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**CHURCH OF ST MICHAEL AND ALL ANGELS,
WHITWELL, REEPHAM, NORFOLK**

**MONITORING OF WORKS UNDER
ARCHAEOLOGICAL SUPERVISION AND CONTROL**

Authors: Peter Thompson MA (Desk-based assessment) Adam Dyson BA (Fieldwork & report)	
NGR: TG 1010 2284	Report No: 3669
District: Broadland	Site Code: ENF 125306
Approved: Claire Halpin	Project No: 4054
Signed:	Date: October 2010

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CONTENTS

OASIS SUMMARY

SUMMARY

- 1 INTRODUCTION**
- 2 DESCRIPTION OF THE SITE**
- 3 METHODOLOGY (Desk-based assessment)**
- 4 THE EVIDENCE**
- 5 METHODOLOGY (Monitoring)**
- 6 DESCRIPTION OF RESULTS**
- 7 CONFIDENCE RATING**
- 8 DEPOSIT MODEL**
- 9 DISCUSSION**

DEPOSITION OF THE ARCHIVE

ACKNOWLEDGEMENTS

BIBLIOGRAPHY

APPENDIX

- 1 HISTORIC CARTOGRAPHIC & PHOTOGRAPHIC SOURCES**

OASIS SUMMARY SHEET

Project details			
Project name	<i>Church of St Michael and All Angels Church Whitwell, Reepham, Norfolk. Monitoring of Works under Archaeological Supervision and Control</i>		
<p><i>In September and October 2010, Archaeological Solutions Ltd (AS) conducted a programme of archaeological monitoring at the Church of St Michael and All Angels, Reepham, Norfolk (NGR TG 1010 2284). The monitoring was conducted during all groundworks associated with the installation of a new ground source heating system.</i></p> <p><i>The church of St Michael and All Angels is a listed building with surviving architecture dating to the 14th and 15th centuries (NHER 7470). It is unusual in sharing a churchyard with two other churches located close by (NHER 7469 & 7471). The monitoring identified 27 inhumations, 15 of which were either lifted or re-positioned to avoid disturbance during the groundworks. No human remains or associated finds were removed from the site.</i></p>			
Project dates (fieldwork)	14 th September – 21 st October 2010		
Previous work (Y/N/?)	N	Future work	N
P. number	4054	Site code	ENF 125306
Type of project	<i>Monitoring of Works under Archaeological Supervision and Control</i>		
Site status	-		
Current land use	<i>Churchyard</i>		
Planned development	<i>Installation of ground source heating</i>		
Main features (+dates)	<i>Inhumations</i>		
Significant finds (+dates)	-		
Project location			
County/ District/ Parish	Norfolk	Broadland	Reepham
HER/ SMR for area	<i>Norfolk Landscape Archaeology</i>		
Post code (if known)	-		
Area of site	-		
NGR	TG 1010 2284		
Height AOD (max/ min)	35m AOD		
Project creators			
Brief issued by	<i>Norfolk Landscape Archaeology (Ken Hamilton)</i>		
Project supervisor/s (PO)	<i>Adam Dyson</i>		
Funded by	Church of St Michael & All Angels PCC		
Full title	<i>Church of St Michael and All Angels Church, Whitwell, Reepham, Norfolk. Monitoring of Works under Archaeological Supervision and Control</i>		
Authors	<i>Thompson P. & Dyson, A.</i>		
Report no.	3669		
Date (of report)	October 2010		

CHURCH OF ST MICHAEL AND ALL ANGELS, WHITWELL, REEPHAM, NORFOLK

SUMMARY

In September and October 2010, Archaeological Solutions Ltd (AS) conducted a programme of archaeological monitoring at the Church of St Michael and All Angels, Reepham, Norfolk (NGR TG 1010 2284). The monitoring was conducted during all groundworks associated with the installation of a new ground source heating system.

The church of St Michael and All Angels is a listed building with surviving architecture dating to the 14th and 15th centuries (NHER 7470). It is unusual in sharing a churchyard with two other churches located in close proximity (NHER 7469 & 7471), and burials encountered under a cottage to the west indicate the grave yard was once more extensive (NHER 19238). Historic maps and aerial photo's show no significant changes to the church precinct since the late 19th century. A ground penetrating radar survey carried out at the church in 2010 detected no clear evidence for archaeological remains, with the exception of masonry footings adjacent to the church building (Archer 2010).

