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Archaeological Excavation Report

Oxford Archaeology

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St Nicholas Church, Forest Hill, Oxfordshire

ARCHAEOLOGICAL EXCAVATION REPORT

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SUMMARY

Instructed by Oxford Architects on behalf of the St Nicholas Parochial Church Council Oxford Archaeology (OA) carried out an excavation at St Nicholas Church, Forest Hill, Oxfordshire (NGR SP 5823 0749) prior to the construction of a new vestry on the north side of the church. The excavation revealed 23 burials from the late 18th to early 19th century. All except a newborn baby were buried in coffins with metal fittings.

1 INTRODUCTION

1.1 Location and scope of work

1.1.1 From December 2003 to February 2004 OA carried out a small excavation and watching brief at St Nicholas Church, Forest Hill, Oxfordshire (Figure 1) on behalf of Oxford Architects in respect of a planning application for the construction of a new vestry on the north side of the church (Planning Application No. P01/No449) and a brief set by Paul Smith, County Archaeologist, Oxfordshire County Archaeological Service (OCAS 2003) and a WSI agreed with Julian Munby, Diocesan Archaeological Advisor to the Diocese of Oxford. St Nicholas Church is located at the south end of the village of Forest Hill, east of Oxford.

1.2 Geology and topography

1.2.1 The churchyard slopes from 108.1 m OD down to 104.2 m OD at the south. The underlying geology is Kimmeridge clays (BGS, Sheet no. 237).

1.3 Archaeological background

1.3.1 This church is a grade II* listed building with 12th-and early 13th-century fabric. It was partly rebuilt in the 17th century with a heavily buttressed bellcote at its west end and in 1852 a north aisle and organ chamber were built by Gilbert Scott. The church obtained full parochial status in 1273 (N. Pevsner, 1960). A detailed account of the 19th-century restoration in 1852 by Reverend C F Wyatt is included in appendix 2.

1.4 Acknowledgements

1.4.1 OA would like to thank Roy Sutton of Latimer Construction and Ian Cox and staff from Cox Construction for their help during the excavation.

2 EXCAVATION METHODOLOGY

2.1 Fieldwork methods and recording

2.1.1 The excavation area consisted of a 5.5 m x 6.5 m trench forming the extent of the new vestry footprint (Figure 2). The overburden was removed under close archaeological supervision by a mini excavator fitted with a toothless bucket. The area was then cleaned by hand and the features revealed were fully excavated to

remove the burials and to retrieve finds. The excavation of the service trench was covered by a watching brief, but where graves were exposed and would be disturbed by the impact of the ground work, these were fully excavated and recorded.

2.1.2 All archaeological features were planned and where excavated their sections drawn at scales of 1:20 and 1.10. All features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OAU Fieldwork Manual* (ed D Wilkinson, 1992).

2.2 Finds

2.2.1 Finds were recovered by hand during the course of the excavation and generally bagged by context. Finds of special interest were given a unique small find number. The finds and the human remains were later reburied in the churchyard.

2.3 Palaeo-environmental evidence

2.3.1 No deposits suitable for environmental sampling were identified during the excavation.

3 RESULTS: DESCRIPTIONS

3.1 Excavation area (*Figure 3*)

3.1.1 Natural was a yellowish brown sand and clay (3) encountered at 0.90 m to 1.10 m below the surface of the graveyard. The natural had been cut by a number of features, mainly graves, and additional burial features and construction features relating to the north aisle.

Structural features (Figures 3 and 5, sections 1 and 2)

3.1.2 The south edge of the excavation area was against the north wall (78) of the north aisle which was constructed in 1852. It was constructed in a 0.6 m deep foundation trench (77) with a light brown silty sand (79) infill. A brick-lined heating duct (32) cut through the wall and venting out in the centre of the north doorway. It was constructed in a sub-rectangular trench (31) measuring 1.25 m x 1.2 m x 0.5 m, with vertical sides, but its base was below impact level. The trench was backfilled with a light brown silty sand (33). A trench (75) cut across the top of this and against the north wall (78) and was 0.34 m wide and 0.11 m deep with vertical sides and flat base. It contained a shallow concave brick gully (76) with a light sand cement bond. This ran all the way around the church and probably dates from the late 19th century.

Other structural features

3.1.3 Posthole 43, located close to the northern baulk, was sub-circular in shape measuring 0.5 m x 0.4 m x 0.4 m with very steep sloping sides rounding to a flat base, with a smaller circular cut in the base (measuring 0.16 m in diameter and 0.05 m in depth). It was filled with a mid brown silty sand (44) which contained pottery dating from the 10th to the 13th century. Posthole 49 was circular in shape and measured 0.32 m in diameter x 0.12 m in depth with near vertical sides and a flat base. In the base was

a smaller shallow cut measuring 0.1 m in diameter x 0.04 m in depth. This was filled by a reddish brown silty sand (50).

3.1.4 Posthole 64 was located close to the eastern baulk and cut by grave 55. It measured 0.3 m in diameter and 0.08 m in depth with steep sloping sides and a flat base. The posthole was filled by a dark brown silty sand (63). These postholes may have been marker posts for burials. All these postholes had been cut by graves and sealed below a 0.25 - 35 m thick layer of mid brown silty sand (2) subsoil. Limestone fragments and building debris from the 19th-century construction of the north aisle were present in this layer.

The graves (Figure 3)

3.1.5 All graves were aligned west to east, facing east. With two exceptions (8 and 51), they appeared to respect the line of the footpath extending from the north doorway.

3.1.6 In the south-west corner of the site was a grave (38), which was coffin shaped measuring 2.10 m x 0.45 m x 0.41 m with vertical sides and flat base. It contained the skeleton (39) of a woman in a wood coffin with iron fittings (40). The grave was backfilled by a dark brown silty sand (41). This had been cut by the construction cut for brick drain 76 around the base of the church wall (see section 3.1.2).

3.1.7 North of grave 38 were three childrens' graves. Grave 28 continued beyond the western baulk and only 0.5 m x 0.38 m x 0.4 m was exposed. It had vertical sides and a flat base and contained the skeleton (30) of a child aged 1 year wrapped in a shroud and covered by a mid brown silty sand (29). As it was just outside the line of the new foundations the burial was not excavated and left in-situ, although it was evident that it had been cut by a later grave (24) at its east end. This grave (24) was rectangular in shape, measuring 0.85 m x 0.34 m x 0.45 m with vertical sides and flat base. It was filled by dark grey brown silty sand (25) and the stain of a small baby coffin (0.75 m x 0.22 m x 0.25 m) was observed in the base of the fill. No trace of the skeleton had survived. Just to the east of this grave a third grave (8) was excavated. It was rectangular with vertical sides and a flat base, measuring 1.18 m x 0.40 m x 0.12 m. It contained the skeleton of a child (7), aged 9 months to 1 year, buried in a wooden coffin with iron fittings (14). This had been backfilled with a dark brown silty sand (9), which had been cut by a small sub-circular grave cut (4) with shallow sloping sides and a flat base. It measured 0.62 m x 0.28 m x 0.03 m and contained the remains of a new born baby (5), who was wrapped in a shroud and covered by a fill of dark brown silty sand (6).

3.1.8 Immediately north of the childrens' graves, and extending under the line of the path, was a brick-lined shaft grave (52). It was constructed in a rectangular cut (51) measuring 2.4 m x 0.85 m x 1.05 m with vertical sides and flat base. The brick lining (52) was a single brick thick (bricks 0.22 m x 0.08 m x 0.065 m) constructed in a coffin shape measuring 2.26 m long and 0.62 m wide at the shoulders. The lining was bonded with a sand cement with a flush finish and was white washed. In the base was the remains of a collapsed coffin overlaid by the remains of another one which had originally been supported on iron struts set into the brickwork above the lower burial. The void between the brick lining (52) and the cut (51) was filled with orange brown

sand (54) and the whole grave was sealed by five rectangular limestone slabs, one of which was a broken gravestone dating to 1745.

3.1.9 Grave 26 was 1.5 m north-west of grave 52. This was a rectangular cut with vertical sides and flat base. It measured 2.0 m x 0.5 m x 0.73 m and contained the skeleton (62) of a female aged 40 - 44 years in a wooden coffin (60). The grave was backfilled with a light reddish brown silty sand (27).

3.1.10 Grave 57, just to the north of grave 26, was coffin-shaped, measuring 2.16 m x 0.64 m x 0.44 m with vertical sides and a flat base. It contained the skeleton (65) of an adult male aged 50 - 55 years in a wooden coffin (59) with associated coffin fittings. The grave was backfilled with a dark reddish brown silty sand (58). In the north-west corner of the site was a rectangular grave (68) with vertical sides and a flat base. It measured 1.3 m x 0.4 m 0.18 m and contained the remains of an adult skeleton (69) in a wooden coffin. It had been backfilled by a yellowish brown silty sand (70). This had been cut (and the burial disturbed) by a later grave (42) along its north side. Grave 42 was a rectangular shape with vertical sides and a flat base, which measured 2 m x 0.48 m 0.44 m x 0.70 m. It contained the skeleton (66) of an adult female aged 28 - 35 years in a coffin (67) with associated fittings. It was filled by a mid brown silty sand backfill (61).

3.1.11 Grave 42 was also cut by the west end of grave 34, which was coffin shaped with vertical sides and a flat base. It measured 1.94 m x 0.6 m x 0.68 m and contained the skeleton (35) of an adult female aged 40 - 56 years. She was buried in a wooden coffin (36) with a backfill of dark yellow brown silty sand (37). This grave cut the south side of posthole 43.

3.1.12 In the north-east corner of the site was a rectangular grave (45) with vertical sides and a flat base, measuring 2.0 m x 0.48 m x 0.7 m. It contained the skeleton (46) of an adult female aged upwards of 40 years in a coffin (47) with associated fittings and grips. The grave was backfilled by a light reddish brown silty sand (48). This grave cut the south side of posthole 49.

3.1.13 Another grave (73) was located in the north-east corner of the north-east buttress of the new vestry. The foundations did not impact this grave (73), therefore it was not excavated. It measured 0.9 m x 0.6 m and was backfilled by a light brown silty sand (74).

3.1.14 Grave 20 was located in the south-east corner of the excavation, close to the aisle wall 78. It was coffin shaped with vertical sides and a flat base, measuring 2.0 m x 0.4 m x 0.14 m. It contained the skeleton (21) of a young female, who was buried wearing a garment with buttons in a wooden coffin (22) with upholstery studs and iron plates. The grave was backfilled by a dark brown silty sand (23).

3.1.15 Grave 16 lay to the north of 20. It was coffin shaped and measured 2.25 m long, 0.4 m - 0.75 m wide and 0.22 m in depth. It had vertical sides and a flat base and contained the skeleton (17) of an adult male aged 54 - 64 years whose skull displayed evidence for a craniotomy. He was buried in a wooden coffin (18) with decorative fittings. The grave was backfilled with a dark brown silty sand (19). At the east end

of the grave cut at the foot of the coffin (18) a number of limestone fragments were placed to support the broken base of a foot stone (102). The upper half of this stone was observed against the north graveyard wall and was probably moved when the graveyard was cleared in the mid 19th century.

3.1.16 Grave 55 which cut posthole 64 lay 1.3 m north of grave 16. It was rectangular in shape with vertical sides and flat base, measuring 2.0 m x 0.75 m x 0.35 m. and contained a lead-lined coffin (15) surmounted by a plaque inscribed *Mrs Mary Mickle, Died 20th Feb 1811, Aged 62 yrs.* The grave was backfilled with a dark brown silty sand (56). At the east end of the grave was a plain footstone (101) with a round top which had been broken. Alongside this was another rough-cut limestone slab (100), although it did not appear to relate to any features in the excavation area.

3.1.17 Two rectangular cuts (10 and 12) lay to the west of grave 16 and 55. These measured 0.8 m x 0.3 m x 0.11 m (10) and 0.45 m x 0.28 m x 0.08 m (12) and were filled by a light reddish brown silty sand (11 and 13). These appeared to be settings for the head stones for graves 16 and 55, which were removed when the graveyard was re-ordered in the mid 19th century.

3.2 Service trenches

Water pipe trench (Figures 2 and 5, Section 5)

3.2.1 The service trench was excavated from the north-east corner of the proposed vestry and ran eastwards to the churchyard boundary wall. The trench was 0.4 m wide and excavated to a depth of 0.75 m. Along most of the trench no grave cuts were observed and there was a lot of root disturbance from the yew tree to a depth of 0.7 m. A grave cut was observed at the east end of the trench approximately 2 m from the wall. This was seen in section and the burial was not disturbed.

