end of trench adjacent to buttress	37.05mAOD
144	Natural	Slightly silty sand; compact and cohesive; mottled mid beige/buff and dark orange with mid grey patches; occasional sub-angular small gravel and flecks of manganese staining; observed within deep sondage at north-east end of trench adjacent to buttress; undisturbed; well defined boundary with 110 and 143 above; same as 230 and 302	1.17m+ / c 36.80mAOD

Trench 2

Maximum dimensions: Length: 5.58m Width: 2.00m Depth: 1.46m

Orientation: north to south

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
200	Modern path	Mixed gravel and road stone layer around south side of church wall; same as 100 and 300	0.00-0.36m
201	Topsoil / graveyard soil	Mid-light brown sandy loam; soft and friable; occasional small-medium rounded stones, charcoal, clay pipe fragments ; moderate root activity; same as 202 to south, 101 and 301	0.36m+
202	Topsoil	Observed within raised south edge of trench; dark brown sandy loam; occasional small to medium sub-rounded stones; frequent roots; similar to 201 below, but more organic; occasional disarticulated bone; possibly redeposited when path 200 to north was laid	0.00-0.20m
203	Service pipe	Modern ceramic drain pipe; within upper horizon of 201; below 200; same as 107; no visible cut or fill	37.73mAOD / 0.34m
204	Service trench	Filled by 205; and three water pipes; aligned east to west; parallel vertical sides to flat base; cuts 201; same as 105 and 108 combined; below 200	0.30-0.93m
205	Fill of service	Fill of cut 204; same as 106; mid-light brown sandy loam; soft and loose; moderate ceramic building material (CBM), modern brick, lime mortar fragments; frequent disarticulated bone	0.30-0.93m
206	Service trench	Multiple modern services trench; aligned east to west; 0.35m wide; parallel sides; same as 111; unexcavated	37.66mAOD
207	Fill of service	Fill of cut 206; dark brown sandy loam; soft and friable; included modern plastic debris; same as 112; unexcavated	37.66mAOD
208	Structure	Stone foundations for southern wall of church buttress; stepped out four times; dressed/ashlar courses over two courses of thin blue lias, over irregular courses of Cotswold and green sandstone; fill of 229; same as 110; cuts 232; bedded directly on natural 230	0.00-1.50m
209	Grave cut	Filled by 211 and skeleton 210; heavily truncated; vertical sides to flat base; below 200; cuts 201	37.63mAOD
210	Skeleton	Partial – all but lower legs and part of left arm; extends into east trench baulk; supine; aligned east to west; hands resting over pelvis; fill of 209; sealed by 211; cut by 200 and 204; traces of corroded iron on ribs – possible coffin furniture/plate; iron nails around head; adjacent and south of skeleton 212 1st layer of burial	37.63mAOD
211	Grave fill	Fill of cut 209; contains skeleton 210; mid brown sandy loam; soft and friable; very occasional small-medium rounded stones; same as 201;	37.63mAOD
212	Skeleton	Juvenile; partial – pelvis; right leg and parts of left leg; extends into west trench baulk; supine, aligned east to west; within 201;	37.63mAOD

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
		cut by 200 and 204; no defined cut; iron nails around feet; associated and possibly cut by with skeleton 210 adjacent to south; no defined grave cut 2nd layer of burial	
213	Skeleton	Juvenile – partial – left torso; aligned east to west; supine; cut by 200 and 203; same as skeleton 214 ; within 201; no defined grave cut 1st layer of burial	37.61mAOD
214	Skeleton	Juvenile – partial – left pelvis and upper leg; aligned east to west; supine; cut by 200 and 203; same as skeleton 213 ; within 201; no defined grave cut 1st layer of burial	37.66mAOD
215	Skeleton	Juvenile – partial – right ribs and spine; within 201; cut by 203 to north and 204 to south; supine; aligned east to west; no defined grave cut indeterminate layer of burial	37.60mAOD
216	Skeleton	Partial – pelvis, lower left arm at 45° to body, left and right legs; supine; aligned approx. east to west; extends into west trench baulk; within 201; cut by 204; below 217 and 218; no defined grave cut 3rd layer of burial	37.37mAOD
217	Skeleton	Partial – left arm, torso, pelvis and right hand over left elbow; supine; aligned east to west; within 201; cut by 204; over 216; associated with skull 218 to south; no defined grave cut 2nd layer of burial	37.40mAOD
218	Skeleton	Disarticulated skull; adjacent to skeleton 217; within 201; overlying skeleton 216? indeterminate layer of burial	37.50mAOD
219	Skeleton	Partial – skull, right torso and upper right arm; supine; aligned east to west; extends into east trench baulk; cut by 225 for skeleton 222; within 201; no defined grave cut 2nd layer of burial ; unexcavated	37.56mAOD
220	Skeleton	Juvenile - partial – skull, torso, right arm folded over stomach, upper left arm; supine; aligned east to west; extends into east baulk of trench; within 201; adjacent to skeleton 221 – contemporary?; no defined grave cut 1st layer of burial ; unexcavated	37.36mAOD
221	Skeleton	Juvenile - partial – skull, torso, arms folded over stomach; supine; aligned east to west; extends into east baulk of trench; within 201; adjacent to skeleton 222 – contemporary?; no defined grave cut 1st layer of burial ; unexcavated	37.37mAOD