The monitoring identified 27 inhumations, 15 of which were either lifted or re-positioned in order to avoid disturbance during the groundworks. No human remains or associated finds were removed from the site.

1 INTRODUCTION

1.1 In September and October 2010, Archaeological Solutions Ltd (AS) conducted a programme of archaeological monitoring at the Church of St Michael and All Angels, Reepham, Norfolk (NGR TG 1010 2284; Figs.1-2). The monitoring was conducted in compliance with a requirement of the DAC attached to Faculty approval for a new ground source heating system.

1.2 The monitoring was carried out in accordance with a brief issued by Norfolk Landscape Archaeology (NLA) (Ken Hamilton dated 12/08/2010), and a specification compiled by AS (dated 27/08/2010), and approved by NLA. The monitoring adhered to the Institute of Archaeologists' *Code of Conduct* (revised 2008), and the procedures described in the *IfA Standard and Guidance for Watching Briefs* (revised 2008) and *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The monitoring aimed to record and identify any surviving archaeological remains liable to be threatened by the proposed development, and to identify areas of previous ground disturbance on the site.

Planning policy context

1.4 PPG16 (1990), the national Planning Policy Guidance Note which applies to archaeology and PPG15 (1994) the national Planning Policy Guidance Note which applies to conservation of the historic environment (by protecting the character and appearance of Conservation Areas and protecting listed buildings (of architectural or historical interest) from demolition and unsympathetic change and safeguarding their settings as far as is possible) have been replaced by Planning Policy Statement 5 (2010), the national Planning Policy Statement that applies to the historic environment.

1.5 PPS5 states that those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest are heritage assets. The Planning Policy Statement aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. It aims to conserve England's heritage assets in a manner appropriate to their significance. It states that opportunities to capture evidence from the historic environment and to contribute to our knowledge and understanding of our past, and to make this publicly available, should be taken, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE

2.1 Reepham is approximately 18km north-west of Norwich. St Michaels Church is on the south-east part of the village. The site is unusual in having two adjacent church buildings, and a third was also sited there. The two churches stand in a shared churchyard precinct which is bisected by a tarmac path that runs past the entrance to St Michaels, with a second path running south from there. There are roads all around the precinct to the north, east and south with residential buildings to the west.

3 METHODOLOGY (Desk-based assessment)

3.1 Archaeological databases

The Norfolk Historic Environment Record (NHER) database was consulted in order to identify any local archaeological finds or remains that might be affected by the groundworks. Sites that may be of relevance are described in the text (4.2).

4 THE EVIDENCE

4.1 Topography, geology and soils (Fig. 1)

4.1.1 The church is located at approximately 35m AOD overlooking a shallow valley to the east. The underlying solid geology is chalk, and the overlying soils are loams with clay enrichment and probably also material derived from the bedrock.

4.2 Archaeological and historical background

4.1 Reepham is first recorded in 1086 and derives its name from 'the manor held by the reeve'. In 1277 the village was granted a market. There are three former parish churches in very close proximity to each other. St Michael's was the medieval parish church for Whitwell (NHER 7470), and is a listed building. Its oldest visible architecture is 14th century, the tower, porch and south transept are 15th century, and it was heavily restored in the 19th century. In 1970 St Michael's became the parish hall; it is now linked to St Mary's Church by a corridor. In May 2010 a ground penetrating radar survey was carried out at St Michael's across an area of grass and tarmac pathway. It revealed a range of sub-surface features interpreted as a masonry footing adjacent to the church building, a shallow void or area of reworked ground, and several buried services. No clear evidence for archaeological remains was detected with excepting the masonry footing (Archer 2010).

4.2 Reepham parish's Church of the Nativity of the Blessed Virgin Mary (St Mary's) is immediately east of St Michael's (NHER 7469: TG 1013 2285). The font dates to c.1200 and the south tower and south arcade to c.1300, the remainder is 14th-15th century with major rebuilding in the 19th century. The 14th century tomb of William de Kerdiston tomb is of international importance. The third church, All Saints of Hackford parish (NHER 7471: TG 1009 2284), stood in the churchyard south of St Michael's and St Mary's churches. It was burnt down in 1543, possibly intentionally made derelict by Protestant reformers, perhaps because it was served by a monastery or priory and no longer served a useful purpose. The remains were mostly demolished in 1790 and all that remain now is the west wall and porch. A sherd each of late Saxon and medieval pottery has been found nearby, and parts of two skeletons found under a cottage to the west indicate the churchyard was originally more extensive (NHER 19238: TG 1006 2284). The site of a post-medieval Guild Hall or town house is located to the south of the ruined church (NHER 16518).