3.2.2 Where the trench continued under the boundary wall, the cut for consolidating the footpath (106) with compacted clay (107) was observed. This had been cut by the foundation trench (108) of the boundary wall and sealed below hardcore (105) and the concrete floor (103) of a small shed that stood against the boundary wall.

Foul pipe and septic tank trench (Figures 2, 3 and 4).

3.2.3 This also started from the north-east corner of the new vestry and extended north-east to the new septic tank excavated against the north wall of the graveyard. The pipe trench was 0.6 m wide and sloped from 1.3 m to 1.7 m in depth towards the septic tank. It cut through the very dark grey brown silty sand topsoil (1) and into a 0.8 m thick dark grey brown silty sand loam (2), which had been cut by three rectangular graves (94, 96 and 98), each containing a dark reddish brown silty sand backfill (95, 97 and 99). The graves were not excavated as the burials were below the impact level of the pipe.

3.2.4 Four graves were identified within the trench for the septic tank and three were excavated. Grave 88 was only partly exposed and was not impacted by the tank. Of the three excavated graves, two were of children (80 and 84), measuring 0.99 m x 0.35 m x 0.08 m (80) and 1.04 m x 0.38 m x 0.45 m (84), both with vertical sides and

a flat base. Each contained the remains of skeletons (81 and 85) in coffins (82 and 86) and were backfilled with a dark grey brown silty sand (83 and 87). Fill 83 contained a high quantity of charnel, probably from disturbance from an earlier grave.

3.2.5 An adult grave (90) along the north side of the tank trench measured 2 m x 0.76 m x 1.27 m with vertical sides and a flat base. This contained a skeleton (91) in a coffin (92) and was backfilled by a mid brown silty sand (93) with a lot of rubble and charnel in the upper part of the fill. This suggests that graves 80 and 90 had cut through earlier shallow burials, which were not observed during the excavation, and the redeposited remains were found as charnel in the fills of these two graves.

4 THE ARTEFACTS

4.1.1 A total of 39 metal objects and 15 bone objects were recovered from the graves. The metal assemblage comprises 38 copper alloy objects (28 of which are shroud pins) and 1 iron object. All the objects are personal items and can be dated to the 18th century.

Copper alloy objects

4.1.2 The majority of the copper alloy objects are shroud pins from contexts 6, 9 and 39. There are 16 complete pins, many of which are plated with a white metal coating, probably tin. The other copper alloy objects include an earring from context 39, a bracelet fragment from context 33, 5 plain rings from context 21 and 2 buttons also from context 21. The earring is a plain hoop from which the attachment wire is missing, The bracelet is a simple rectangular strip decorated with incised ovals and dots. The 5 rings are plain copper alloy wire rings with diameters of 17 mm-18 mm and the two buttons are circular discoidal buttons with integral attachment loops, their upper surfaces are plain.

Iron object

4.1.3 A single corroded iron disc recovered from context 46 is probably the remains of a circular discoidal button, without the attachment loop.

Bone objects

4.1.4 The bone objects are all buttons, recovered from contexts 46, 47 and 62. They are all of the same form, circular with four holes for attachment and a raised ridge around the outside. They range in diameter from 15 -19 mm. This type of button first made its appearance in the late 17th century (Margeson 1993, 20-22, fig.11, No 107)

Object	*Material*	*SF No*	*Ctx No*	*Description*
Shroud pins	CA	-	6	13 pins, all complete and with white metal plating (probably tin)
Shroud pins	CA	-	9	1 complete pin and 12 fragments some with white metal plating (probably tin)
Ring	CA	1	21	Plain ring with a circular cross section, diameter 18 mm,
Ring	CA	2	21	Plain ring with a circular cross section,

				diameter 18 mm
Ring	CA	3	21	Plain ring with a circular cross section, diameter 18 mm
Ring	CA	4	21	Plain ring with a circular cross section, diameter 17 mm
Ring	CA	5	21	Plain ring, circular cross section, diameter of ring 17 mm
Button	CA	6	21	Plain discoidal button with an integral attachment loop (incomplete) diameter 18 mm, upper face plain
Button	CA	7	21	Plain discoidal button with an integral attachment loop, upper face plain
Button	Mother of Pearl	8	21	Plain mother of pearl button with 4 holes
Bracelet	CA	9	33	Copper alloy strip decorated with incised ovals and dots
Earring	CA	10	39	Plain hoop, the wire for attachment is missing, diameter 22 mm,
Shroud pins	CA	-	39	Two complete shroud pins
Button	Bone	11	46	Button with 4 holes and a raised ridge around the outside, diameter 18 mm
Button	Bone	12	46	Button with 4 holes and a raised ridge around the outside, diameter 16 mm
Button	Bone	13	46	Button with 4 holes and a raised ridge around the outside, diameter 18 mm
Disc	FE	14	46	Corroded iron disc, probably a button, the attachment loop is missing.
Button	Bone	15	47	Button with 4 holes and a raised ridge around the outside, diameter 18 mm
Button	Bone	16	47	Button with 4 holes and a raised ridge around the outside, diameter 18 mm
Button	Bone	17	47	Button with 4 holes and a raised ridge around the outside, diameter 16 mm
Button	Bone	18	47	Button with 4 holes and a raised ridge around the outside, diameter 17 mm
Button	Bone	19	47	Button with 4 holes and a raised ridge around the outside, diameter 18 mm
Button	Bone	14	62	Bone button with 4 holes and a raised ridge around the outside, diameter 19 mm
Button	Bone	21	62	Button with 4 holes and a raised ridge around the outside, diameter 16 mm
Button	Bone	22	62	Bone button with 4 holes and a raised ridge around the outside, diameter 19 mm
Button	Bone	23	62	Button with 4 holes and a raised ridge around the outside, diameter 18 mm
Button	Bone	25	62	Button with 4 holes and a raised ridge around the outside, diameter 16 mm
Button	Bone	26	62	Bone button with 4 holes and a raised ridge around the outside, diameter 16 mm
Button	Bone	27	62	Bone button with 4 holes and a raised ridge around the outside, diameter 15 mm

4.2 Pottery

by Carole Wheeler

4.2.1 The pottery assemblage comprised 15 sherds with a total weight of 136 g. The assemblage was medieval in date, ranging from *c* 11th - 15th/16th century. Most of the sherds were too small to reflect the vessel form, however, one clearly came from a Midlands Yellow jug (context 27) and three other sherds within this context can, by their decoration, be associated with tableware. The others are likely from their fabric types and lack of decorative finish to be cooking or storage jars, probably produced locally.

4.2.2 The assemblage has been recorded utilising the coding system and chronology of the Oxfordshire County type-series (Mellor 1994).

Table 1 Summary of pottery identifications by context

Context	Fabric code	Common Name	Chronology	Form
27		Midland Yellow	15th/16thC	Jug
	?OXBX	Late Brill/Boarstall	15th/16thC	Jug
	OXAM	Brill/Boarstall Ware	14th/15thC	Jug
		1 unknown sherd reduced limestone tempered coarseware		
44		Shell-tempered (Henley-type IB.32)	c11thC	
	OXAC	Early Med.West Oxfordshire Ware	10th-mid-13thC	
		1 unknown oolitic limestone sherd		
56	OXBG	Surrey Border Ware	1500-1700	
		1 unknown quartz tempered sherd		
58	OXY	Medieval Oxford Ware	Mid-11th – mid-13thC	
	OXAC	Early Medieval West Oxfordshire Ware	10th – mid-13th	
		1 unknown limestone & quartz tempered sherd	?c.11th/12thC	
61		1 unknown limestone & quartz tempered sherd(Same fabric as sherd in context 58)	?c.11th/12thC	

4.3 Coffin Fittings

By Ceridwen Boston

Introduction

4.3.1 All the excavated graves were found to contain fragmentary remnants of coffins and coffin furniture or fittings. These are summarised in Table 4. They varied greatly in quantity and state of preservation, but serve as a useful, albeit imprecise means of dating these burials. In Britain from the late 17th century onwards, it became customary to cover the coffin with upholstery of baize or velvet, and to decorate the lid and side panels of coffins with studs and metal coffin fittings. By 1700-20 the funeral furnishing trade was a firmly established business, providing fittings for all classes of people and at various costs, depending on the status and wealth of the deceased (Litten 1991). The financial investment in funerary panoply grew over the course of the 18th century, reaching its zenith in the 1840s. Metal coffin furniture broadly consisted of *departum* plates (breastplates, footplates and headplates), lid motifs and escutcheons. Once solely functional, the grips with which mourners carried the coffin became stylistically elaborate during this period, as did the grip plates to which they were attached. Brass or iron studs, originally used to secure the

upholstery to the wooden case, themselves became a decorative device, being arranged to create complex patterns on the lid and side panels of the coffin.

4.3.2 Grips were produced by casting, but the rest of coffin fittings were stamped using dies (ibid). In the period 1720-30 these were produced by hand-operated die stamping machines, but after this such machines became power-assisted (ibid). Coffin fittings could then be produced *en masse* and were financially accessible to a wide audience by the mid to late Georgian period. Excavations of the 18th-19th[th] century crypt of Christ Church, Spitalfields, London, undertaken in the 1990s, revealed a large number of coffin fittings. The taxonomy compiled from these fittings (Reeves and Adams 1991) forms the basis for identification of the styles in vogue throughout this period. The coffin fittings at St Nicholas were compared to this catalogue and several matches were found. In addition four hitherto unknown styles were identified.

Coffin material

4.3.3 All but one of the individuals at St Nicholas' were interred within single wooden coffins. These had decayed but their outlines were clearly visible as dark stains within the grave backfill. Fragments of wood were also found adhering to the reverse of coffin fittings and to the iron fixing nails of the coffins. Only one coffin (15), of a Mrs Mickle (dated 1811), was more elaborate triple coffin, consisting of an inner wooden coffin, within a lead shell, which itself was within a highly decorated outer wooden case or coffin. The expense of such a coffin suggests that the lady or her family were people of wealth and social prominence within the community. It seems probable that she was the wife of the late William Julius Mickle, a well-known Scottish poet, whose memorial plaque used to hang in the church nave.

4.3.4 At St Nicholas', the outlines of all the coffin stains revealed that the wooden coffins were of a single break type, shaped at the shoulders and tapering towards the feet. This shape, now synonymous with coffins, broadly indicates a post-1660 date, as it was around this date that this coffin shape replaced the more simple trapezoid design (Litten 1991).

Coffin fittings, grips and grip plates

4.3.5 At St Nicholas only three of the 16 coffins (36, 60, 110) completely lacked coffin fittings. The rest had fittings of varying elaboration, some being fairly plain (just having grips and grip plates), and others having the full complement of furnishings. Each coffin with furnishings had between one and eight grips and grip plates. All were made of iron, but those from infant coffins 82 and 86 had been dipped in tin to produce a silver effect. Most were too corroded to identify the style. However, it was possible to match three sets of grips (from coffins 18, 22 and 92) to the Christ Church, Spitalfields, Type 2a. This style is known to have been in use between 1763-1837, but may well have been in use before and after these dates. The material used for grip plates were more varied, five sets being of iron, four of silvered tin, and two of brass. The fittings from coffin 92 were black painted tin, a most expensive variant (Litten 1991). Three coffins were unusual in having mixed sets of grip plates of different metals, such as iron and silvered tin (22 and 59), and iron and brass (40).

Litten (1991) reports that tin was an expensive material, and perhaps one or two grip plates of tin was all that could be afforded by the surviving families of the deceased.

4.3.6 Most of the iron grip plates were too corroded to identify the styles, but four (15; 82; and two from shaft grave 51) could be matched to Christ Church, Spitalfields 3 (dated 1768-1842). This style is the most ubiquitous of this period. The grip plates from coffin 14 match Christ Church, Spitalfields 26 (dated 1819). Two new types (22 and 92) were identified.

Breastplates

4.3.7 Six coffins had breastplates, but being composed of iron, corrosion had rendered the designs indecipherable. On the corroded iron breastplate of coffin 14 an oval cartouche surrounded by a twisted rope design was observed. This is either a new design or the central panel of Christ Church, Spitalfields 62 or 111 (dated 1811 and 1788 respectively). The iron breastplate of coffin 86 bearing a shield surmounted by a pair of cherubim, and surrounded by a laurel wreath, is a new type. The shape of four other iron coffin plates could be discerned: coffins 59 and 92 and one of the breastplates found within brick-lined shaft grave 51 were shield-shaped; and coffin 18 was lozenge-shaped. The last was tin-dipped and painted black, a fairly expensive choice (Litten 1991). Due to the difficulty of inscribing lettering onto iron, none of these breastplates would have born inscriptions.