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
222	Skeleton	Juvenile – partial – skull, torso, right arm, upper left arm and hand folded over stomach; supine; aligned east to west; extends into east baulk of trench; within 225; sealed by 224; above skeleton 219 1st layer of burial ; unexcavated	37.42mAOD
223	Skeleton	Partial – lower legs and feet; supine; aligned east to west; within 201; below skeleton 216; extends into west baulk of trench; no defined grave cut; directly above 226 and 227 4th layer of burial	37.20mAOD
224	Grave fill	Fill of 225; contains skeleton 222; below 201; mid-light brown sandy loam with greenish sand to edges and base; soft and friable; occasional small-medium rounded stones; frequent disarticulated bone	37.42mAOD
225	Grave cut	Filled by 224 and skeleton 222; vertical sides to flat base; rounded western end; extends to east baulk of trench; over skeleton 219	37.42mAOD
226	Skeleton	Partial – lower legs and feet; supine; aligned east to west; within 227; extends into west baulk of trench; directly below 223; no defined grave cut 5th layer of burial	36.93mAOD
227	Graveyard soil	Dark brown sandy loam; soft and friable; occasional small angular limestone flakes and roots; below 201; similar to 201	37.05mAOD
228	Skeleton	Partial – skull, torso, right pelvis, arm and hand, lower left arm and hand; arms raised and hands together over chest; extends into west baulk of trench; possible pillow stones of green sandstone to either side of skull; within 227; cut by 229 for 14 th C. buttress 208; no defined grave cut 6th layer of burial	36.76mAOD
229	Foundation cut	For buttress 208; cuts 227 and 228; relationship with 201 unclear; vertical sides	37.05mAOD
230	Natural	Slightly silty sand; compact and cohesive; mottled mid beige/buff and dark orange with mid grey patches; occasional sub-angular small gravel and flecks of manganese staining; observed within deep sondage at north end of trench adjacent to buttress; cut by 231; same as 144 and 302	36.64mAOD
231	Grave cut	Filled by 233 and skeleton 132; cuts 230; aligned east to west; straight sides; unexcavated	36.64mAOD
232	Skeleton	Partially exposed – knees only; supine; aligned east to west; extends into west trench baulk; fill of 231; sealed by 233; below skeleton 228 7th layer of burial ; unexcavated	36.64mAOD
233	Grave fill	Fill of 231; over 232; dark brown sandy loam; soft and friable; same as 227; unexcavated	36.64mAOD

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
234	Grave cut	Filled by 235 and coffin 236; below 202; cuts 201 and skeleton 238; sheer sides; only observed in west section; extends into south and west baulks of trench; skeleton nor base identified	38.18mAOD
235	Grave fill	Fill of mid-light brown sandy loam; loose and un-cohesive; occasional small-medium rounded stones; seals 236; defined tip lines of laminated humic loam from north edge	38.18mAOD
236	Coffin	Within 234; sealed by 235; thin line of decayed metal; possible coffin plates or lining 1st layer of burial ; unexcavated	37.18mAOD
237	Skeleton	Partial – left arm; within 201; extends into west baulk of trench; possibly the same as 238 2nd or 3rd layer of burial	37.22mAOD
238	Skeleton	Partial – lower vertebrae and right elbow; within 201; extends into west baulk of trench; possibly the same as 237; cut by 234 and 239 2nd layer of burial	37.14mAOD
239	Grave cut	Filled by 240 and coffin 241; vertical south side; base and north side not identified; cuts 201, 237 and 238; extends into west baulk of trench	c 37.70mAOD
240	Grave fill	Fill of mid-light brown sandy loam; loose and un-cohesive; occasional small-medium rounded stones; extensive disarticulated bone; seals 241; defined tip lines of laminated humic loam from south edge	c 37.70mAOD
241	Coffin	Fill of 239; sealed by 240; blackish-brown stain of decayed wood; aligned east to west, with square right-angle to east end; small – possibly for juvenile; iron handles on north and south sides 1st layer of burial ; unexcavated	36.98mAOD

Trench 3

Maximum dimensions: Length: c 1.35m Width: c 1.00m Depth: c 0.72m

Orientation: north to south

Context	Classification	Description	Depth below ground surface (top and bottom) or Ordnance Datum
300	Modern path	Mixed pea gravel layer	0.00-0.12m
301	Mixed soil	Mid-light brown sandy loam; soft and friable; occasional small-medium rounded stones, charcoal, clay pipe fragments ; disturbed by various trenches for ceramic and cast iron pipes; same as 101 and 201; one disarticulated bone only	0.12-0.62m
302	Natural	Slightly silty sand; compact and cohesive; mottled mid beige/buff and dark orange with mid grey patches; occasional sub-angular small gravel and flecks of manganese staining; disturbed and cut by various trenches for ceramic and cast iron pipes; same as 144 and 230	0.62m+

Appendix 2 Technical information

The archive (WA project code: P4326)

The archive consists of:

52	Context records AS1
1	Field progress reports AS2
5	Photographic records AS3
27	Black and white photographic films
216	Digital photographs
1	Drawing number catalogues AS4
6	Scale drawings
2	Context number catalogues AS5
27	Skeleton records AS6
2	Trench record sheets AS41
1	Box of finds
1	CD-Rom/DVDs
1	Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Warwickshire Museum