4.3 The first edition OS map (Fig. 3) and the 1946 and 1988 aerial photographs (Figs. 4 and 5), all show that there have been no significant changes to the church precinct and its building and pathway layout.

5 METHODOLOGY (Monitoring of works under archaeological supervision and control)

5.1 The archaeological monitoring comprised the observation of all the groundworks. The latter were carried out using a small 360° mechanical excavator fitted with a toothless bucket. Mechanical excavation was halted when inhumations were encountered and the remaining overburden was excavated by hand.

5.2 The groundworks consisted of a trench (c.30m by 0.70m) excavated along the route of the pathways (Figs.6 – 7). At three locations boreholes were drilled to a depth of 100m to accommodate the pipes for the new ground source heating system. Elsewhere the trench was excavated to the required depth of c.0.80m below ground level. Due to the depth of the boreholes these three locations were excavated under archaeological supervision to the level of natural sand and clay deposits to prevent any destruction of human remains during drilling. Once an area c.0.4m² was cleared of remains, plywood shuttering was erected, allowing the surrounding area to be backfilled prior to drilling.

5.3 All the inhumations revealed during the ground reduction were excavated by hand and recorded on *pro forma* sheets, planned at 1:10 scale and photographed. Thereafter skeletons were either lifted in their entirety for re-internment elsewhere within the churchyard, or partially lifted and elements repositioned. The latter method was adopted when only the upper or the lower portion of a skeleton was at threat from the development; repositioning elements under threat alongside those left *in situ* allowed the skeleton to remain largely undisturbed. Disarticulated human bone was also encountered in quantity within the graveyard soil, and it was recovered for reburial.

6 DESCRIPTION OF RESULTS

Sample sections

A sample section of the stratigraphy was recorded to a depth of c.0.80m; the required depth for the development. Where deeper excavation was carried out at the locations of the three boreholes, sample sections were not recorded but the depth of the natural geological deposit was noted. The results are tabulated below:

Sample Section 1

<i>Fig.7</i> <i>North-east facing</i>		
0.00 – 0.07m	L1000	Path. Dark grey tarmac with a mid orange gravel bedding. Subsoil. A mid orange brown moderately compact sandy silt with frequent medium angular flint fragments and occasional small CBM fragments.
0.07 – 0.29m	L1001	Made ground. Mid greyish brown, loose sandy silt with moderate small stones and moderate flecks.
0.29 – 0.88m+	L1002	Subsoil. Mid yellow grey, compact sandy silt with frequent chalk flecks, frequent small stones and occasional medium and large stones.

Depth of natural deposit (L1003) at borehole locations

Southern BH	1.20m below ground level
Central BH	1.30m below ground level
Northern BH	1.70m below ground level

Additional description of deposits

Natural deposit L1003 was a light yellowish orange colour and varied between a compact clay sand and a compact sandy clay.

Inhumations

Fifteen separate articulated inhumations were recorded in detail. All the inhumations were oriented east/west with the head at the west end. Some of the skeletons were fully intact, others had been truncated by subsequent grave digging during the continual use of the graveyard. The burials are tabulated below. Large quantities of disarticulated human remains were also recovered from the graveyard soil.

The locations of twelve further inhumations were recorded in plan (Fig.7 and DP16, DP17 and DP18). These were otherwise unrecorded as they were deep enough to remain undisturbed by the development.