4.3.8 By far the best preserved breastplate was the black painted rectangular lead breastplate attached to the outer wood of coffin 15. The style could not be matched in the Spitalfields taxonomy. The inscription read as follows: *Mrs Mary Mickle Died 20th Feby 1811 Aged 62 Yrs.* An identical inscription surrounded by a rectangular border of curled leaf motifs was carved directly onto the lead shell.

Lid motifs and escutcheons

4.3.9 Fragments of corroded iron found over the knees and skulls of five of the skeletons probably represent lid motifs. None were sufficiently well preserved to identify their styles confidently. Two small lid motifs or escutcheons of tin-dipped iron (82) were tentatively identified as Christ Church, Spitalfields 1 (dated 1776-1827). Numerous brass escutcheons from the two coffins within the brick-lined grave 51 could not be identified due to corrosion.

Other lid decorations

4.3.10 The lid and side panels of the outer wooden coffin of Mrs Mickle (15) were heavily decorated by large numbers of iron studs, most of which were arranged in double rows. Several groups of seven studs also formed diamond shapes. More detail of the stud pattern could not be discerned due to the severity of the wood's decay, but originally probably composed a design similar to Christ Church Spitalfields 17 or 55 (both styles undated). Iron studs were evident in large quantities in the brick-lined grave (51), suggesting decorative upholstery stud-work, but here also, the designs could not be identified. Three other coffins had several iron studs, but the low number suggests that their function was merely to attach the upholstery, rather than as a decoration in their own right. Coffin 40 was the only coffin still to have traces of

the upholstery fabric, preserved here by the wet conditions beneath the drain and eaves-drip of the church.

Table 2 Summary of the coffin fittings found in the excavated graves and brick-lined shaft grave 51 at St. Nicholas', Forest Hill (n = 15)

Coffin No	Material	Upholstery studs	Breastplate	Grips	Grip plate	Lid motif	Escutcheons	Fixing nails	Upholstery
14	wood	nil	Fe; oval; CCS62 or 111	x 1; Fe	x 2; silvered Tn; CCS26	nil	nil	x 12; Fe	nil
15	lead	Fe studs; +++	Pb; new type	x 4; Fe	x 3; Fe; CCS3	nil	nil	Fe	nil
18	wood	x 38; Fe studs	Fe; lozenge	x 6; Fe; CCS2a	x 2; Fe	x 2; Fe	nil	x 10; Fe	nil
22	wood	x 10; Fe studs	nil	x 4; Fe; CCS2a	x 3, Fe; x 1 Tn, new type	nil	nil	x 4; Fe	nil
36	wood	nil	nil	nil	nil	nil	nil	present	nil
40	wood	nil	nil	x 3, Fe; x 1, brass	x 1; brass; x1, Fe	x 1; Fe	nil	x 8; Fe	black
47	wood	Tn lettering	nil	x 1; Fe	x 1; Fe	nil	nil	x 10; Fe	nil
59	wood	nil	iron	x 4; Fe	x 2, Fe; x 1; Tn	x 1; Fe	nil	Fe	nil
60	wood	nil	nil	nil	nil	nil	nil	Fe	nil
67	wood	nil	nil	x 2; Fe	x 2; Fe	nil	nil	Fe	nil
82	wood	Tn strips	nil	x 2 Tn dipped Fe; x 4 Fe	x 6; silvered Tn; CCS3	nil	x 2; Tn dipped Fe; CCS1	x 13; Fe	nil
86	wood	Tn strips	Fe; new type	x 4, Tn-dipped Fe	x 4; silvered Tn; CCS3	x 1; Tn	nil	x 2; Fe	nil
92	wood	Fe studs; ++	Tn-dipped Fe; shield motif	x 8; Fe; CCS2a	x 6; Tn; new type	x 2; Fe	nil	x 20; Fe	nil
51	wood	Fe studs; ++++	Fe; shield motif	x 10; Fe	x 10; Cu alloy; CCS3	Fe	Cu alloy	Fe	nil
110	wood	nil	nil	nil	nil	nil	nil	x 3; Fe	nil

4.3.11 Three coffins (47, 82 and 86) were 'finished' with thin strips of punched tin, approximately 10 mm in breadth. On the latter two the strips outlined the margin of the lid and side panels. The tin strips on these infant coffins had the identical motif of a line of raised double circles. Adult coffin 47 used the strips somewhat differently. Instead of a border, the strips were used to form letters and numbers. An 'A', an 'F', 'I', and a '1' are easily identified. Other fragments suggest an '8' or a 'B', an 'E' and an 'O', but these are less clear. It is likely that the letters spell out the name and year-of-death of the deceased. The punched motif on these strips was leaves and flowers. No reference to this form of decoration could be found in the literature but it may be a cruder version of filigree 'coffin lace' found on coffins dated from the mid-18th to the 20th century (Litten 1991; 112-113).

Shrouds and grave goods

4.3.12 Janaway (1998) comments on the great variation in dressing corpses in the 18th and 19th centuries. A loose sheet or winding cloth was often placed under the corpse and used to line the open coffin, and later to cover the corpse, often being pinned in place. In addition, crudely made shrouds, often with a ruffle round the neck and down the front, came into vogue in this period. Alternatively, the deceased was sometimes dressed in personal clothing. Although no textiles survived at St Nicholas, grave clothes are suggested by the presence of fastenings, such as pins and buttons. Pins of copper alloy or nickel-coated iron were found in seven graves, most

frequently located at the pelvis, knees and foot of the skeleton. These would have been used to secure the shroud or winding sheet. In addition, four graves contained buttons. Most were plain copper alloy buttons, one of which was still covered by fabric. One button was of shell or mother-of-pearl and another was enamelled. A row of five wire circles was found overlying the left ribcage of a young woman (21). These are likely to be the remnants of cloth or cartwheel buttons. Most other buttons were positioned at the side of the neck and at the wrists of the skeletons. The presence of buttons suggests that these individuals were buried in garments, instead of a shroud, since the latter were more commonly fastened with woollen or cotton ties (Litten 1991; 81; Janaway 1998; 24) rather than with buttons.

4.3.13 Personal effects are rarely found within graves of this period. The exception was in the grave of a young woman (21), buried with a pair of copper alloy hoop earrings. Bilateral green staining on the mastoid processes of the skull indicates that she was wearing them at the time of burial.

Conclusion

4.3.14 The type and richness of coffin fittings suggests that the burials disturbed during the course of excavation date from the post-medieval period, most probably from the 18th century to 1850, when the churchyard ceased to be used for burial. Differences in the elaboration of coffin furnishings between burials suggests similar differences in social status in life, although personal preference must have played a role. All burials included a coffin, but the plainness of three of the coffins suggest that these were burials of the very poor, possibly pauper burials. However, the rest of the burials suggest a modest investment in funerary panoply. The only exception is Mrs Mickle (15), whose elaborate triple coffin suggests that she or her family were individuals of high standing in the community.

5 THE HUMAN SKELETAL ASSEMBLAGE

by Ceridwen Boston

Introduction

5.1.1 A total of twenty three graves were revealed. Fifteen graves were fully excavated and the skeletons removed for analysis. The assemblage consisted of three adult males, six adult females, one adult of indeterminable sex and five infants, aged between late foetal and 16 months. Two brick-lined shaft graves were also discovered. The central one (51) contained two adult individuals. Cursory examination of the crania revealed that these were an older man and woman. However, due to the depth of the burials within the grave it was not practicable or indeed desirable to attempt further osteological analysis. The interior of the second brick-lined shaft grave was not investigated, lying as it does beyond the excavation area. The lead shell of the only triple-shelled wood-lead-wood coffin (15) of a Mrs Mickle, aged 62 years, was largely intact, and was not opened for analysis. The osteological report below excludes both her and the two individuals buried within brick-lined shaft grave 51.

5.1.2 All human remains in their primary place of burial underwent low-resolution analysis. In addition, there was a moderate amount of charnel in the backfill of

several graves, particularly in the trench opened for the installation of the septic tank. This material was not osteologically analysed. With the exception of skeleton 17 , the skeletons were not washed prior to analysis. This did prove problematic, as a number of skeletons were too muddy to accurately assess the presence of many diseases on the bones and teeth. As a result, the prevalence of pathologies, such as periostitis, is likely to be under-reported in this assemblage.

5.1.3 The burial tradition at St Nicholas' is in keeping with established Christian burial traditions of the post-medieval period. All individuals were orientated west-east, and with the exception of the neonate (skeleton 5), were laid out in a supine and extended body position. Skeleton 5 was positioned on its left side with legs loosely flexed. All burials had been placed within wooden coffins. The coffin furnishings on these indicates that the burials are post-medieval, probably Georgian or Victorian in date.

Methodology

5.1.4 Adults were aged by a combination of methods, including ageing from the pubic symphysis (Todd 1921; Suchey and Brooks 1990), auricular surface (Lovejoy *et al* 1985), cranial suture closure (Meindl and Lovejoy 1985) and sternal rib ends (Bass 1987). The dental attrition method of Miles (1962) was not employed, as it tends to grossly underestimate age for later populations. Subadults were aged by dental development (Moorrees *et al* 1963), by epiphyseal fusion (Bass 1987; Schwarz 2000) and by diaphyseal long bone length (Scheuer et al 1980; Maresh in Hoppa 1992).

5.1.5 Sexing of adults was determined from the skull and pelvic morphology (Buikstra and Ubelaker 1994), and from metric data (Workshop 1980). No attempt was made to sex subadults, in accordance with accepted practice.

5.1.6 Stature of adults only was estimated from combined femoral and tibial long bone length measurements, using the regression formulae developed by Trotter (1970).

The dental notation employed in the catalogue is as follows:

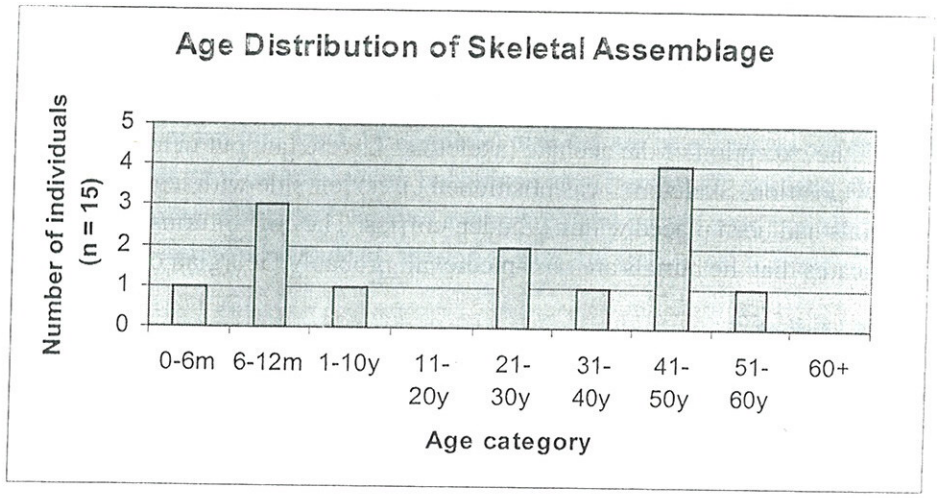
/ post mortem loss	X ante mortem loss
C caries	A abscess
NP not present	U unerupted
E erupting	PE pulp exposed
k calculus	- alveolus and tooth absent

Assemblage composition

5.1.7 The assemblage comprised three adult males, six females, one adult of sex and five subadults. The last were aged from between late foetal or newborn and 1- 1.25 years. There was an absence of children and adolescents, and a preponderance of females over males. The number of infants in the assemblage reflects the high infant mortality rates pervasive in pre-modern societies. The preponderance of women over

men is probably an artefact of the small size of the sample, and demographically cannot be regarded as significant save for the children.

Graph 1 Bar graph showing the distribution of ages within the skeletal population of St Nicholas, Forest Hill (n = 15)



Stature estimation

5.1.8 It was possible to estimate the stature of all the adult individuals in the assemblage. The overall mean stature was estimated at 1.644 m. Males had an average stature of 1.677 m or 5' 6" (n = 3) and the females 1.617 m or 5' 4" (n = 6).

