Archaeological Discoveries at Woodeaton Church

By JOHN BLAIR

SUMMARY

Salvage recording after drainage works, supplemented by two small controlled excavations, revealed an unexpectedly complex sequence underlying this 13-century parish church. A wall-trench containing lumps of burnt daub indicates a timber church, evidently of the early to mid 11th century, with walls built of close-spaced vertical baulks. This was burnt down and replaced by a stone church, probably of the late 11th century, interpreted as one of the distinctive group of `tower-nave' churches. A probable south aisle, with an eastern chapel or vestry, was added* c. *1200, and the chancel enlarged in the early 13th century. The nave was rebuilt in the mid to late 13th century around the still-standing Romanesque `tower-nave', explaining its unusual proportions. Fragments of painted panels recovered from under the pew floors derive from a late medieval rood tympanum.

INTRODUCTION

Archaeologically, Woodeaton parish church (SP 535 119) has always seemed one of the less interesting medieval churches of Oxfordshire. Ostensibly it is a single-phase structure of the mid 13th century, with a small 15th-century west tower and a Victorian south porch. Historically, too, it is unexceptional: first mentioned in 1228 in Eynsham Abbey's patronage, and a presumed adjunct of the manor of Woodeaton which Eynsham had acquired from the Hareng family in the late 12th century.[1]

Renovation and drainage works in 1991 revealed that this simple story disguises something more complex and interesting. The lifting of the pew floors in the nave disclosed the massive footings of an earlier stone church, completely enclosed within the standing 13th-century walls. Outside, workmen digging the trench for a French drain around the base of the walls encountered a series of footings, as well as an area north of the nave where the earth contained numerous small fragments of burnt daub. A fully satisfactory archaeological record was at this stage impossible, but the footings were clarified by selective trowelling and plotted under salvage conditions (Fig. 1). Two areas of the French drain, one south of the chancel and the other north of the eastern end of the nave, were enlarged and excavated archaeologically in 1993 and 1994, confirming the presence of an 11th-century timber church (the source of the burnt daub), and of a stone structure which is now (after consideration of alternative hypotheses) interpreted as a late 12th-century south aisle.[2] The exercise well demonstrates how much information can survive in the zone around the walls of even a seemingly simple church, and the need for all below-ground work in such areas to be monitored archaeologically.

[1] *V.C.H. Oxon.* v, 315-17.

[2] The account of Woodeaton church which appeared in J. Blair, *Anglo-Saxon Oxfordshire* (1994), 136-7, identified this feature as the remains of an earlier stone church. This interpretation has been abandoned in the light of the unexpectedly late radiocarbon date from skeleton F20.