Skeleton no.	Truncated (Y/N)	Depth below ground level (m) (skull/sacrum/feet)	Excavation method	Photographic reference	Additional notes
1	N	0.75 / 0.85 / 0.90	Lifted	DP2	
2	N	N/A / 1.04 / 1.04	Repositioned	DP3	
3	Y	0.93	Lifted	DP4	Depth taken from proximal humerus.
4	Y	N/A / 1.05 / N/A	Lifted	DP6	Truncated by Pit F1011
5	Y	N/A	Lifted	N/A	
6	Y	N/A	Lifted	N/A	
7	Y	N/A / 1.16 / N/A	Lifted	N/A	
8	Y	N/A	Lifted	N/A	Child
9	Y	1.17	Repositioned	DP7	Depth taken from pelvis
10	N	1.40 / 1.60 / N/A	Repositioned	DP9	Grave Cut F1009
11	N	1.50 / 1.65 / N/A	Repositioned	DP9	Grave Cut F1009; child
12	N	1.40 / 1.65 / N/A	Left in situ	DP9	Grave Cut F1009
13	N	N/A / N/A / 1.45	Repositioned	DP12	
14	Y	N/A	Left in situ	DP12	
15	N	1.50 / N/A / N/A	Repositioned	DP 13, 14	

Additional description of features

Pit F1011 was rectangular in plan (0.54 x 0.26 x 0.12+m; Fig.8, DP5). It had steep sides and a flat base. Its fill, L1012, consisted of a large quantity of disarticulated human remains representing more than one individual. Also within this deposit was an iron coffin handle. The bones were dense with the spaces between bones devoid of soil. L1012 likely represents the contents of a box or bag which has since decayed. F1011 cut the left leg of Skeleton 4. It likely represents the reburial of a disturbed remains.

Grave F1009 was rectangular in plan (1.05+ x 0.76+m; Fig.8, DP9). It had steep sides and an irregular base. Its fill, L1010, was a mid greyish brown, moderately compact, clay silt. The grave cut contained at least three inhumations (SKs 10, 11 and 12). The skeletons lay flat against the irregular base of the grave cut. The grave contained two adults and a young child placed between them, and may therefore represent a family burial.

7 CONFIDENCE RATING

7.1 It is not felt that any factors inhibited the recognition of archaeological features or finds.

8 DEPOSIT MODEL

8.1 The current ground surface (L1000) was a dark grey tarmac with a mid orange gravel bedding (c. 0.07m thick). Beneath L1000 was a layer of modern made ground (L1001), comprising a mid greyish brown, loose sandy silt (c.0.22m thick). Below L1001 was Subsoil L1002, a mid yellowish grey, compact sandy silt with frequent chalk flecks and small stones, and occasional medium and large stones (0.90 - 1m thick). All the grave cuts truncated the subsoil. The latter overlay the natural light yellowish orange compact clay and sand.

9 DISCUSSION

9.1 The monitoring identified 27 inhumations; 15 of which were fully recorded and either lifted or repositioned in order to avoid disturbance during the groundworks. The remaining 12 inhumations were recorded only in plan as they occurred at a sufficient depth to avoid disturbance. Grave F1009 contained three inhumations, likely a family group.

9.2 All inhumations were within the areas currently used as pathways through the church yard. The first edition Ordnance Survey (1886) shows the pathways in this same position, and therefore the inhumations pre-date 1886. All inhumations were aligned east/west, Christian burials. They occurred at varying depths. Many had been truncated by subsequent grave digging and the graveyard soil (subsoil) contained a large quantity of disarticulated remains.

DEPOSITION OF THE ARCHIVE

Archive records, with an inventory will be deposited at the Norwich Museum. The archive will be quantified, ordered, indexed, cross referenced and checked for internal consistency.

ACKNOWLEDGEMENTS

Archaeological Solutions Limited would like to thank the PCC for funding the monitoring, in particular Ms Josephine Tym for all her kind assistance during the project.

AS would also like to acknowledge the assistance of the main contractor, Mr David Willan.

AS would like to acknowledge the assistance, input and advice of Dr Ken Hamilton of NLA

BIBLIOGRAPHY

Archer, T. 2010 *Ground Penetrating Radar Survey at St Michael's Church in Whitwell, Norfolk* NPS Property Consultants

British Geological Survey 1991 *East Anglia Sheet 52°N-00° 1:250,000 Series Quaternary Geology*. Ordnance Survey, Southampton

Gurney, D. 2003 *Standards for Field Archaeology in the East of England*. East Anglian Archaeology Occasional Paper no. 14

Institute of Field Archaeologists 1994 (revised 2008) *Standard and Guidance for Archaeological Desk-based Assessment*

Institute of Field Archaeologists 1994 (revised 2008) *Standard and Guidance for Watching Briefs*

Mills A. 1991 *The Popular Dictionary of English Place Names* Oxford University Press