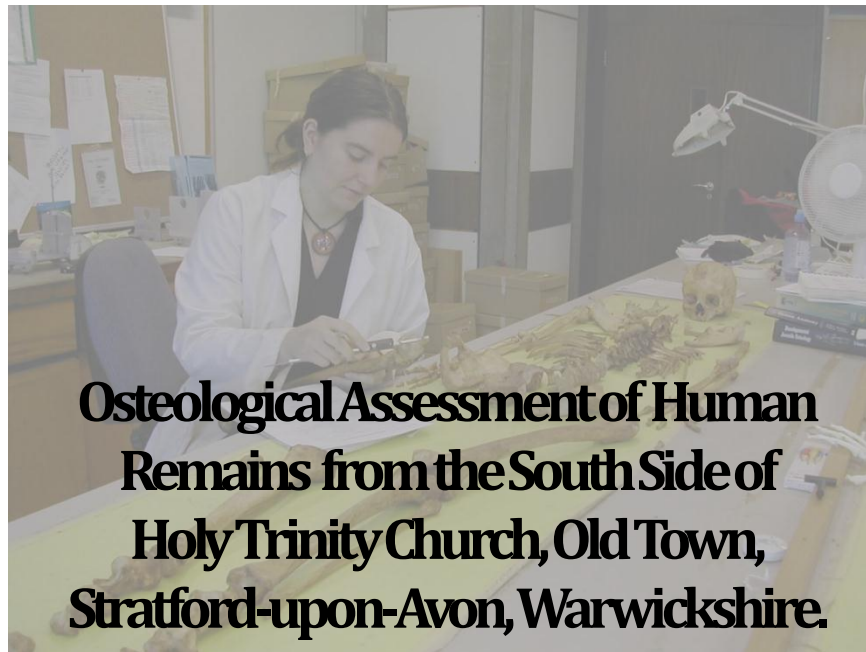
The Butts

Warwick

Warwickshire, CV34 4SS

Tel. Warwick (01926) 412500

Appendix 3 Osteological Assessment



Osteological Assessment of Human Remains from the South Side of Holy Trinity Church, Old Town, Stratford-upon-Avon, Warwickshire.

A Report for Worcestershire Archive and Archaeology Service

September 2014

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Project: OA1048

Abstract

An assessment of the human remains from the south side of Holy Trinity Church, Old Town, Stratford-upon-Avon, Warwickshire, recovered during an evaluation undertaken by Worcestershire Archive and Archaeology Service from 4th to 20th June 2014, was carried out in order to quantify the material excavated and to ascertain the potential of the analysis of human remains from the site for future analysis in respect of the proposal of development work at the site.

The excavation revealed 29 graves, the human remains from 18 of which were exhumed in order to allow an evaluation of the number and depth of burials. These remains underwent osteological assessment to ascertain the potential for future analysis of skeletal remains from the site. In addition a collection of c.984 re-deposited disarticulated human bone fragments and elements from stratified contexts was also recovered, 449 of which were assessed.

Historic records indicate that burials have taken place in the churchyard since at least the early 13th century (Tavener 2012). One burial excavated was truncated by a church buttress and therefore known to predate c.1312-22. The latest burial noted on gravestone inscriptions in the churchyard dates to 1925. Burial records in the parish registers date from 1558 to 1962. None of the human remains exhumed as part of this evaluation were associated with gravestones and all originate from anonymous individuals. The burials excavated were understood to date between the medieval and post-medieval periods.

Overall, the condition of the articulated assemblage was observed to be 'good' although the majority of individuals were less than 25% complete. The disarticulated material was of similar preservation to the articulated material. Initial assessment of both assemblages indicated the presence of both adults, male and female, as well as a number of sub-adults. A few cases of pathology were recorded that included diseases of traumatic and metabolic aetiology as well as degenerative joint disease in the spine and joints of the limbs.

The assessment indicates that full analysis of the human skeletal material will significantly enhance the osteological data currently available in Warwickshire and broaden our understanding of lifestyle and health during the medieval and post-medieval period in the area. The data can also be integrated into analyses of associated archaeological finds and structures to give an insight into contemporary funerary practices.

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1. Introduction

The aim of this report is to present the data collated from the osteological assessment of human skeletal remains recovered during an evaluation of the land on the south side of Holy Trinity Church, Old Town, Stratford-upon-Avon, Warwickshire (Grid reference: SP 2010 5428), site reference P4326). The evaluation was carried out by Worcestershire Archive and Archaeology Service from 4th to 20th June 2014 on behalf of the Holy Trinity Church Parish Office in advance of construction in the area. The excavations identified 29 inhumation burials, which were aligned on an east-west axis. Since the aim of the evaluation was only to assess the nature, extent and density of the burials, the remains of 11 individuals were not excavated and were left *in situ*. In order to reveal the full depth of burials, it was necessary to exhume the human remains of 18 individuals, which are the subject of the osteological assessment presented in this report. Up to eight phases of burial were identified and burials were found to lie between 0.30m and 1.25m below ground level. A further 16 stratified contexts were found to contain re-deposited disarticulated skeletal elements. The relatively large quantity of disarticulated human skeletal material reflects the intense use of the site.

Historic records indicate that a site located next to the river in Stratford-upon-Avon, putatively the same as that currently under investigation, had been granted ecclesiastical tenure from the 8th century onwards having been granted to the monks of Ufer a Stet Ford, situated on the banks of Eafene, by Offa from 704 to 709 AD (Bloom 1902). The oldest parts of the present church building are from a later period, however, and date to c. 1210AD. Burials thought to have taken place in the churchyard since at least the early 13th century (Tavener 2012). The current archaeological evidence suggests that burials at the site pre-date the current church building and continued into the 20th century. One burial in trench 2 was furnished with a stone pillow and truncated by a church buttress known to date to c.1312-22 (Vaughan, pers. comm.) providing a *terminus ante quem* of the very early 14th century for this inhumation (SK[228]). A re-deposited headstone found covering a Victorian brick drain in one of the earlier excavated trial trenches was inscribed with a date of death of 1648 (Tavener 2012). Several interments from the latest two phases of burial were found to contain iron coffin furniture and a possible fragment of aluminium coffin plate (Vaughan pers. comm.). Stratford-upon-Avon Cemetery in Evesham Road was opened in 1881 to accommodate new burials after the churchyard at Holy Trinity Church was filled to capacity (<http://databases2.shakespeare.org.uk/main/index/10>). The latest burial noted on inscriptions of the 486 gravestones in the churchyard recorded by the Gravestone Photographic Resource dates to 1925 (<http://www.gravestonephotos.com/public/cemetery.php?cemetery=1041>), though burial records in the parish registers date from 1558 to 1962.