Skeletal pathology

Trauma

5.1.9 The only evidence for trauma was observed on a female aged upwards of 40 years (skeleton 49). The head of the right femur had been crushed inferiorly and posteriorly, such that the neck of the femur was foreshortened. There was thickening of the bone at the junction of the head and neck of the bone. This injury must have occurred some time before death as remodelling of this new bone was advanced, if not complete. The articular surface of the head was slightly porous but lacked evidence of eburnation. The fracture of the neck of femur is today a very common consequence of osteoporosis and particularly affects post-menopausal women.

Infectious disease

5.1.10 Three individuals had osteological evidence of chronic infections. Skeleton 46 had woven bone overlaying the normal bone of her para-nasal sinuses bilaterally, such that the surfaces of the sinuses appeared roughened, rugged and porous. These changes are normally indicative of chronic sinusitis (Aufderheide and Rodriguez-Martin 1998), frequently caused by poor ventilation, allergy and the chronic exposure to polluted sooty air. This disease is particularly common in the smoggy cities of post-medieval Europe, and prevalence increased in line with air pollution associated with industrialisation. It is possible that this female may have lived for some time in such a city, or may have lived and/or worked in sooty and poorly

ventilated conditions (such as a forge or even a domestic setting) in this more rural environment.

5.1.11 Skeleton 62 displayed woven bone on the visceral surfaces of a number of ribs. The remodelling of the new bone indicates that the rib lesions were not active at the time of death. Skeleton 17 also displayed rib lesions on the visceral surface of five right and three left mid-to-lower thoracic ribs. Like the rib lesions of skeleton 62, the bone was extensively remodelled. Such lesions form in response to inflammation of lung tissue adjacent to the ribs in question. Roberts *et al* (1998; 56-57) report that they may also form in response to a wider number of chronic chest infections, such as chronic bronchitis and prolonged pneumonia, and more rarely metastatic carcinoma. However, they write that there remains a very high probability that they are the result of tuberculosis. Respiratory disease was commonplace in the medieval and post-medieval period. Chundun in Roberts and Manchester (1995; 141) reported a prevalence of 17.7% in rib lesions in a medieval hospital cemetery. Respiratory diseases continued to be widespread in the post-medieval period, in particular tuberculosis, which became increasingly prevalent from the 17th century onwards. By the early 19th century pulmonary tuberculosis was the most common cause of death, afflicting 400-500 in every 1,000,000 people (Roberts and Cox 2003; 338). Thus, it is very possible, but not conclusive that these two individuals suffered from tuberculosis.

5.1.12 Skeleton 17 also displayed lesions on the parietal bones of the skull. A horizontal craniotomy had been performed on the corpse. The posterior two-thirds of the parietal bones of the skull of skeleton 17 showed a spread of well healed lesions on the ectocranial surface. The ectocranial surface was raised due to new bone formation, presenting a dimpled appearance. The lesions had largely remodelled, indicating that some time had passed between their development and the death of the individual. They did not penetrate to the endocranial surface and it was impossible to establish if they involved the diploe. They lacked the classical purse-string appearance of healed *caries sicca,* associated with syphilis. There were no other lesions indicative of syphilis on the facial bones or post-cranial skeleton. It would appear that the skull lesions were the result of a non-specific periostitis or osteomyelitis, which probably began as an infection of the scalp, penetrating to the bone beneath. This infection may have been primary in origin or caused by a secondary bacterial infection of skin lesions resulting from, say, psoriasis or eczema of the scalp (Ortner and Putchar 1981; 120).

Degenerative joint disease

5.1.13 Five individuals (17, 46, 65, 69 and 90) suffered from degenerative changes to the spine, most commonly involving the thoracic vertebrae. Such changes are commonly age related, although physical activities, lifestyle and diet all play a role (Roberts and Manchester 1995; 114). All five of the above individuals were aged over 40 years, and so such wear and tear to the vertebrae was not unexpected. Skeleton 17 (the oldest individual in the assemblage) suffered the most marked osteoarthritic changes of the group. They affected thoracic vertebrae T4 to T12, particularly the bodies on the right side. The bodies of T3 and T4 were fused on the right side. Minor porosity

was observed on the bodies of many vertebrae, and marked eburnation, osteophytosis and porosity to superior and inferior facets, particularly on the left side. Minor degenerative joint disease (DJD) was observed bilaterally on the clavicular articular facet of the scapula, and minor lipping of the humeral heads and glenoid fossae, and acetabulae was also present. Severe macroprosity and osteophytosis of the distal ciavicular facet was present bilaterally, but was more marked on the left. Macroporosity of this joint was also noted in skeleton 35.

Table 3 Summary of palaeopathology noted on the skeletons from St Nicholas, Forest Hill

Summary of the pathology of the St. Nicholas' skeletal population (n = 15)								
Skeleton No	Age	Sex	Stature	Infections	DJD	Trauma	Metabolic disorders	Congenital anomalies
5	late foetal	unknown						
7	1- 1.5 y	unknown					rickets	
17	50y+	male	1.59 m	rib & ectocranial lesions	T4-12;shoulder;pelvis		rickets	
21	25-29 y	female	1.66 m					
30	1 y	unknown						
35	40 - 55 y	female	1.56 m		L & R clavicles			severe scoliosis
39	30 - 40 y	female	1.6 m					
46	40+ y	female	1.68 m	chronic sinusitis	osteophytes T6-L5	# R neck of femur		
62	40 - 44 y	female	1.59 m	rib lesions				
65	50 - 55 y	male	1.71 m		T5-T6, slight			
66	28 - 35	female	1.61 m					fused C2-3; 6 sacral segments
69	adult	indeterminate	1.73 m		fused thoracic bodies			
81	8 - 13 m	unknown						
85	6 m +	unknown						
91	40 - 50 y	male	1.73 m		C2-T12; glenoid fossa			
Total = 15								

5.1.14 Spinal degenerative joint disease (SDJD) was observed in two fused mid-thoracic vertebrae of skeleton 69. Unfortunately, due to truncation by a later grave this skeleton was incomplete and the true extent of this pathology cannot be known. Minor osteophyte formation was observed on the bodies of T5 and T6 of skeleton 65, and on the bodies of T6 to L5 of skeleton 46. In skeleton 91 these changes involved the whole spine, from C2 to L5, with considerable pitting and new bone formation on the cervical vertebral bodies, and marked eburnation of the dens of the axis. Schmorl's nodes were present on the bodies of T9 to T12.

Metabolic disorders

5.1.15 The lower limbs of two skeletons (7 and 17) displayed evidence of rickets. In both the infant and the adult, the femora showed exaggerated anterior-posterior curvature, whilst the shafts of the tibiae were bowed inwards medio-laterally. Skeleton 7 also displayed slight flaring of the metaphyses of the femur and tibia. These are changes

typical of rickets. Rickets is a disease caused by a deficiency of vitamin D. Vitamin D is central to the absorption of calcium, a deficiency of which results in soft thin bones. Weight-bearing during crawling and walking cause the shafts of the bones to bow. Because no changes were noted on the left humerus of skeleton 7 it is likely that the disease did not manifest whilst the child was still crawling. Although Vitamin D may be obtained in some foodstuffs, such as oily fish and animal fat, the majority of vitamin D is formed by the exposure of the skin to ultraviolet light. The presence of rickets usually indicates an individual who had not received sufficient exposure to sunlight in early childhood. Rickets is fairly uncommon in pre-industrial and rural agrarian societies (Ortner and Putschar 1981; 274). The 17th century physician Francis Glisson described rickets in considerable clinical detail, noting that that it was a disease of childhood, not usually manifesting before the child was 9 months old. He noted that it was commoner in children of the wealthy, where it was common practice not to suckle by their mother, but by a wet nurse (Sloan 1996; 44). This usually resulted in early weaning onto gruels high in calories but poor in animal fat, and hence, low in vitamin D (Steinbock 2003; 281-282). These socio-economic factors coupled with dressing the infant in swaddling clothes and being kept indoors, may well have resulted in rickets in one or both the rachitic individuals from St Nicholas.

Congenital anomalies

5.1.16 Severe scoliosis was noted in the spine of skeleton 35, a middle-aged woman. The spine formed a tight S-shape, with C4 to T1 deviating to the left of the mid-line, and T7 to T9 returning to the midline, and then curving to the right from T10 to L2. Considerable wedging of a number of the vertebral bodies was evident. The ribs were deformed to accommodate the scoliosis. The right ribs were wasted and angled very acutely, suggesting that they had been severely compressed. On the left, the ribs were thinned out and two had fused together. Considerable SDJD of the costal facets of the thoracic vertebrae, and the bodies of some of the lumbar vertebrae was associated with this anomalous curvature. The internal organs, particularly the lungs, would have been compressed, possibly causing respiratory problems as well as an increased risk of blockages in the intestines. This type of spinal deformity may be caused by trauma (Auderheider and Rodriguez-Martin 1998; 66-67), but the severity of the deformity in this individual, and the morphological changes to the ribs indicate that the scoliosis was congenital.

5.1.17 Skeleton 66 was found to have fused C2 and 3 vertebrae and an additional sacral segment. This was not due to sacralisation as the normal number of lumbar vertebrae were present.

Craniotomy

5.1.18 Skeleton 17 had undergone a post-mortem craniotomy in the horizontal plane. No other saw marks were visible on the skull or post-cranial skeleton, suggesting that the medical investigations were restricted to the cranium and possibly the soft tissues only. Why this individual should have undergone this craniotomy is unclear, but it may well relate to the presence of infectious disease of the ectocranium observed osteologically (see section 3.1.8).

5.1.19 Skeleton 17 was buried within a moderately decorated wooden coffin, having a breastplate, iron grip plates and studs. The style of the grips suggests that the burial was broadly mid-Georgian to early Victorian in date. In this period post-mortem dissection was an uncommon procedure, and often one over which the deceased and their relatives exercised little control. In the 18th century there was a growing need in medical institutions for cadavers on which students might learn anatomy and practice dissection. In 1752 the Company of Surgeons was granted the corpses of all executed felons. However, demand far outstripped supply, and many additional cadavers were supplied to anatomy halls by 'resurrectionists', who raided graveyards, exhuming corpses and selling them on for a handsome profit (Porter 1997; 318). Public outrage at this practice reached a height in 1829 with the notorious case of Burke and Hare. The outcome of this outrage was the passing of the Anatomy Act (1832), in which the medical profession could take for dissection all 'unclaimed bodies' of those dying without family or dying in the workhouse or hospitals. As a result of the act there was a reduction in body-snatching, but the act also served to deepen the fear and shame amongst the poor of dying on the parish. The antipathy to the notion of being dissected was based around religious and social perceptions. The Christian belief in the resurrection of the whole body on Judgement Day led to fears that dissection would damage the spiritual state of the dissected person. A deep-seated solicitude for the corpse causes reactions of revulsion at the indignity that the body suffered during exhumation and dissection. Particularly with regards to female corpses, the physical exposure of the naked body to the gaze of young men was perceived as harrowing, a process tantamount to sexual assault (Rugg 1999; 225). In view of these almost universal sentiments regarding dissection at this time, it is puzzling that skeleton 17 had undergone a craniotomy, yet was buried with due formality in a fairly expensive coffin close to the northern nave of the church. He lies alongside Mrs Mickle (coffin 15), evidently a woman of high social standing. This strongly suggests that he was neither a felon, nor one who had died in a friendless impecunious state. It is possible that he consented before death to the procedure, possibly due to unusually progressive views about medicine and the academic necessity for dissection. Alternatively, the craniotomy may have been performed surreptitiously by a curious doctor interested in the lesions on his scalp and cranial vault. Such craniotomies are fairly easy to hide from the incurious if the dissection of the skin is concealed within the hairline. It is possible that his family may have buried him remaining none the wiser of this intervention.

Dental pathology

5.1.20 A summary of the dental pathology is displayed below in Table 2. Calculus prevalence was not calculated given the rather muddy unwashed condition of the skeletons, and dental enamel hypoplasia (DEH) rates were only attempted in a few of the skeletons. There was no pathology noted on the deciduous teeth present. The prevalences cited below relate to the permanent dentition only.