SSEW 1983 *Soil Survey of England and Wales: Legend for the 1:250,000 Soil Map of England and Wales* Harpenden, Rothamsted Experimental Station/Lawes Agricultural Trust

WEB SITES

Norfolk Churches
Norfolk Heritage Explorer
Norfolk County Council Historic Maps

APPENDIX 1 Historic Cartographic and Photographic Information

Date	Description	Scale
Modern	Site Location	1:25,000
Modern	Detailed site Location	1:1,000
c.1886	First Edition OS map	1:2,500
1946	Aerial Photo	1:10,000
1988	Aerial Photo	1:10,000

PHOTOGRAPHIC INDEX



1
St Michael's (background) and St Mary's. Looking north-west.



2
SK 1. Looking west.



3
SK 2. Looking west.



4
SK 3. Looking west.



5
Pit F1011 containing disarticulated human bones, and right leg of SK 4. Looking north.



6
SK 4. Looking west.



7
SK 9. Looking west.



8
Southern borehole location, post-excavation.
Looking north.



9
F1009: SK 10, SK 11, SK 12. Looking west.



10
Central borehole location, post excavation. Looking west.



11
Drilling rig over central borehole. Looking south.



12
SK 13, SK 14 (foreground). Looking west.



13
SK 15, with femurs of SK 13 visible in section above. Looking west.



14
SK 15, close-up of skull and torso. Looking west.



15
Northern borehole location, post-excitation. Looking west.



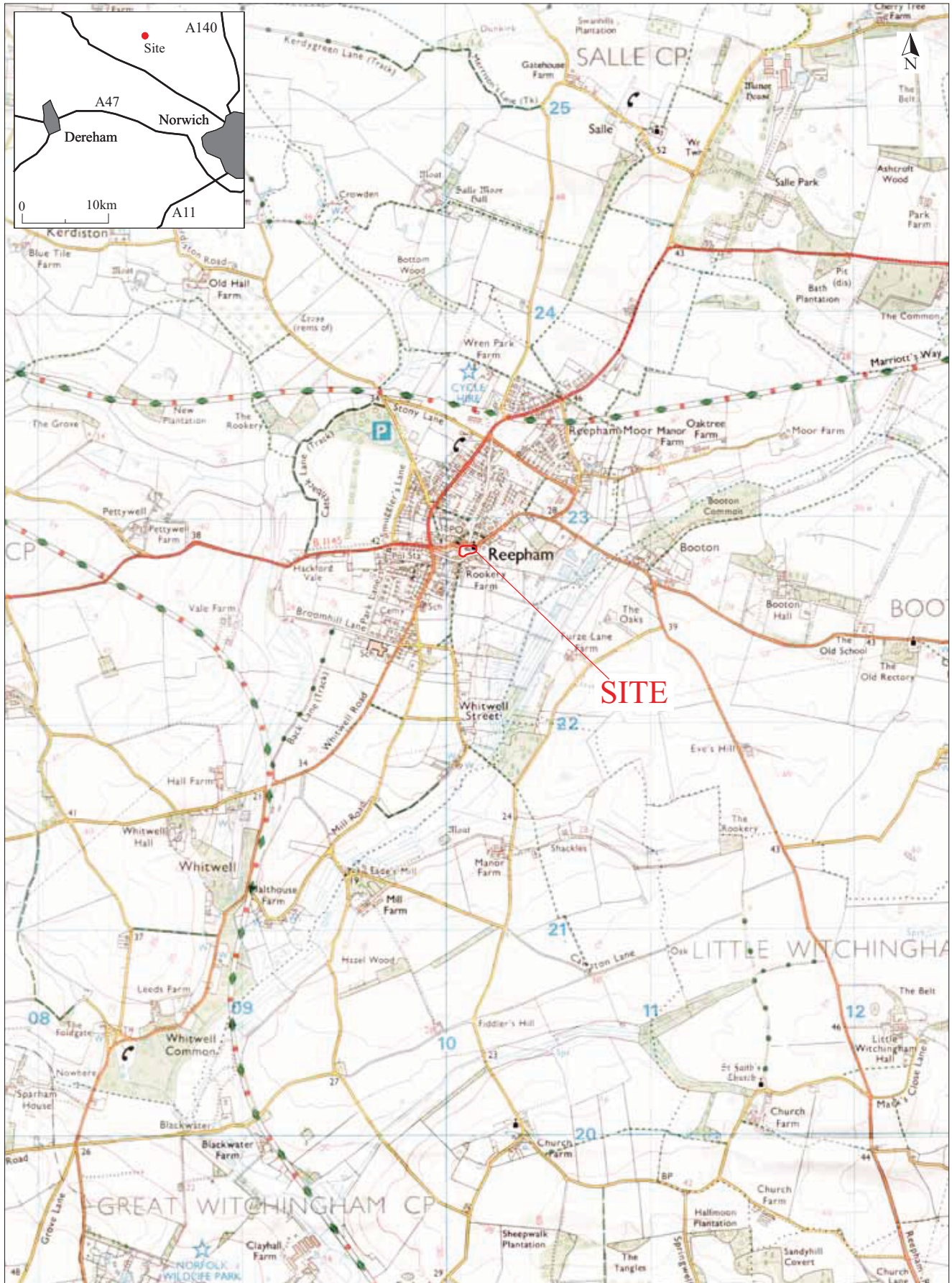
16
North-south trench run, post-excitation. Looking north.