None of the human remains exhumed as part of this evaluation were associated with gravestones and all originate from anonymous individuals. There is, therefore, no direct dating for any of the burials excavated and they are currently understood to span a range of dates from the medieval to post-medieval periods.

2. The Physical Evidence

2.1 Methods and Process

The skeletal material was assessed according to the standards laid out in the guidelines recommended by the British Association of Biological Anthropologists and Osteologists in conjunction with the IFA (Guidelines to the Standards for Recording Human Remains, Brickley and McKinley (eds) 2004) as well as by English Heritage (Human Bones from Archaeological Sites: Guidelines for producing assessment documents and analytical reports, Centre for Archaeology Guidelines, 2002).

- ❑ Recording of the material was carried out using the recognised descriptions contained in Standards for Data Collection from Human Skeletal Remains by Buikstra and Ubelaker (1994).
- ❑ A summary inventory of the skeletal material by context was created on a MS Access database
- ❑ The material was assessed macroscopically and where necessary with the aid of a magnifying glass for identification purposes.
- ❑ Where relevant, digital photographs have been used for illustration.
- ❑ The material was assessed without prior knowledge of associated artefacts so that the assessment remained as objective as possible.

Each context was recorded separately. In each instance, the completeness of the individual, the condition of the skeletal elements and the potential for observing age, sex and pathology was recorded as well as the potential for metric analysis. Any obvious indication of age, sex

and pathology were noted. The presence of dentition was recorded in order to assess the potential for stable isotope analysis of dental enamel.

2.2 *Reasons for the Analysis*

Osteological analysis was carried out to ascertain:

- ❑ Minimum Number of Individuals
- ❑ Completeness of Inhumated Individuals
- ❑ Condition of Bone present
- ❑ Broad Age Groups and the Potential for Specific Age Assessment
- ❑ Sex Categories and the Potential for Sex Determination
- ❑ Potential for Stature Estimation
- ❑ Skeletal Pathology
- ❑ Dental Pathology

The pelvic or skull bones were analysed for sexually dimorphic traits where preservation allowed, using the criteria set out by Buikstra and Ubelaker (1994). Age determination was carried out by assessing the stage of development of the skeletal element using epiphyseal fusion (Scheuer and Black 2004) as well as observations of dental development and eruption (Smith 1991, Ubelaker 1989).

2.3 *Quantification of Material*

Human skeletal elements were recovered from a total of 45 contexts across the excavated site. Twenty nine inhumations contained articulated skeletal material as primary deposits, 18 of which were exhumed to allow full archaeological investigation of the site to be undertaken.

These exhumed individuals form the articulated assemblage for which the osteological assessment was undertaken here. Re-deposited disarticulated skeletal material, which had been disturbed when new graves were dug into earlier ones, was recovered from a further 16 stratified contexts.

These two different types of deposit of remains will be reported on separately. The articulated remains represent primary deposits of known context and it is much more probable that the relative dating of these contexts can be established. The skeletal elements derived from these inhumations belong to discrete individuals and, therefore, they contain more potential for estimating demographic data and diagnosing pathological conditions. The disarticulated material is also informative with regards to demographics, stature and pathology but only in reference to individual skeletal elements. Since these elements are re-deposited, the original context and date is unknown.

3. The Articulated Assemblage

3.1 *Preservation of Material*

The condition of the skeletal material was analysed macroscopically assessed and graded according to those guidelines set out by Brickley and McKinley (eds) (2004). Since most of the elements exhibited more than one grade of state of preservation, these categories were simplified into 4 main groups of preservation: Good (grades 0-2), Fair (grades 2-4), Poor (grades 4-5). Factors extrinsic (such as soil acidity or hydrolic action) and intrinsic (shape and density) to the bone can contribute to its preservation; it has been reported that age of the individual can also be an underlying contributory factor to state of preservation of skeletal material, with older and younger individuals more likely to have less robust and more susceptible bones (Henderson 1987). In addition, an estimate of the observability of the cortical (external) surface of the bone was made. The percentage of the remaining observable outer surface of elements was estimated and reported in categories of: <25%, 25-50%, 50-75% and 75%>. This gives further qualification to the likelihood of pathological changes being observed.

Of the 18 exhumed articulated skeletal remains, a majority of 83.3% were categorised as being of 'good' condition (n = 15) with only 16.7% of the individuals observed to be in 'fair' condition (n = 3) and none being poorly preserved (See Table 1). Additionally, as illustrated in Table 2, 83.3% (n=15) of the skeletal material present was identified as having 75% or more of

the outer cortex observable. A further two individuals (11.1%) were classified as having 50-75% of the cortex intact with the remains of only one individual was categorised as having less than 50% of the cortex observable (5.6%).

	Good	Fair	Poor
Number of Individuals (n)	15	3	0
Percentage	83.3%	16.7%	0%

Table 1: *Preservation assessment of the articulated individuals*

	<25%	25-50%	50-75%	75%>
Number of Individuals (n)	0	1	2	15
Percentage	0%	5.6%	11.1%	83.3%

Table 2: *Cortical bone observability amongst the articulated individuals*

Therefore, the majority of the elements were in 'good' condition overall, with the vast majority of the skeletal elements present amongst the articulated individuals exhibiting excellent preservation of their cortical (outer) surfaces. This indicates that the bone is well preserved and that observation of skeletal features required for assessing the age and sex as well as the presence of pathology and non-metric traits should only be limited by the absence or incompleteness of elements relating to post-depositional disturbance.