5.1.21 Dental pathology, such as periodontal disease, caries and define, frequently relates to the consumption of carbohydrates and to poor oral hygiene practices. Food residues left on the teeth following consumption of carbohydrates rapidly become colonised by bacteria, and are broken down to form a corrosive plaque. It is this

plaque that is responsible for the development of carious lesions on the teeth. Plaque may also mineralise, forming a hard unmovable coating of calculus on the tooth surface, colloquially known as tartar. Periodontal disease is the inflammation of the soft tissues of the mouth, namely the gums, and/or the periodontal ligament and alveolar bone. Retraction of the gums exposes the vulnerable root of the tooth to attack by acidic plaques, commonly resulting in caries, abscesses and ante-mortem tooth loss. Periodontal disease may be localised to two or three teeth (as were both cases cited in Table 2 below), or may be more diffused.

Table 4 Prevalence of dental pathology in the permanent dentition of skeletons from St Nicholas, Forest Hill (n = 15)

Dental Pathology							
Skeleton No	**Age**	**Sex**	**Dental caries**	**DEH**	**AMTL**	**Peridontal disease**	**Dental abscess**
5	late foetal	unknown					
7	1 -1.25y	unknown		3/3			
17	54-64 y	male	1/6		23/32	considerable	2
21	25-29 y	female	2/31		0/3		
30	1 y	unknown					
35	40 - 55 y	female	1/4	3/5	27/32	severe	
39	30 - 40 y	female	0/29		7/29	slight	
46	40+ y	female	1/2	2/2	30/32	considerable	
62	40 - 44 y	female	3/14		15/29	slight	2
65	50 - 55 y	male	0/3		22/25	moderate	
66	28 - 35	female	3/25		2/31		
69	adult	indeterminate					
81	8 - 13 m	unknown					
85	6 m +	unknown					
91	40 - 50 y	male	0/31		14/31	slight	1
Prevalence			**11/145 (7.58%)**	**8/10 (80%)**	**141/231 (60.6%)**	**7/9 (77.78%)**	

Dental Caries

5.1.22 Dental caries were evident on 11 of 145 teeth with erupted and intact crowns. This is a prevalence of 7.58%. These caries ranged in size from slight to moderate and were found on all aspects of the tooth crown. Dental caries develop as a result of poor oral hygiene and a diet high in carbohydrates. Processed sugar is particularly destructive to dental enamel. Over the 18th and 19th centuries sugar became widely available, falling prices making it financially affordable by all but the very poor. Dental decay followed in its wake, and caries and tooth loss became more widespread in the population.

Ante-Mortem Tooth Loss

5.1.23 Ante-mortem tooth loss (AMTL) was present in all but the youngest adult (skeleton 21). Among the individuals aged upwards of 40 years, tooth loss was pronounced. The prevalence in this population was 141 teeth lost from the 231 sockets present (60.6%). Although teeth were sometimes drawn electively, in anticipation of the agonies of toothache in later life, or lost as a result of trauma, it is likely that most teeth were lost as a result of periodontal disease and resultant caries. AMTL is age-

related and hence it is no surprise that the older members of the skeletal population at St Nicholas suffered such high rates of tooth loss.

Periodontal disease and dental abscesses

5.1.24 Periodontal disease means any ailment of the supporting structures of the teeth, including the gums, periodontal ligament and alveolar bone. It may be divided into two distinct but not mutually exclusive processes: gingivitis or inflammation of the gums, and periodontitis, the destructive loss of bone and connective tissue attachments that anchor the teeth in the jaw (Levin 2003; 244). On skeletal tissue this is evident from the resorption of the alveolar bone leaving the roots of the teeth exposed. Deposition of calculus below the cemento-enamel junction is frequently noted. In the St Nicholas' population seven of the nine adults that had extant dentition had periodontal disease (77.78%), ranging in severity from slight to considerable.

5.1.25 Severe disease of a tooth may result in infection tracking down to root canal or around the root to the apex of the root, resulting in a dental abscess. In untreated cases the pressure of the inflammation and accumulated pus forces a path through the alveolar bone, leaving behind a smooth-sided lesion in the jaw. Three individuals displayed such lesions. Skeletons 17 and 62 had two each, whilst skeleton 91 had one.

Dental Enamel Hypoplasia

5.1.26 Dental enamel hypoplasia (DEH) manifests on the buccal surface of the crowns of teeth as pits, horizontal lines or lines of pits. It is a thinning of the enamel of the crown that reflects an interruption or slowing of the normal deposition of enamel during crown formation in the first six or seven years of life (Goodman and Rose 1990). This may be due to a prolonged episode of illness or malnutrition during childhood. Unlike bone, enamel does not remodel throughout life and so remains as a permanent indicator of such an episode of stress in the early years of life.

5.1.27 In the St Nicholas population many teeth were too dirty to be able to assess DEH. In the small number of teeth examined (10) the prevalence was 8 (80%). In the newly forming crown of the first maxillary incisor of skeleton 7, marked DEH was noted mid-crown. This may well be in response to the rickets from which the young child was suffering.

Non-metric traits

5.1.28 Because only low-resolution analysis was undertaken and because the bones were unwashed, non-metric traits were not formally recorded. Those traits noted in passing were an open metopic suture on adult skeleton 21. An adult skull forming part of the charnel also displayed this inherited trait, and it is possible these two individuals were related. Skeleton 17 displayed a palatal torus.

Burial practices

5.1.29 The manner of burial of the 15 individuals excavated at St Nicholas' reflects contemporary practices elsewhere in the 18th and 19th centuries. All individuals were

orientated west-east in established Christian tradition. All but the late foetus/ newborn (skeleton 5) were laid out supine and extended. Skeleton 5 was laid out on its left side with the limbs gently flexed. In all burials the feet were placed close together and had probably been loosely bound post-mortem. The arms were either extended and arranged close to their sides, with the hands lying alongside the thighs, or were flexed at the elbow with hands overlying the abdomen or pelvis.

Table 5 Summary of the burial practices evident from the excavations at St Nicholas' (n = 15)

Burial practices at St Nicholas', Forest Hill							
Skeleton No	**Completeness**	**Preservation**	**Orientation**	**Posture**	**Coffin**	**Fastenings**	**Grave goods**
5	50-75%	fair	W-E	left side	wood	shroud pins	nil
7	40-50%	fair	W-E	supine	wood	shroud pins	nil
17	near complete	good	W-E	supine	wood	nil	nil
21	near complete	excellent	W-E	supine	wood	buttons	nil
30	25-30%	good	W-E	supine	wood	shroud pins	nil
35	near complete	good	W-E	supine	wood	nil	nil
39	near complete	excellent	W-E	supine	wood	nil	cu alloy earrings
46	near complete	good	W-E	supine	wood	buttons	nil
62	near complete	good	W-E	supine	wood	buttons	nil
65	near complete	good	W-E	supine	wood	nil	nil
66	near complete	good	W-E	supine	wood	shroud pins	nil
69	40-50%	good	W-E	supine	wood	nil	nil
81	50-60%	fair	W-E	supine	wood	buttons & pins	nil
85	cranium only	poor	W-E	supine	wood	shroud pins	nil
91	near complete	good	W-E	supine	wood	nil	nil

5.1.30 All individuals had been buried in a coffin. More detailed description of the coffins may be found in the section entitled 'Coffin Fittings'. The existence of pins suggests that at least five individuals had been wrapped in a winding sheet or shroud. Four had buttons within the grave, suggesting that they may have been buried in personal clothes rather than the nightdress-like shrouds that were coming into vogue in this period. Other than this, only skeleton 39 was accompanied by any personal effects. She had been buried wearing a pair of plain copper alloy hoop earrings.

Catalogue

Skeleton number 5
Completeness: 50-75%
Preservation: fair
Age: late foetal/ neonate
Sex: unknown
Dental inventory: no teeth present
Pathology: nil noted

Skeleton number 7
Completeness: 40-50%
Preservation: fair
Age: 1-1.25 y
Sex: unknown
Dental inventory:

						U	U								
/	/	/	/	/	/	1	1	a	-	-	-	-	-	-	-
/	/	/	/	/	2	/	/	b	/	/	d	-	-	-	-
					U										

Dental Pathology severe DEH on mid-crowns of all permanent teeth
Pathology: rickets (legs)

Skeleton number 17
Completeness: near complete
Preservation: good
Age: 54-64 y
Sex: male
Stature: 1.59 m
Dental inventory:

	C														A	
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	X	6	/	X	3	X	/	X	X	/	4	5	X	X	8	
													A	A		

Dental Pathology dental caries 1/6; healing abscesses x 2; considerable peridontal disease; moderate to severe calculus; AMTL 23/32
Pathology: rickets; SDJD of T4-T12; DJD of clavicles and acromium process, and humeral heads; healed non-specific infection of ectocranium of parietal bones; healed rib lesions on visceral surfaces of R and L mid-thoracic ribs; craniotomy

Skeleton number 21
Completeness: near complete
Preservation: excellent
Age: 25-29 y
Sex: female
Stature: 1.66 m
Dental inventory:

	PE														
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8
		C	C												

Dental Pathology caries 2/31
Pathology: nil noted; open metopic suture

Skeleton number 30
Completeness: 25-30% (lower legs only)
Preservation: good
Age: 1 y
Sex: unknown
Dental inventory: No teeth present
Pathology: nil noted

Skeleton number 35
Completeness: near complete
Preservation: good
Age: 40-55 y
Sex: female
Stature: 1.56 m
Dental inventory:

	C															
8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	1	2	3	X	X	X	X	X	

Dental Pathology dental caries 1/4; DEH 3/5- two lines per tooth; considerable calculus on mandibular teeth, slight on maxillary tooth; AMTL 27/32; considerable peridontal disease
Pathology: severe scoliosis involving whole thoracic spine- S-shaped curvature; DJD: bilateral moderate pitting of medial and lateral articular surfaces of clavicles

Skeleton number 39
Completeness: near complete
Preservation: excellent
Age: 30-40 y
Sex: female
Stature: 1.60 m
Dental inventory:

X	X	X	5	4	3	2	1	1	2	3	4	5	6	X	8
/	X	6	/	/	3	2	1	1	2	3	5	6	X	X	X

Dental Pathology AMTL 7/29; slight peridontal disease
Pathology: no pathology noted

Skeleton number 46
Completeness: near complete
Preservation: good
Age: 40+ y
Sex: female
Stature: 1.68 y
Dental inventory:

X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	3	2 C	X	X	X	X	X	X	X	X	X

Dental Pathology caries 1/2; AMTL 30/32; considerable peridontal disease; DEH 2/2- 2 lines/ tooth
Pathology: fractured right neck of femur (healed); SDJD of T6-L5; chronic sinusitis

Skeleton number 62
Completeness: near complete
Preservation: good
Age: 40-44 y
Sex: female
Stature: 1.59 m
Dental inventory:

		C			A	R									
X	X	6	X	X	3	2	X	1	X	3	4	X	X	X	X
-	X	6	5	4	3	2	1	1	2	X	X	X	X	/	-
		C			R	R		C							
						A									

Dental Pathology caries 3/14; AMTL 15/29; dental abscess x 2; slight peridontal disease
Pathology: healed new bone of visceral surfaces of mid-thoracic ribs

Skeleton number 65
Completeness: near complete
Preservation: good
Age: 50-55 y
Sex: male
Stature: 1.71 m
Dental inventory:

-	-	-	-	X	3	X	X	X	X	X	X	X	-	-	-
X	X	X	X	X	X	X	X	X	2	3	X	X	X	X	X

Dental Pathology AMTL 22/25; moderate peridontal disease: slight calculus on all teeth
Pathology: Slight SDJD of T5 and T6 (lipping)

Skeleton number 66
Completeness: near complete
Preservation: good
Age: 28-35 y
Sex: female
Stature: 1.61 m
Dental inventory:

								C	C		R				R
8	7	6	5	X	3	/	/	1	2	3	4	5	6	7	8
8	7	X	5	4	3	2	1	1	2	3	4	5	6	7	8
R														C	

Dental Pathology caries 3/25; AMTL 2/31; heavy calculus on maxillary crowns
Pathology: no pathology noted; congenital anomalies of spine: C2 & 3 fused; 6 sacral segments, 5 lumbar vertebrae

Skeleton number 69
Completeness: 40-50% (legs, R pelvis; R forearm)
Preservation: good
Age: adult
Sex: indeterminate
Stature: 1.73 m
Dental inventory: no dentition present
Pathology: DJD- 2 fused thoracic bodies (probably mid-thoracic)

Skeleton number 81
Completeness: 50-60%
Preservation: fair
Age: 8-13 months
Sex: unknown
Dental inventory:

		U	PE	PE	PE	PE	PE	PE	PE	PE	PE	U
		e	d	c	b	a	a	b	c	d	e	
6	e	5	d	c	b	a	a	b	c	d	e	
U	U	U	PE	U	PE			PE	U	PE	U	

Dental Pathology nil noted
Pathology: nil noted

Skeleton number 85
Completeness: cranial vault only
Preservation: poor
Age: 6 months + (infant-sized, probably less that a year)
Sex: unknown
Dental inventory: no teeth present
Pathology: nil noted

Skeleton number 91

Completeness: near complete
Preservation: good
Age: 40-50 years
Sex: male
Stature: 1.73 m
Dental inventory:

							A								
	-	7	X	X	4	X	2	1	1	2	X	X	X	X	X	X
	8	X	X	5	X	3	2	1	1	2	3	4	X	X	X	8 R

Dental Pathology slight peridontal disease; slight calculus on all anterior teeth; AMTL 14/31
Pathology: SDJD - considerable pitting C1-7; eburnation on dens of C2; T5-L5 slight lipping on bodies; T9-12 Smorl's nodes; T1-L5 slight porosity on bodies; R and L glenoid fossa slight lipping of margins

6 DISCUSSION AND INTERPRETATION

6.1.1 The excavation uncovered a total of 23 graves dating from the late 18th century to the early 19th century. This was confirmed by the dating of certain artifacts. These were in the form of personal items of clothing and jewellery found with the skeletons. The varied number of coffin fittings recovered from the graves and the pottery and objects mixed in with the backfills of the grave cuts date from the post-medieval period, most probably from the 18th century to 1850, when the churchyard ceased to be used for burial.