17
East-west trench run, post-excitation. Looking west.

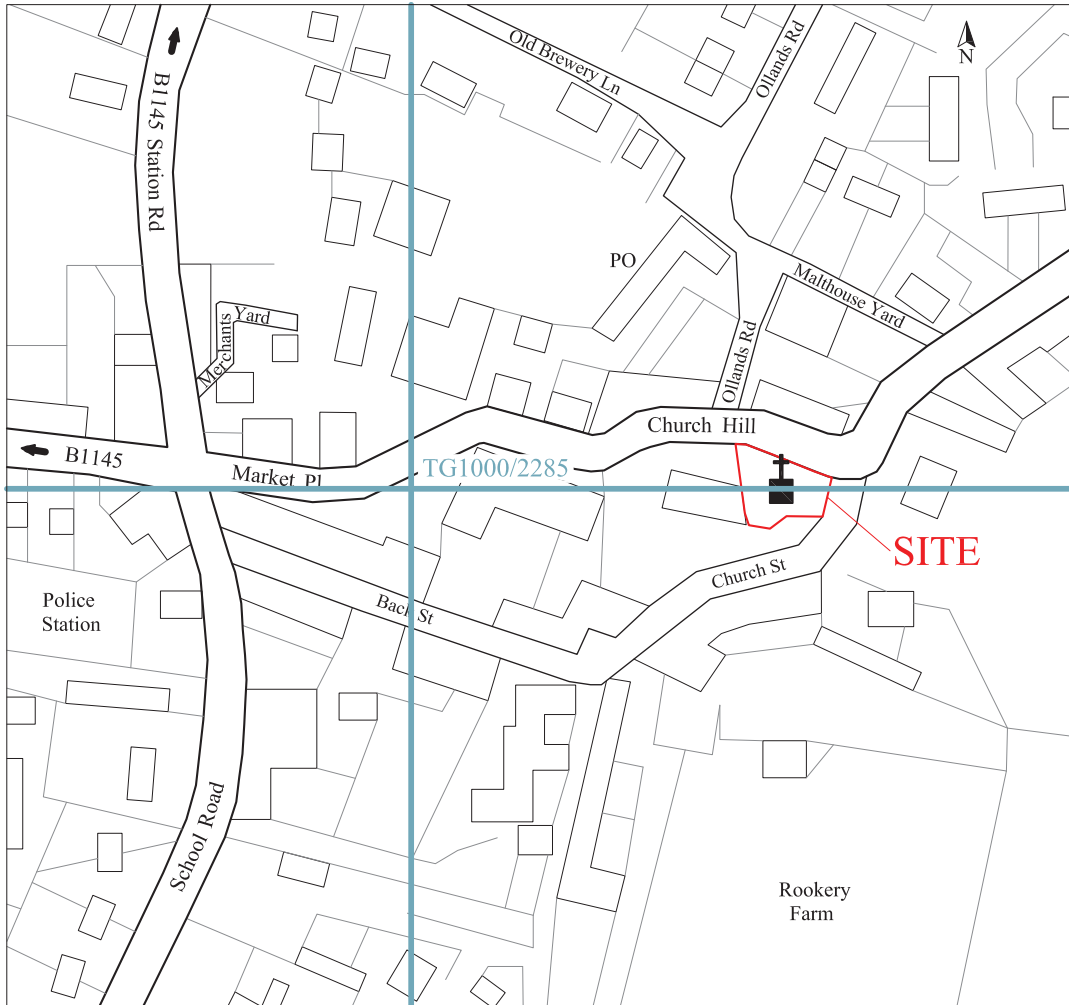


18
North-south trench run beside porch, post-excitation. Looking north.



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Fig. 1 Site location plan
 Scale 1:25,000 at A4