It was also noted that a number of long bone elements present were complete and that it should be possible to obtain estimations of stature for some adult individuals as well as age at death for some sub-adults.

3.2 *Completeness of Individuals*

Completeness of individuals is another useful indicator of how much potential data may be observed in the bones, particularly for aging, sexing and diagnosing diseases. Individuals are categorised as being <25%, 25-50%, 50-75% or 75%> complete. Recording of the completeness of individuals can also allow an insight to be gained into how much post-depositional activity has occurred.

As can be seen in Table 3 below, the majority of the individuals excavated from Holy Trinity church were less than 25% complete (n = 11). Two of the individuals were 25-50% complete (n = 2) with a further three of individuals represented by 50-75% (16.7%) of the skeleton. The

skeletal remains of only two individuals, 11.1% of the sample, were over 75% complete. The high number of incomplete remains reflects the great degree of intercutting of burials and truncation by later structures, with skeletal remains from earlier burials frequently being disturbed by later inhumations and construction.

The incomplete nature of the majority of the remains in this sample indicates that analysis of the articulated skeletal assemblage may be restricted by the limited number of elements recovered and this is likely to affect the analysis for identifying specific age categories and sex in several cases. Nonetheless, the ‘good’ condition of the remains suggests that it should be possible to distinguish between adult and sub-adult age categorisation for the majority of individuals. Pathology should also be observable if present on those elements retrieved and there may be scope for some metric analysis to be undertaken to aid with sex assessment. A more detailed account of potential for assessing age, sex, stature and pathology is presented below.

	<25%	25-50%	50-75%	75%>
Number of Individuals (n)	11	2	3	2
Percentage	61.1%	11.1%	16.7%	11.1%

Table 3: *Completeness of Individuals*

3.3 *Age Assessment*

There are a number of techniques available for assessing the age of both adult and sub-adult remains. Sub-adults can be accurately assessed by observing the stage of development of skeletal growth, dental eruption and tooth formation (Scheuer and Black 2004). The assessment of adult remains is based on the changes observed in particular joints in the body, namely the auricular surface (Lovejoy et al. 1985), pubic symphysis (Brooks and Suchey 1990) and costal rib ends (Bass 1995). These changes are consistent with the ageing of the skeleton but fall into broader age ranges.

For the purposes of age assessment of the human remains from the Holy Trinity Church, Stratford, each element was examined for evidence of epiphyseal fusion. This is an aging process whereby as the bone completes development, the epiphysis, or end of the bone, fuses to the diaphysis or main shaft of the bone. Therefore, in sub-adults, the epiphyses or ends are

unfused whereas in the adult, they are fully fused on to the shaft. Dentition was also examined for stage of development and tooth eruption which are both indicators of age. Only broad categorisations of age were used for the assessment of the material at this stage.

Each individual was categorised as following:

Sub-adult = 0-19 years

Adult = 20 years +

Due to the bone preservation being 'good', all the individuals present could be assigned to an age category. The results of the age assessment indicate that the majority of the remains retrieved from excavation of the site were adult (83.3%, n=15) with only 3 individuals (16.7%) were identified as being sub-adult (See Table 4 below).

Bone was noted to be well preserved for both adult and sub-adult individuals and therefore, the demographic profile of skeletal remains should not be influenced by preservation conditions on site. A further four more sub-adult and seven adult individuals were identified on site but remain *in situ*. Taking these additional individuals into account, overall the proportion of sub-adults increases (24.1%, N=29), suggesting that sub-adults may be under-represented in the excavated sample due to its relatively small size rather than by bias created by burial practices or by preservation.

Age Category	Number of Individuals (n)	Percentage
Adult	15	83.3%
Sub-adult	3	16.7%
Unobservable	0	0.0%

Table 4: *Broad Age Distribution of the Articulated Exhumed Assemblage*

Potential for Age Estimation

From the articulated skeletons, 10 individuals (55.5%) were recorded as having sufficient elements present to provide a more specific estimation of age at death (i.e. neonate/infant/child/ juvenile or young/middle/old adult) through examination of dental development, eruption and attrition as well as from an assessment of those observable auricular surfaces and pubic symphyses present.

Techniques employed to determine the biological sex of adult skeletal remains are well established and are largely based upon an assessment of the morphological features exhibited by the skull and the pelvis. These features reflect the sexual dimorphism displayed between males and females and develop as the individual matures. These features are, therefore, not observably marked until after adolescence and there are no reliable techniques for determining the sex of sub-adult remains, except for aDNA analysis.

Sex determination using skeletal features is relatively accurate, some researchers reporting a success rate of 95% of known in tests on known sex samples (Phenice 1969). In addition to the descriptive methods outlined above, assessment techniques also include metric analysis and discriminant functions, depending on the completeness of the skeletal material.

For the purposes of a preliminary skeletal assessment, a cursory examination of morphological features was undertaken. Sex could only be ascribed to a total of 5 adult individuals (33.3%, N=15). One individual was identified as female/possible female whereas the remaining 4 individuals as male/possibly male. A total of 10 adult individuals could not be assessed for sex due to the absence of observable morphological features. The bias towards males recorded may be due to the small sample of remains recovered in combination with their incomplete nature. However, further analysis would aid the sex determination of more individuals if metric analysis was undertaken.

	Female	Possible Female	Indeterminate	Male	Possible Male
No. of individuals (n)	1	0	0	2	2
Percentage	6.6%	0%	0%	13.3%	13.3%

Table 5: *Sex assessment of the Articulated Assemblage*

Potential for Sex Assessment

The preliminary sex estimation carried out did not include metric analysis. Assessment of the remains suggests that sex could be estimated for a total of 11 individuals (73.3% of the adult sample) using both morphological and metric methods. The application of metric methods of sex assessment may also be useful for comparing the results of sex determination using both morphological and metric methods.