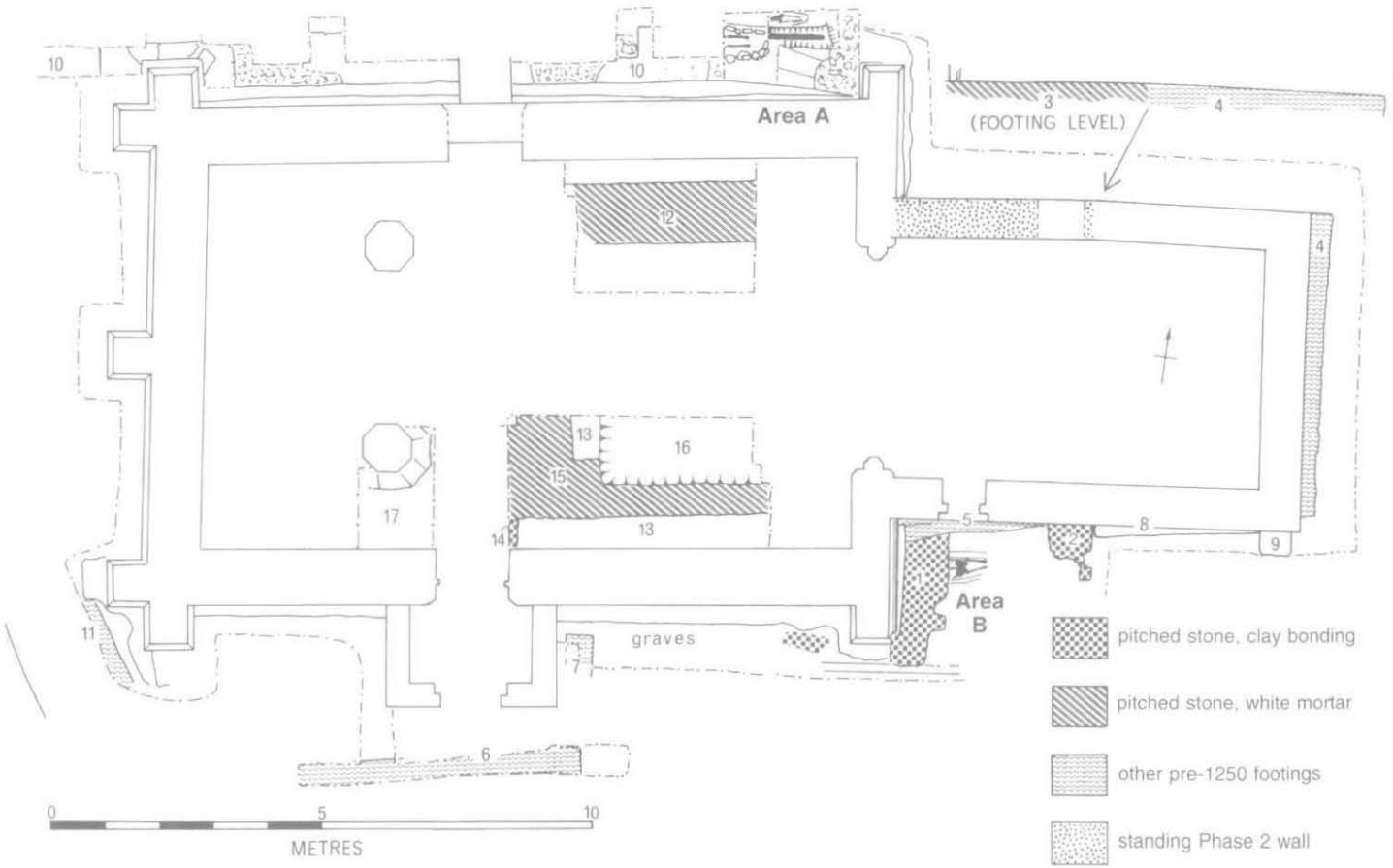

Fig. 1. Woodeaton church: outline ground-plan showing salvage observations and the two excavated areas.

The pew floors proved to be made partly from re-used late medieval panels, some of them bearing traces of red and green paint. Analysis by English Heritage was not complete at the time of writing, but a brief comment on the likely source of this material is given below.

The site records, pottery and burnt daub will be deposited with the County Museums Service.

THE ARCHAEOLOGICAL EVIDENCE

The following report describes the work in reverse order of its execution: the excavation N. of the nave (Area A: May-June 1994), the excavation S. of the chancel (Area B: June 1993), the salvage recording after the digging of the French drain (March 1991) and the salvage recording under the pew floors (June 1991). An attempt is then made to interpret, on the basis of this evidence, the successive churches which have occupied the site.

The excavation north of the nave (Area A) (Figs. 2-3)

A trench *c.* 2 m. x 1.5 m. was excavated on the N. side of the nave, in the angle between the nave wall and the buttress at its NE. corner, to investigate the source of the flecks and small lumps of burnt daub observed in the floor of the drainage trench in 1991. The area was taken down to just below the bottom of the drainage trench, after which a N.-S. section 70 cm. wide was excavated to natural subsoil; this section was then selectively widened.