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0 150m

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Fig. 2 Detailed site location plan
 Scale 1:2500 at A4



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Fig. 3 1st edition OS map, 1886

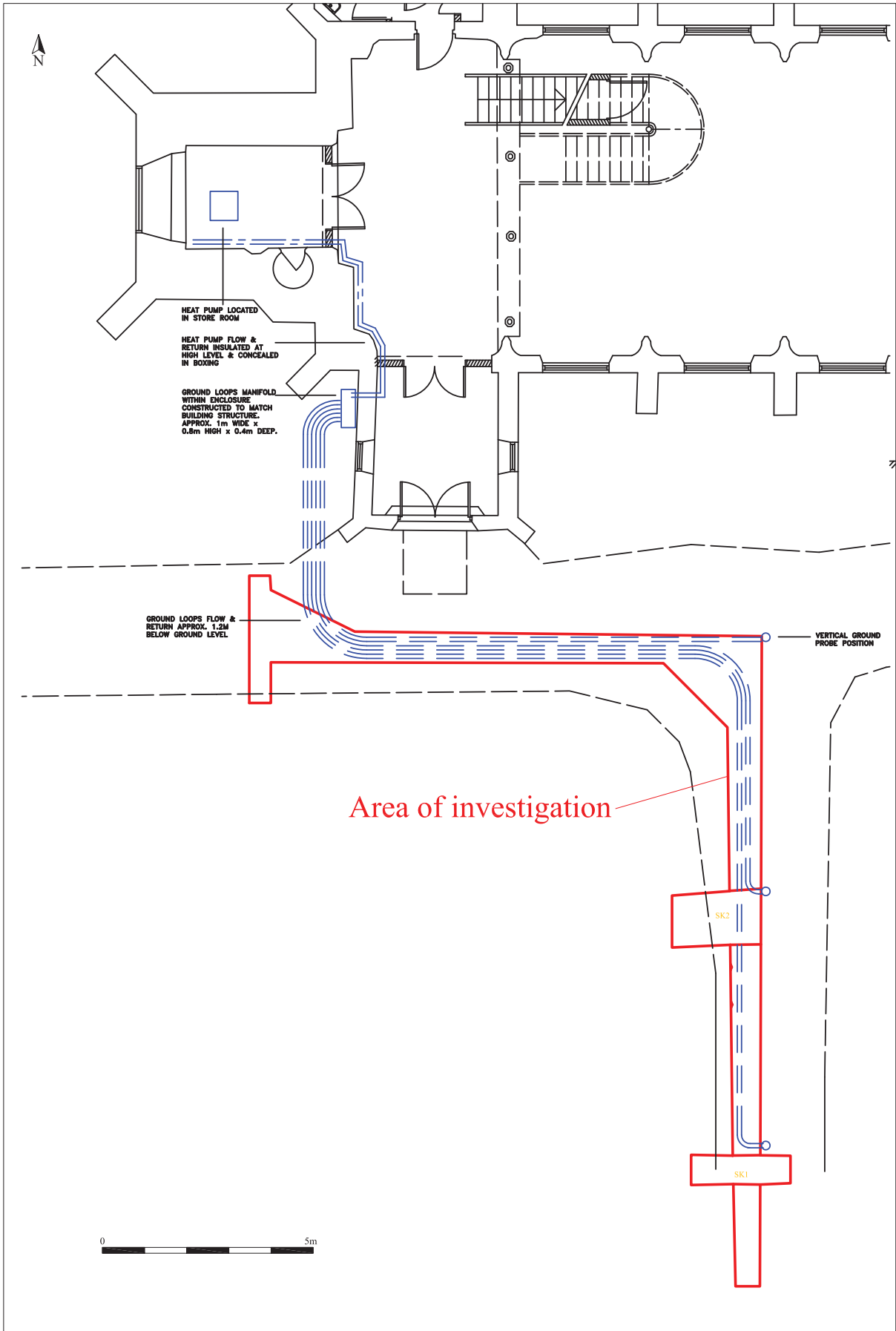
Not to scale



<i>Archaeological Solutions Ltd</i>
Fig. 4 Aerial photo, 1946