6.1.2 The graves were in rows extending northwards and all were cut into the natural. The graves were orientated west-east, and with the exception of the neonate (skeleton 5), were laid out in a supine and extended body position within wooden coffins. This was in keeping with established Christian burial traditions of the post-medieval period. The lack of charnel and earlier grave cuts suggests that the graveyard layout was that of the medieval attitude, being that the north side of the church was less holy. With most people wanting to be buried on the east and south side of the church, hence the later burials in the churchyard being on the north side as the graveyard filled up.

6.1.3 The 15 skeletons analysed during the excavation comprised a mixed group ranging from newborn babies to the elderly. They all suffered from a number of health problems, which left traces on the bones. These were from joint problems on five of the skeleton aged over 40 years, resulting from wear and tear of a hard working life and poor diet. Three skeletons had osteological evidence of chronic chest infections caused by poor ventilation, allergy and the chronic exposure to polluted sooty air. This is particularly common in the smoggy cities of post-medieval Europe, and increased with air pollution associated with industrialisation. It is possible that these skeletons may have lived for some time in a city, or may have lived or worked in sooty and poorly ventilated conditions (such as a forge or even a domestic setting) in this more rural environment.

6.1.4 Two of the skeletons, that of a young child and an old man (7 and 17) were found to be suffering from rickets and the skeleton of a middle aged woman was suffering from scoliosis, which was probably congenital.

6.1.5 The burials were all laid in a wooden coffin, except that of a newborn baby (4) who lay in a shroud on top of a young child's coffin. The coffins were all wood with tin plated and iron fittings, except the coffin of Mrs Mickle, which had an inner lead lined coffin. A brick-lined shaft grave (52) lay within the vestry footprint. It contained two coffins and probably served as a family vault. Some of the graves were marked with head-and footstones, but these had been removed during the late 19th-century re-ordering of the graveyard.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Context No	*Type*	*Width (m)*	*Length (m)*	*Depth (m)*	*Comment*	*Finds*
1	Layer				Topsoil of graveyard	
2	Layer				Subsoil	
3	Natural				Natural of sand and clay loam	
4	Cut	0.28 m	0.62 m	0.03 m	Grave cut for infant burial	
5	Skeleton				Skeleton of baby	
6	Fill				Fill of grave 4	
7	Skeleton				Skeleton of infant	
8	Cut	0.4 m	1.18 m	0.12 m	Grave cut for infant burial	
9	Fill				Fill of grave 8	
10	Cut	0.3 m	0.8 m	0.11 m	Cut for headstone	
11	Fill				Fill of 10	
12	Cut	0.28 m	0.45 - 55 m		Cut for headstone	
13	Fill				Fill of 12	
14	Coffin				Coffin of skeleton 7	
15	Coffin				Lead coffin	
16	Cut	0.45 m	2.25 m	0.22 m	Grave cut	
17	Skeleton				Skeleton of adult	
18	Coffin				Coffin of skeleton 17	
19	Fill				Fill of 16	
20	Cut	0.4 m	2 m	0.24 m	Grave cut	
21	Skeleton				Skeleton of adult	
22	Coffin				Coffin of skeleton 21	
23	Fill				Fill of 20	
24	Cut	0.34 m	0.85 m	0.45 m	Grave cut for infant burial	
25	Fill				Fill of 24	
26	Cut	0.5 m	2 m	0.73 m	Grave cut	
27	Fill				Fill of 26	
28	Cut	0.38 m	0.5 m	0.06 m	Grave cut for infant burial	
29	Fill				Fill of 28	
30	Skeleton				Skeleton of infant	
31	Cut	1.2 m	1.25 m	0.5 m	Construction cut for C19th heating duct	

Context No	*Type*	*Width (m)*	*Length (m)*	*Depth (m)*	*Comment*	*Finds*
32	Structure	0.37 m		0.3 m	19th Century heating duct	
33	Fill				Fill of 31	
34	Cut	0.5 m	1.94 m	0.68 m	Grave cut	
35	Skeleton				Skeleton of adult	
36	Coffin				Coffin of skeleton 35	
37	Fill				Fill of 34	
38	Cut	0.45 m	2.1 m	0.41 m	Grave cut	
39	Skeleton				Skeleton of adult	
40	Coffin				Coffin of skeleton 39	
41	Fill				Fill of 38	
42	Cut	0.48 m	2 m	0.44 m	Grave cut	
43	Cut	0.16 m		0.05 m	Posthole	
44	Fill				Fill of 43	
45	Cut	0.48 m	2 m	0.7 m	Grave cut	
46	Skeleton				Skeleton of adult	
47	Coffin				Coffin of skeleton 46	
48	Fill				Fill of 45	
49	Cut	0.32 m		0.12 m	Posthole	
50	Fill				Fill of 49	
51	Cut	0.85 m	2.4 m	1.05 m	Cut for brick lined vault	
52	Structure	0.62 m	2.26 m	1.05 m	Brick lining	
53	Structure				Capping stones	
54	Fill				Fill between cut 51 and lining 52	
55	Cut	0.75 m	2 m	0.35 m	Grave cut	
56	Fill				Fill of 55	
57	Cut	0.64 m	2.16 m	0.44 m	Grave cut	
58	Fill				Fill of 57	
59	Coffin				Coffin of skeleton 65	
60	Coffin				Coffin of skeleton 62	
61	Fill				Fill of 42	
62	Skeleton				Skeleton of adult	
63	Fill				Fill of 64	
64	Cut	0.30 m		0.08 m	Posthole	
65	Skeleton				Skeleton of adult	

Context No	*Type*	*Width (m)*	*Length (m)*	*Depth (m)*	*Comment*	*Finds*
66	Skeleton				Skeleton of adult	
67	Coffin				Coffin of skeleton 66	
68	Cut	0.4 m	1.3 m	0.18 m	Grave cut	
69	Skeleton				Skeleton of adult	
70	Fill				Fill of 68	
71	Cut	0.3 m	0.8 m	0.3 m	Cut for memorial slab	
72	Fill				Fill of 71	
73	Cut	0.6 m	0.9 m		Grave cut	
74	Fill				Fill of 73	
75	Cut	0.34 m	5 m	0.11 m	Construction trench for brick gully	
76	Structure				Brick gully	
77	Cut		5 m	0.59 m	Foundation trench for church	
78	Structure				1851 wall foundation	
79	Fill				Fill between wall 78 and cut 77	
80	Cut	0.35 m	0.99 m	0.08 m	Grave cut for infant burial	
81	Skeleton				Skeleton of infant	
82	Coffin				Coffin of skeleton 81	
83	Fill				Fill of 80	
84	Cut	0.38 m	1.04 m	0.45 m	Grave cut for infant burial	
85	Skeleton				Skeleton of infant	
86	Coffin				Coffin of skeleton 85	
87	Fill				Fill of 84	
88	Cut	0.45 m	0.21 m	0.02 m	Grave cut	
89	Fill				Fill of 88	
90	Cut	0.76 m	2 m	1.27 m	Grave cut	
91	Skeleton				Skeleton of adult	
92	Coffin				Coffin of skeleton 91	
93	Fill				Fill of 90	
94	Cut	0.4 m	1.25 m	0.3 m	Grave cut	
95	Fill				Fill of 94	
96	Cut	0.4 m	1 m	0.28 m	Grave cut	
97	Fill				Fill of 96	
98	Cut	0.5 m	1.8 m	0.18 m	Grave cut	
99	Fill				Fill of 98	

Context No	*Type*	*Width (m)*	*Length (m)*	*Depth (m)*	*Comment*	*Finds*
100	Stone				Foot stone	
101	Stone				Foot stone for grave 55	
102	Stone				Foot stone for grave 16	
103	Floor			0.1 m	concrete floor for old shed	
104	Layer			0.02 m	Ash and cinder layer	
105	Layer			0.09 m	Hardcore base	
106	Cut				modern construction cut for boundary wall	
107	Fill				Consolidating material	
108	Cut			0.33 m	Foundation cut for boundary wall	
109	Fill				Hardcore base	

Appendix 2 Notes on Church and Churchyard Alterations in 1852

From the notes by the Reverend C F Wyatt, vicar 1848-1870

On Easter Day (April 11) 1852, the old dilapidated, ill-arranged, decayed and dirty Church of St Nicholas, Forest Hill, was used for God's Service for the last time in that sad state.
On Easter Tuesday the builder (George Wyatt of Oxford, under the directions of Mr G Scott, the architect) commenced clearing away the ground for the New Aisle on North side. The churchyard soil had accumulated to several feet above the floor level of the Church making it very damp and mouldy. Owing to their advancement in decay it did not take long to sweep away the unsightly deal pews, the few open oak seats (of the time of Charles?) and the cupboard which occupied the inside of North doorway (used for rubbish) together with a very cumbrous gallery which bisected the perpendicular West window and projected as far as the South West window, serving as a sleeping or talking place for the idle. The builder was bid fifteen shillings for the interior fittings! A thin oak Pulpit with sounding board, painted oak (probably tem.Geo.1) stood above a small desk in the North East angle of Nave, The Rose in centre of sounding-board has been preserved. The Clerk stood facing the East in a position which brought his nose, vis-à-vis, within 2 feet of the Presbyter officiating. Two great square Pews used to occupy the Chancel on either side to altar steps. The altar rails in pattern and as far as they were of cedar were Laudian, and would have been preserved had not more than two parts of them been patchwork (deal and oak) all painted over of a very heavy design. The rails themselves corresponded with the legs of Communion Table, which is entirely of cedar and good of its kind. Two large monuments projected on either side to near the Communion Table. That on the North side was removed to East end of Vestry, that on the South side (which completely walled up the South East window) was re-fixed in the North wall of Aisle. The monument of Mrs Ann Heywood placed above it was formerly attached to the wall where the Vestry arch now is. The tablet to the memory of Jane, J Boughton was refixed near its original spot only on the exterior of Nave North wall. The Schutz monuments were not touched. The lettering of all the Heywood monuments was repainted, and rendered much more legible thereby. The South wall of Chancel was entirely rebuilt, the window stones being carefully replaced in the position they occupied originally. On some of these stones (externally) may be seen small crosses roughly scratched – the same occurs on the cill of the low side window now in Vestry (vide Gent. Mag. May 1852 p. 446 where crosses are spoken of as being on the external walls of Churches left from time of their Consecration.) Near where they South end of rail touches the wall was discovered a plain circular arch, doubtless the original Piscina, tho' no drain could be found: subsequently, however, one stone was discovered thrown in among the walling-stones (v. Drawing opp) which evidently was a part of the Piscina, having a perforation through it – it has now been placed between a basin and a shaft in front of the old arch which has been moved to the eastward of the Sedilia. The two Sedilia are new : from the old ones not being traceable, Mr Scott thought they were probably of wood. Under the South West window of Chancel were some curious cupboard like jambs, but nothing could be inferred from them. The stairs and doorway to Roodloft were opened in 1849, and the Chancel roof unceiled, boarded, felted and stained.
The circular Norman Chancel Arch (Norman) remains in statu quo – Scott said that it would be desirable to leave the evidently Norman pointing and chiselling on the stones. However, on entering the Church during the repairs I found that the Masons had commenced re-pointing. I made them desist immediately – this accounts for its incomplete appearance.