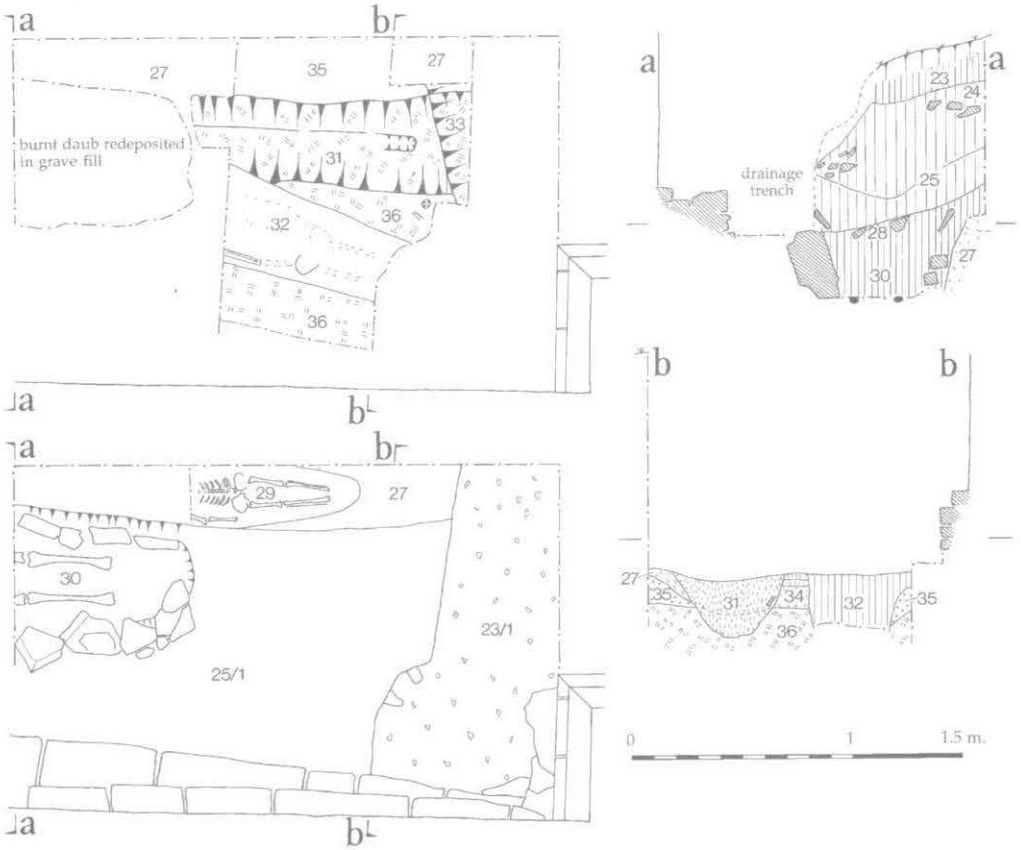

Fig. 2. Area A: plans and sections.

The natural subsoil (L36), of orange clay mixed with decayed limestone fragments, was overlain by a fine grey silty clay (L35), apparently filling natural undulations in its surface. Over this, and apparently filling an artificial cut-away of L35, were exposures of clean medium-brown clay loam (L27 and L34), probably a naturally developed soil profile. Towards the E. end of the area, a gully or ditch (F33) with a fill of medium-brown clay loam, running NNW. to SSE., intersected with the timber-slot F31 and was almost certainly cut by it.

The main early feature was a W.-E. trench (F31), cutting through LL27/34 into the subsoil. In its bottom a slot 8 cm. wide and *c.* 1 cm. deep was visible intermittently, especially towards the E. where it ended in a straight butt-end. The lower fill, of dark-brown clay loam with occasional burnt daub and charcoal flecks, merged into the upper fill, which resembled it except that it was slightly more glutinous and contained many more daub and charcoal flecks. Also in the upper fill were much larger lumps of burnt daub (6 kg. from the 1.2-m. length excavated) which in places were packed almost solid, and fragments of small wood charcoal which yielded a radiocarbon date of cal. AD 980-1215 at 2-sigma (see Table 1).

TABLE 1. RADIOCARBON DETERMINATIONS

context	*age*	*cal. 1σ*	*cal.2σ*	*reference*
F31	970±60BP	1015-1160 AD	980-1215 AD	RCD-3064
F20	780±60BP	1225-1290 AD	1060-1385 AD	RCD-3065

Note: Samples were taken from charcoal of hazel wattles (F31) and from the femur of a burial (F20).