Not to scale

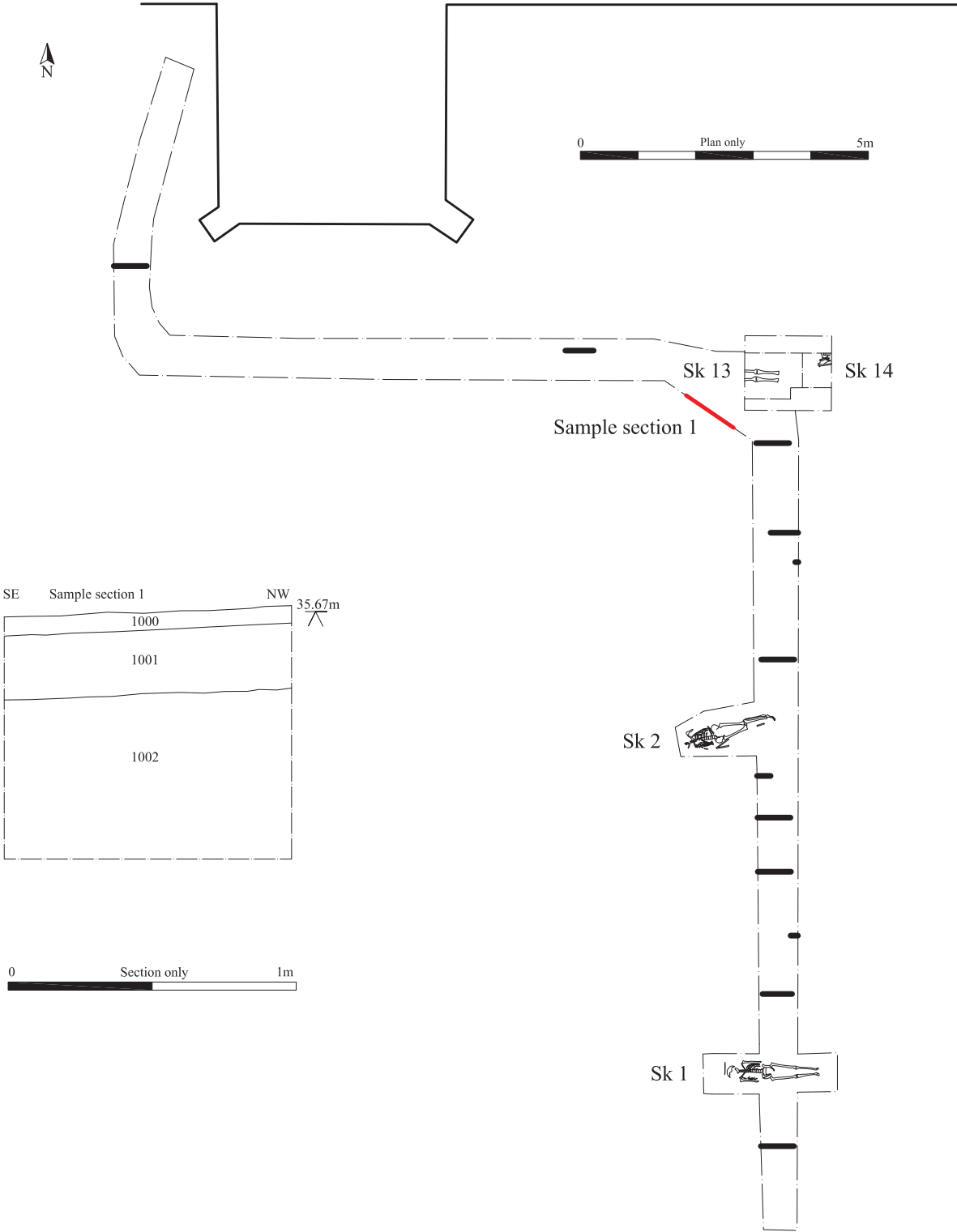


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Fig. 5 Aerial photo, 1988
Not to scale



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Fig. 6 Trench location plan
 Scale 1:125 at A4

St Michael's Church



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Fig. 7 Location of skeletons
Scale 1:100 at A4