Three cills of lancet windows were found to have been thrown into the rood staircase as a sort of loose steps, evidently taken from East or West windows of Church. The East wall of Chancel was built by Lincoln College in the autumn of 1847* at an expense of £70, Knowles of Oxford being builder.
One of these Miles [Some brothers who were Owners of the Manorial Estate until bought by Lincoln College to augment the Hutchins Scholarships - they sold it to pay off heavy

mortgages] [The Manorial Estate was purchased by Lincoln College in 1807 or 8 for £18,000 (containing 370 acres or thereabouts) at the recommendation of the then Rector, Dr Tatham. It had previously been the property of Messrs Miles and Fletcher (q.Freeman?), one of whom had been a Weaver, the other a gentleman's servant. They very soon got through the property and were aided in their endeavour to do so by Messrs Bannister and .... of Shipston-on-Stour. Previously to this ownership Miles' uncle was the possessor.] (between1790-1807) is said by Jas. Ray's father to have taken out the original East window of the Church, which was of 2(?) lancet lights and to have replaced it by a wooden affair: this again was removed by Lincoln College in 1847. A similar impropriety was effected by Mr White – the farmer of what is now Mr Morrell's farm : he ejected a small window in South wall of nave eastward of the door and inserted a wooden casement – thus did these worthies just as seemed good in their eyes.

On the opposite page a view is given of the North side of Chancel as it appeared when stript of plaster with lowside window near the angle. In the Churchyard opposite they walled up Chancel doorway a pebbled path to Manor House was clearly traceable. The Locker is new; - no trace of one originally. The string or hood-mould of North window ended as it now does. The splay of lowside window re-erected in Vestry is less than it was originally owing to our fears of weakening the door jamb. The walls of both Church and Chancel had been painted a sort of brickdust colour – the window jambs etc being ashlared with the same colouring: (a small piece of plastering has been preserved to show the colour.) Behind the panel which supported the sounding board of pulpit was a little black lettering but undecipherable. On South and North Walls near the Chancel arch were two long square-headed cupboard-like openings built up with rough stone. They had been plastered and whitewashed inside. The pulpit arch and door is new, no trace of old one remaining. The Roof of Nave was unceiled, boarded, felted and stained – with kingposts and cornices added. The Easternmost beam has inscribed on it 'C 1630 R'. The Porch had a new Oak roof and the east and west walls re-built with windows as before. Minton's and Staffordshire tiles now constituted the floor in lieu of bricks and odds and ends of stones. The Marble step under the Altar was from the late Rector of Lincoln's (Dr Radford) having come into his possession on the refitting of Magdalen College Chapel. Under the pews of South West corner, below the rubbish, was discovered a small bronze box and very near it two Neuremberg jettons, which had doubtless been by some means ejected from it. (In the collection of the Misses Biscoe of Holton Park is a precisely similar box of bronze discovered on the Warminster Road at Midford or Mudford. It contains 1 gold coin of Edw IV and 3 smaller silver ones. Vide also Archaeo. Journ.Vol.vi.p.71 and vol xiv.p.75 where is a fig. Of one closely resembling the above, and discovered at Lincoln 8 or 10 feet below the surface with fragments of Roman, Samian, Medieval and glazed wares.) In the North wall and among the rubbish were found 4 or 5 fragments of glass quarries Scott considered them to be dec. The Church was externally covered with roughcast, and has now been painted and the Bells have been refitted with new wheels and lowered to their original places – and a third in the previously empty Sanctus bell opening. The Pigion House sort of structure behind the bells was swept away, and a cross erected on the Eastern gable of Nave, previously terminated by a flat-stone. Towards the middle of July the alterations were nearly completed, and on the 27th the Bishop [Samuel Wilberforce] came to reopen the Church and consecrate the newly-added piece of ground on North side of Churchyard given by Lincoln College from the Manor House Garden. The Bishop and 29 clergy took part in the service. Prayers were read by the P.C. and other parts taken by the Rector of Lincoln, Rector of Broughton, R Gordon Vicar of Elsfield, RD, I Randall, Geo. K Morrell, J B Morrell, E Payne. The Bishop preached from St John VI.2 - £47.12.3½ was the amount of Offertory – and £2.3.9½ after Evening Service.

In the garden ground added to Churchyard and not far from the yew-tree a sort of shallow basin like pit of rough stone was discovered about 2 ft below the surface and perhaps 3ft in diameter. It seemed to contain ashes and not far off were found some bones and skull of some animal with very rough pieces of pottery which I have preserved. On North side of Holly tree a pitched way some 5 yards long was discovered leading east and west.

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APPENDIX 4 SUMMARY OF SITE DETAILS

Site name: St Nicholas Church, Forest Hill, Oxfordshire
Site code: FONC 03
Grid reference: NGR SP 5823 0749
Type of excavation: Ground works for the construction of a new vestry and associated service trenches.
Date and duration of project: Five weeks from the 2nd December to the 5th February. Area of site: 6.5 m x 5.5 m and 2.5 m^2 **and trenches 0.4 m x 18 m and 0.6 m x 6 m.**
Summary of results: The evaluation revealed 23 burials from the late 18th to early 19th century .
Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Oxfordshire County Museums Service in due course, under the following accession number: OXCMS 2003.161