3.5 *Stature Estimation*

Stature estimation was not carried out for this assessment since metric analysis was not undertaken.

Potential for Stature Estimation

Due to the complete nature of several long bones present, it will be possible for 7 individuals (46.7% of the adult sample) to undergo the metric analysis that will allow stature to be estimated. It will also be possible to undertake metric analysis on one sub-adult individual to obtain information as to age at death.

3.6 *Skeletal and Dental Pathology*

Palaeopathology is the study of diseases of past peoples and can be used to infer the health status of groups of individuals within a population as well as indicate the overall success of the adaptation of a population to its surrounding environment (Roberts and Cox 2003). Pathologies are categorised according to their aetiologies; e.g. congenital, metabolic, infectious, traumatic, neoplastic etc. Any pathological modifications to the bone are described. The size and location of any lesion is also noted. Distribution of lesions about the skeleton should be noted to allow diagnosis. A differential diagnosis for any pathological lesions should be provided.

The assemblage was briefly scanned for obvious indications of pathological change to the bone and dentition present. One case of extensive osteoarthritis with inflammatory changes noted about the right os coxa was observed in SK[120], a possible adult male. The acetabulum (hip socket) and femoral head (ball) exhibited gross changes including eburnation, macroporosity, osteophyte formation and subcondral cyst formation (See Plate 1). A further case of degenerative disease in the spine was noted in SK[216], an adult of unobservable sex. One case of minor cribra orbitalia, linked to poor health status associated with acquired haemolytic or megaloblastic anaemias that are frequently associated with parasitic infection for example, was also observed in SK[218], an adult male.

Dentition was only present in 5 individuals and no gross pathology was observed in these teeth.



Plate 1: *Right Hip Joint, SK[120]. The joint exhibits extensive eburnation, macroporosity, osteophytes and subchondral cyst formation.*

Potential for Skeletal and Dental Pathology

The potential for observing skeletal pathology is determined by bone preservation and completeness of individuals. Given the bone preservation, the potential for observing skeletal pathology is good, reflected in the findings of a number of pathologies during the brief assessment. The number of pathologies recorded and diagnosed, however, may be limited by the incomplete state of several of the individuals. Since the age and sex of several individuals can be determined through a full skeletal analysis, evidence may be available to aid more specific diagnoses if required.

Although no gross dental diseases were recorded among the population during the assessment, it is likely that more subtle pathologies are present and these will require further examination and recording.

4. Disarticulated Elements from Stratified Contexts

4.1 *Preservation and Potential for Analysis*

A total of 16 stratified contexts contained re-deposited disarticulated human skeletal elements. It is probable that given the number of intercutting graves and intensity of activity at the site, elements from one individual may have re-deposited in more than one context over time. Due to the secondary nature of these deposits, it is not possible to re-associate skeletal elements without aDNA analysis. An inventory of the elements present made during the full analysis, however, will enable an estimation of the minimum number of individuals represented by the disarticulated assemblage. This is achieved by establishing the maximum number of repeated elements (or part thereof) in the group.

For the purposes of assessment, a sample of the total disarticulated bone assemblage was processed in order to assess its condition and potential for future analysis. A basic fragment count was recorded for each context along with the general condition of the bone present where the bone. The potential for metrics, allowing sex and/or stature to be determined was noted as well as any gross pathology present. Only identifiable fragments greater than c.10mm in length and breadth were counted.

For the remaining unprocessed bone sample, the count of fragments present was estimated in order to provide a total provisional quantification of disarticulated bone present. No assessment of analytical potential was made for the unprocessed bones. The results for the assessment of the disarticulated assemblage are presented in Table 6 below.

The processed sample consisted of 449 fragments contained in 12 contexts. It is estimated that there are a further 535 unprocessed bone fragments, giving a total of approximately 984 re-deposited disarticulated fragments recovered from stratified contexts.

The disarticulated material from the stratified contexts was generally of 'good' condition, similar to the articulated material, although it was found to be more fragmentary due to post-depositional disturbance. Nine of the contexts consisting of processed bone samples contained several elements that would allow metric analysis as well as descriptive techniques

for determining sex. The presence of some complete auricular and pubic symphyseal surfaces will allow for age at death to be assessed for some material.

Context	Fragment Count	Preservation	Potential Metrics	Age/Sex	Pathology
101	c.100	-	-	-	-
102	42	Good	X	X	X
106a	c.60	-	-	-	-
106b	143	Good	✓	✓	✓
118	7	Good	X	X	X
119	28	Good	X	✓	X
143	10	Fair	X	X	X
200	c.150	-	-	-	-
201	c.50	-	-	-	-
205a	59	Good	✓	✓	✓
205b	c.50	-	-	-	-
211	16	Good	X	✓	X
224	28	Good	X	✓	X
227a	25	Good	✓	✓	X
227b	c.25	-	-	-	-
235/240	c.100	-	-	-	-
240	59	Good	✓	✓	✓
123-1	7	Good	X	✓	X
125-1	25	Good	X	✓	X
TOTAL		-	-	-	-

Table 6: *Minimum Fragment Count calculated by context with details of preservation and potential for carrying out age/sex and stature assessment. Any pathology observed is also noted. Estimated counts represent unprocessed samples.*

A few examples of gross skeletal pathology were observed, including a rib fracture and degenerative diseases, largely reflecting the nature of pathologies observed in the articulated sample, though the rib fracture represents the only example of trauma noted in the brief assessment of the remains. The preservation of the disarticulated skeletal elements suggests that more examples of pathology may be observed on full analysis and findings will compliment the data recorded in the incomplete articulated remains.