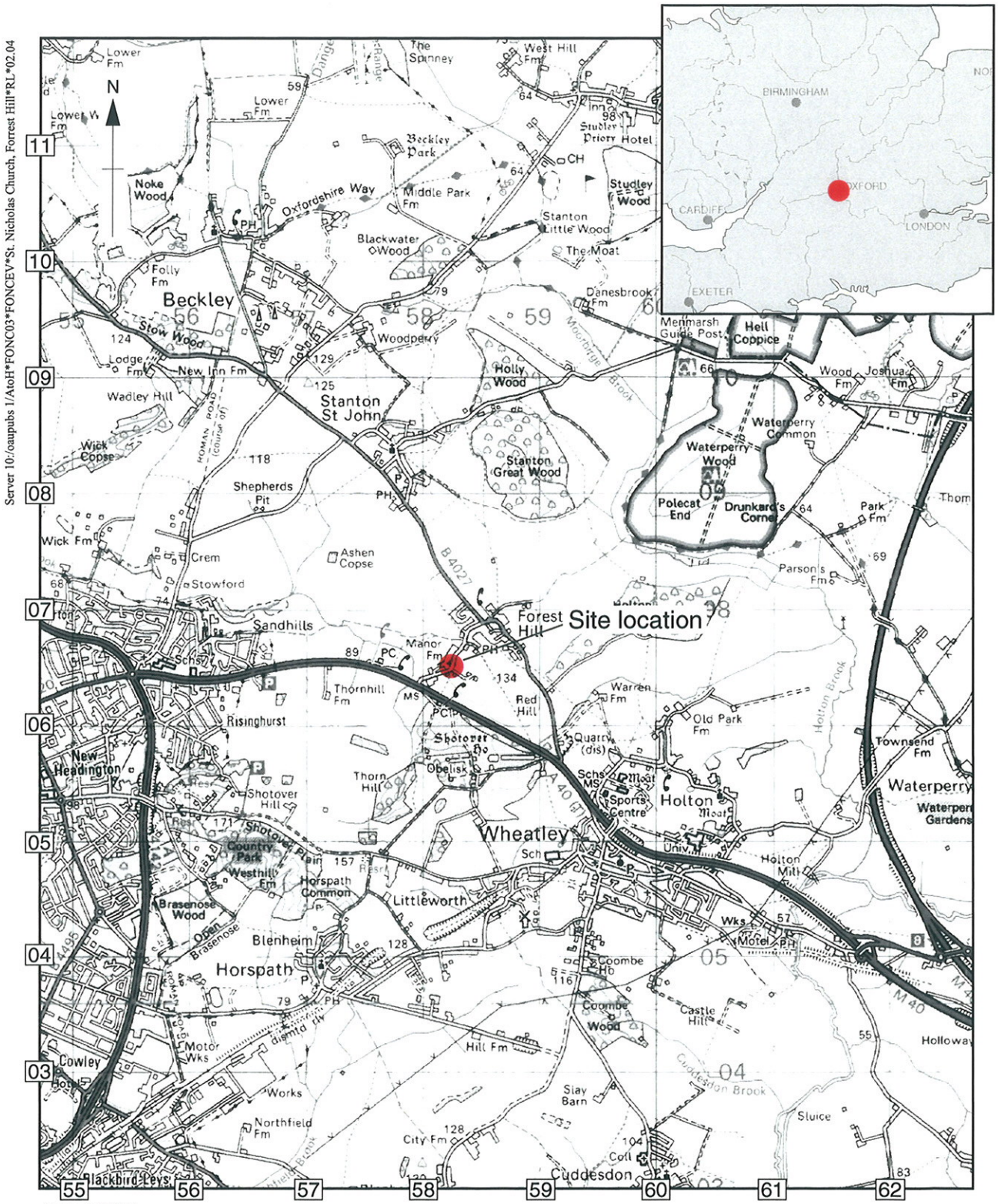


Figure 1: Site location

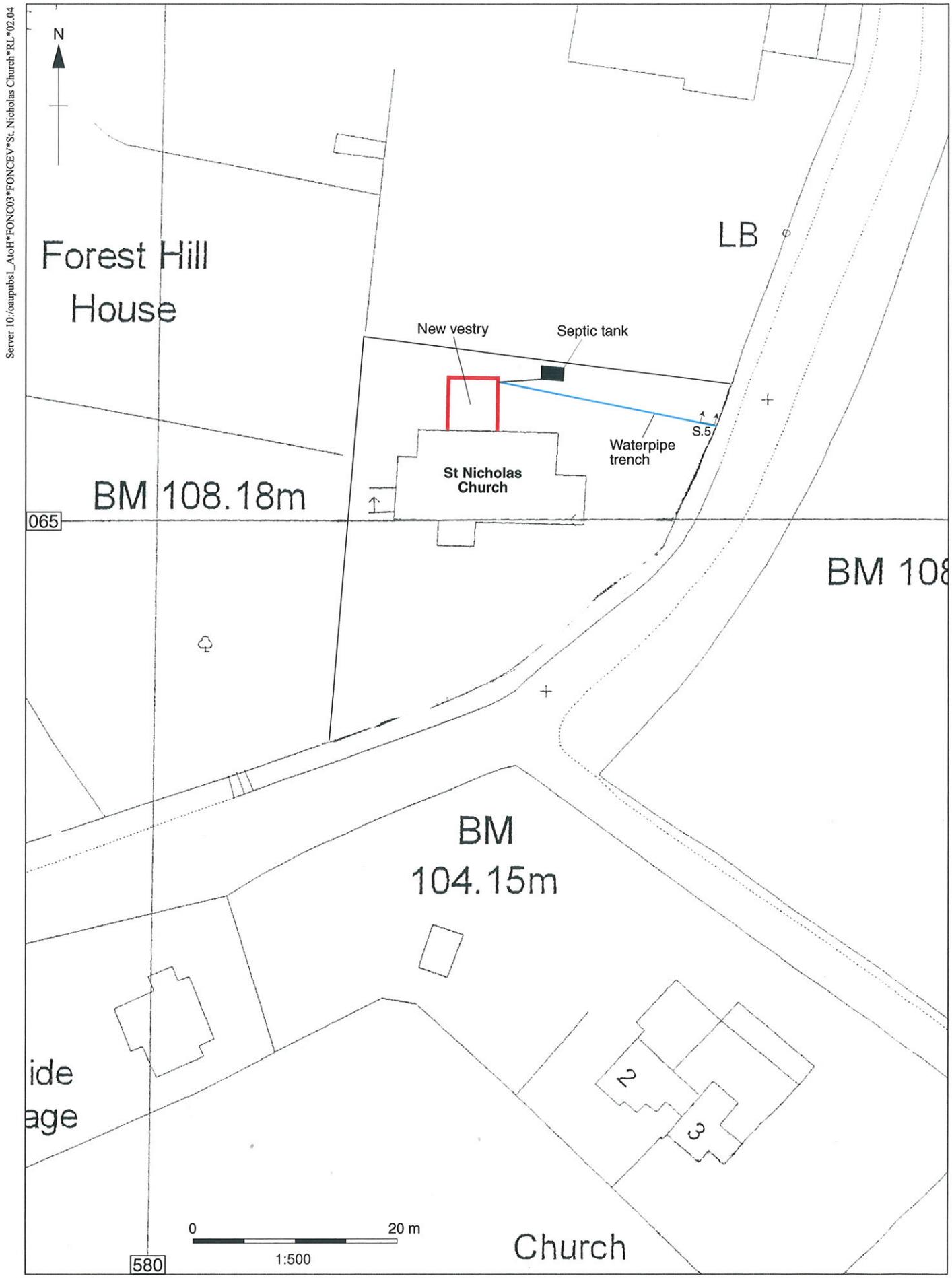


Figure 2: Site location showing new vestry

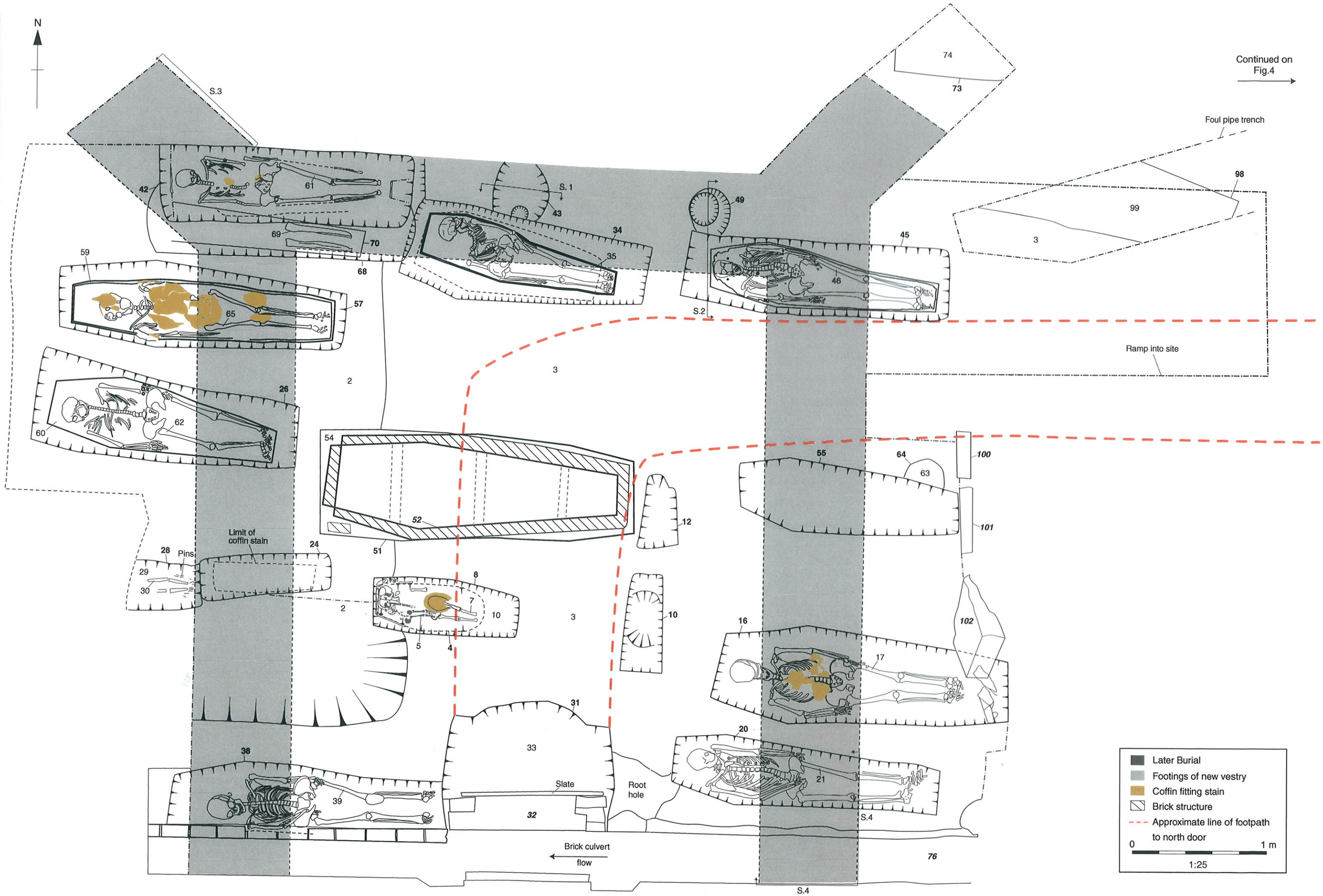
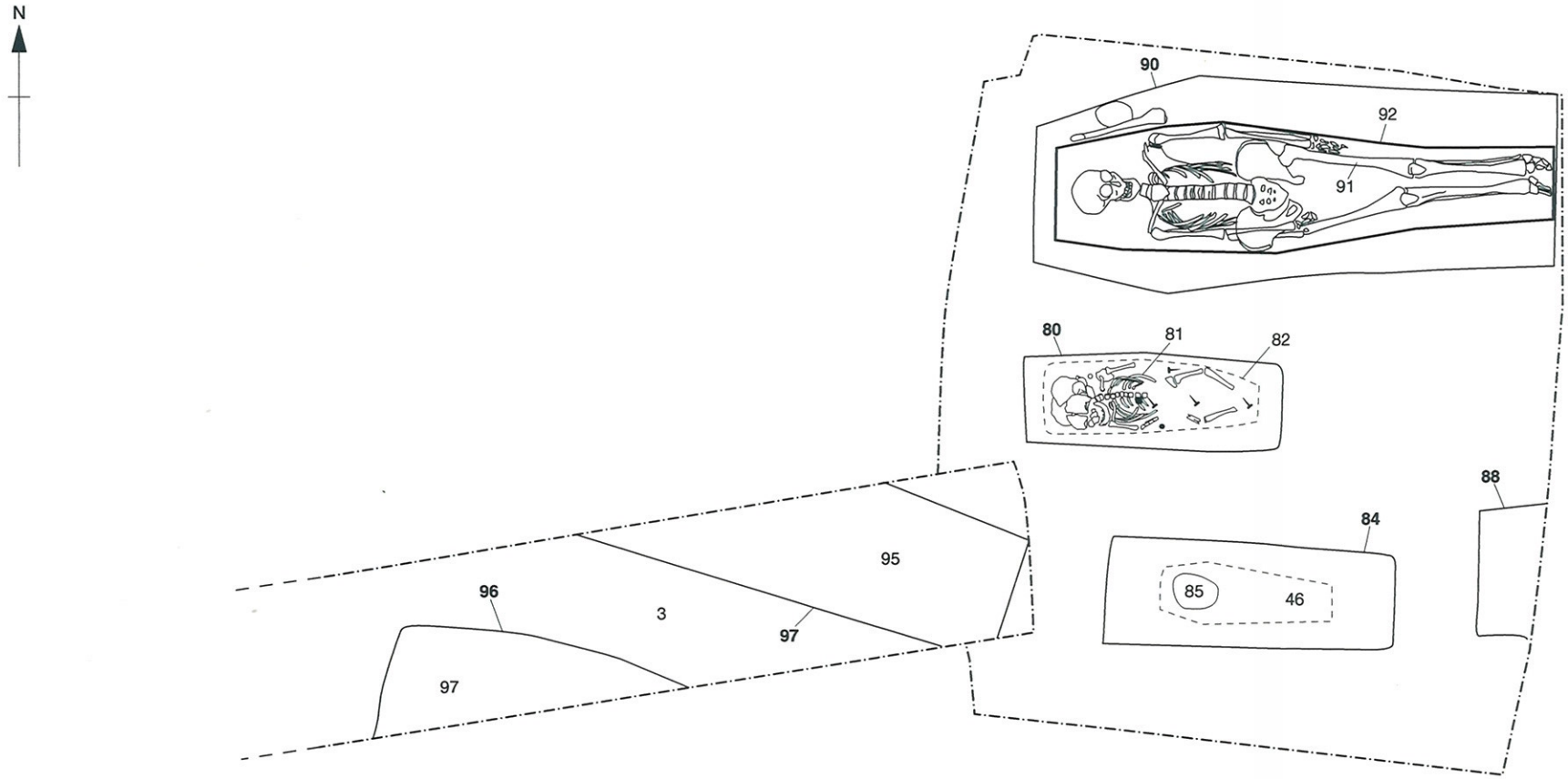


Figure 3: Features within excavation area



Continued on
Fig. 3

0 1 m

1:25

Figure 4: Features in foul pipe and septic tank trenches

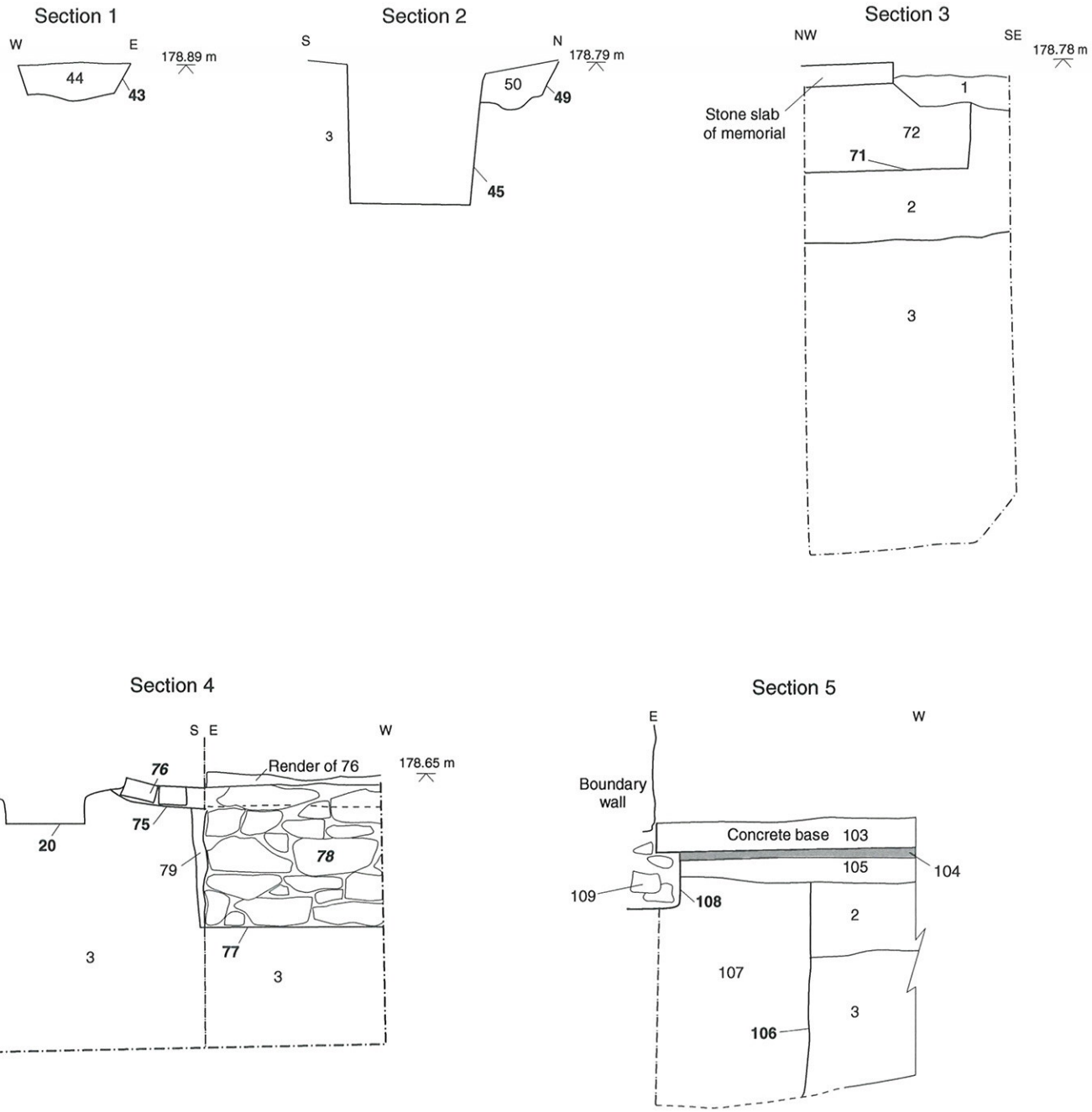


Figure 5: Sections 1 to 5

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