5. Funerary Archaeology

5.1 *Preservation and Potential for Analysis*

It is clear from the archaeological evidence revealed by the evaluation that the site of the churchyard has been used for burial for a considerable period of time and that this practice predates the 14th century construction phase of the present church edifice. These earliest burials, truncated by the current church foundations, may represent the first tangible evidence of religious activity at the site. Burials at established churchyards often date to periods earlier than traditionally assumed; at St. Mary's Church, Kempsey, Worcestershire, for example, burials were independently dated to between 870 and 1260AD (Western 2012). It is also known that some late Saxon burial grounds were not accompanied by a church structure and it is not uncommon for early medieval churches to be constructed on the same site as pre-existing burial grounds (Cherryson, 2010; Buckberry, 2010).

The discovery of early burials at Holy Trinity Church sheds important light on a period in the history of the church and practices of the early Christian faith in Stratford that hitherto there has been little direct evidence for. Archaeological evidence from other sites across the country, as manifest through funerary rites and church construction during the late Saxon period, demonstrates a wide variation in religious practice and the role of the Church in local socio-economic development (See, for example, Hoggett 2010; Buckberry, 2010; Cherryson 2010). Analysis of any archaeological evidence revealed by further excavation at Holy Trinity has the scope to provide unique evidence for the foundation of the site as a religious centre, contributing to our wider understanding of Stratford as a settlement during the late Saxon and early Medieval periods.

Burial practice and treatment of the body within the Christian faith has changed dramatically from the early medieval to the 20th century. Excavation at the Holy Trinity site indicates, for example, that while burials from all chronological phases were orientated east-west, body position in the grave may have varied through time. For example, it was noted that some individuals in earlier burials have had their arms placed flexed upwards across the chest with hands clasped together in a prayer-like position, whereas individuals from later burials tended to have the arms extended alongside the body. Early Christian burial rights reflected the importance of the soul rather than the material body, with prayers for the dead offered at Mass playing a pivotal role for the continuation of the soul on its journey after death until the Last Things (Binski, 1996, 23-24). Material expression in burial form was not dictated by the Church (Hadley and Buckberry 2005) and burials excavated from this period are most

commonly lacking grave goods or furniture, though location of the grave could be a means of conveying social importance and prominence within the community. Previous archaeological investigations in early Christian burial grounds suggest a clustering of groups of individuals according to social status, including differential treatment of sub-adult individuals (Hadley 2010).



Plate 2: *Human Remains from the Second Phase of Burial in Trench 2, pre-dating the early 14th Century Church Buttress, with arms and hands in a Prayer Position (SK[228])*

During the Medieval period, the overriding importance of the soul over the physical body led not only to a general lack of material provision for the dead in Christian churchyards (with perhaps the exception of some social elites) but also in many cases to the exhuming and collection of charnel to be stored in an ossuary, allowing re-use of the space contained within the churchyard. This is likely to have occurred at Holy Trinity; a reference in the Vestry Minute-Book of Stratford-Upon-Avon dating to 1620 makes note of the 'The Minister's Studye over the bonehouse to be Repayred' (Arbuthnot, n.d.). During this process, graves were frequently disturbed and cut through, as seen at the Holy Trinity Church as well as at St. Mary's, Kempsey (Western 2011). In contrast, the Victorian period saw an exponential rise in the provision of coffin furniture for the deceased with the growth of the funeral trade and a

desire to protect and maintain the sanctity of the corpse. This reflected a new emphasis on the intactness of the corpse being necessary for the body's eventual resurrection on Judgement Day. Funerary items were many and varied, including shrouds, caps, bindings, pillows, elaborate coffins and name plates. The selection of such items reflects not only the religious beliefs and customs prevalent in society at the time but also social status, since for many people such paraphernalia would have been beyond their economic means. Unfortunately, the limited space of the parish churchyards very often did not allow for graves to go undisturbed in perpetuity and this gave rise to the foundation of privately and publically run cemeteries. A series of Burial Acts passed by government legislation during the period allowed burials to be made outside of the parish graveyards in cemeteries and, for the first time, laws emerged addressing pragmatic and sanitary aspects of burial, such as minimum depth.

Coffin stains and iron finds likely to represent coffin fittings were noted to be present on site. Additionally, copper staining was noted on the remains of two individuals, one area on the cranium and another on the jaw. Such staining is likely to represent the pinning of textiles such as shrouds or binding around the head to keep the jaw closed, a practice common in the late Georgian and Victorian periods.

The evidence noted so far suggests that this area of the churchyard was intensely used for burial and provides a record of several periods of interment from a date prior to the construction of the present church through to the Victorian period. Who was buried in the churchyard, how and where, are questions that the archaeological evidence is best poised to answer due to a lack of historical evidence at this time. The relatively rare presence of well preserved adult and sub-adult burials dating to the early medieval period (if not earlier), the noted variation in body position over time in addition to the find of a pillow stone burial indicates that the archaeological evidence from Stratford will provide a significant contribution to our understanding of burial practice of the period.

6. Discussion

In consideration of this sample assemblage, the assessment of the human remains indicates that the majority of the articulated remains and the majority of the disarticulated assemblage were of 'good' condition. Although the intercutting nature of the burials present has resulted in the majority of skeletal remains being incomplete, the condition of the human skeletal

material indicates that there is potential for a significant amount of osteological data to be retrieved from full analysis.

The initial assessment undertaken of the articulated skeletal assemblage indicates that 15 of the individuals were adult and that 3 were sub-adult. One individual was provisionally identified as female/possible female with 4 individuals being male/possible male. The assessment suggests that a total of 10 individuals may be assessed for a more specific age at death and that the sex that 11 individuals could be determined through metric and descriptive analyses. Stature could be estimated for 7 individuals. The cursory examination for pathological changes revealed a case of extensive osteoarthritis as well as further examples of degenerative and metabolic conditions. Further cases of pathology may be revealed by a closer examination of the assemblage.

The disarticulated assemblage from stratified contexts consists of approximately 984 fragments, 449 of which were briefly examined here. A full inventory of the material would provide the data required to assess the minimum number of individuals present in the disarticulated assemblage. The majority of these were observed to be of 'good' preservation and offer potential for metric analysis for the purposes of sex determination as well as descriptive analyses for sex and age at death assessment. A few examples of pathology were also noted amongst these elements, consisting of degenerative and traumatic conditions. The size of the disarticulated assemblage and its good level of preservation, particularly in consideration of the incompleteness of the articulated assemblage, justifies a full analysis of the elements present and would allow for important complimentary data to be recorded.

Overall, the assemblage offers quantifiable osteoarchaeological data that is sufficient to require a full inventory of material to be undertaken for deposition in the archaeological archive. Although the assemblage is currently relatively small, the data collected will provide unique and valuable information as regards to the very early history of Holy Trinity church, the composition of the population buried in this area of the church and the health of individuals in Stratford during this period. Human remains from only two other medieval cemeteries have so far been excavated from the Stratford environs that include the recovery of human remains: the land on the south side of the church of St. Lawrence, Warwick (MWA13181), where the remains of 10 individuals were exhumed, and the early medieval cemetery 500m south-west of Wootton Pool (MWA8880), where 19 individuals were excavated. Thus, the analysis of human remains from Holy Trinity Church, and any further remains recovered in the future

excavation at the site, will make an important contribution to our knowledge of early medieval churchyards and their continued use in Warwickshire that is not obtainable through other means.

The assemblage also has potential to add to our understanding of post-medieval burial in the region and data obtained from Holy Trinity Church, Stratford can be compared to that compiled from archaeological analysis of contemporary assemblages from large urban centres at Holy Trinity Church (SP 3350 7910) and Churchyard (SP1219 9628), Coventry; Park Street Burial Ground (SP 0737 8709), St. Martin's-in-the-Bullring (SP 07 86) and St. Phillip's Cathedral Churchyard (SP 0710 8710), Birmingham, in addition to smaller urban and rural assemblages such as St. Andrew's (SO 84 54) and Tallow Hill (SO 856 550), Worcester, and Upton-on-Severn (SO385150 240743), Worcestershire. The data from Stratford-upon-Avon will provide useful comparative data from a smaller urban settlement in Warwickshire which is currently absent from the archaeological record. The intense use of the burial ground indicates that future excavations across the planned area of development will result in a substantial increase in the number of skeletal remains recovered thus far and that an analysis of these additional remains will positively contribute towards the quality and quantity of information recorded.

7. Conclusion

Excavations on the south side of Holy Trinity Church, Stratford-upon-Avon revealed 29 graves containing 29 individuals, 18 of which were exhumed. In addition, c. 984 fragments of re-deposited disarticulated material were recovered, of which 489 were assessed as a representative sample. A limited initial assessment of condition, completeness, age, sex and pathology was undertaken to quantify the material present in light of its potential for future analysis. The majority of the remains were found to be in good condition though relatively incomplete. Both adult individuals and sub-adult individuals were represented in the sample. A brief examination of dimorphic elements revealed that the males and females were present. The assessment suggests that there is potential for obtaining a significant amount of osteological data regarding age, sex, stature and presence of pathology from the population. This would include the age of 55.5% and sex of 73.3% of the individuals exhumed to date through both descriptive and metric analyses, stature estimation of 46.7% of adult individuals, the observation of non-metrics and pathology as well as quantification of pathology prevalence rates and the calculation of the minimum number of individuals represented by the disarticulated assemblage.

The assessment of the human remains excavated so far indicates that future osteological analysis would provide valuable complimentary archaeological data to other recently excavated assemblages in the region as well as to the historical records, particularly since the assemblage in part pre-dates the earliest burial registers for the church. A full inventory of material should be undertaken for the archive.

8. Future Recommendations

Further analysis and recommendations to enhance the data currently recorded for the human remains in view of the forthcoming full excavation of the site are listed below:

- ❑ Given the incomplete nature of the majority of the remains exhumed to date, where excavation leads to the exposure of human remains that are located below the construction horizon and are to remain on site, it is advisable that these remains are recorded *in situ* with regards to age, sex and pathology where possible, in order to maximise the sample size for the purposes of determining the demographic profile of the population.
- ❑ AMS dating of a sample of the burials, to include in particular some of the earliest interments, would be helpful in providing an absolute *terminus post quem* for the assemblage and to establish the chronology of burial at this site.
- ❑ Analysis of the human remains including full inventory of articulated and disarticulated material.
- ❑ Metric analysis and descriptive analysis of dimorphic elements for the purposes of sex assessment.
- ❑ Descriptive analysis to provide specific age at death estimates where possible.
- ❑ Metric analysis of complete long bones for stature estimation where possible.

- ❑ Detailed analysis and description of pathological lesions, including radiography where appropriate.
- ❑ Documentary research focusing on comparative sites to establish the local and regional context of the burial ground, including osteological data and evidence of funerary practices.

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THE ARCHIVE

Type	No	Type	No
Skeleton Recording Form A	0	Skeleton Recording Form L	0
Skeleton Recording Form B	0	Skeleton Recording Form P	0
Skeleton Recording Form D	0	Skeleton Recording Form Q	0
Skeleton Recording Form E	0	Skeleton Recording Form R	0
Skeleton Recording Form F	0	Skeleton Recording Form U	0
Skeleton Recording Form G	0	Skeleton Recording Form V	0
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