Cutting F31, but underlying the buttress footing-layer L23/1, was a grave F32 (not fully excavated) with a fill of dark-brown clay loam with burnt daub flecks which produced one sherd of yellow-glazed Saxo-Norman sandy ware (fabric OXY). A child burial (F29) cut L27 on the N. side of the area. Overlying F31 and F32 was a layer of glutinous medium-brown clay loam (L25/1), of rather mixed appearance and containing many burnt daub and charcoal flecks, as well as some rather larger lumps of daub. A layer of yellow clay with small limestone fragments (L23/1), forming a sub-footing for the buttress, cut L25/1.

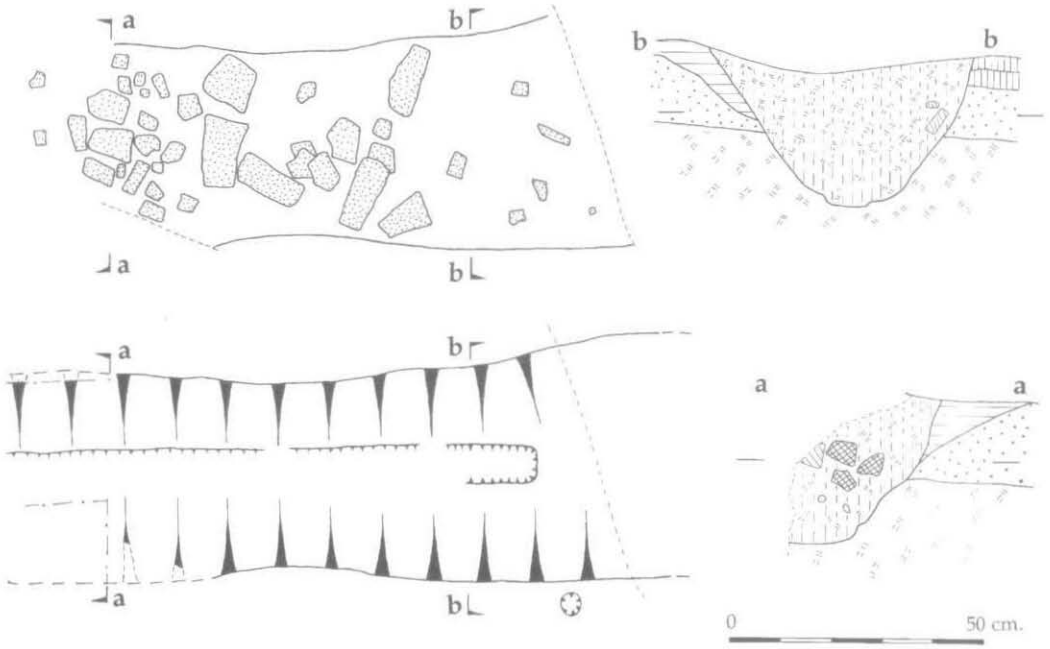

Fig.3. Area A: detailed plans and sections of the timber wall trench (F31). (Burnt daub shown stippled.)

Also cutting down through L25/1 and L27, and presumably into F31 beneath, was a deep grave (F30) with large, vertically-set limestone blocks lining its edges. Both the plan of the grave and the presence of four small iron nails in its fill indicate a coffin, and it seems likely that the stone blocks were packed into the gaps around the sides of this. An overlying layer of packed rubble (F28) had slumped into the grave fill, as had a layer of medium-brown clay loam (L25) above, the latter containing numerous burnt daub lumps which had presumably been thrown up from the fill of F31. A superficial rubbly feature (F24) terminated eastwards in line with the E. end of F30, and was probably the uppermost in this sequence of fills. A shallow rectangular feature with a fill of redeposited clay containing one unglazed sherd of fabric OXY (F26), cutting L25/1, was probably cut by F30 and the sequence of layers above it. Thus F30 was stratigraphically late, and both this and the appearance of its coffin-nails suggest a late- or even post-medieval date.

The excavation south of the chancel (Area B) (Figs. 4-5)

A trench *c.* 4 m. x 2.7 m. was set out with the aim of identifying the function and relationship of two footings, F1 and F2, which had already been seen in 1991. In the event this aim was partly frustrated by the dense, intercutting graves which neutralised about half the trench area, reducing it to little more than a strip around the base of the standing walls which had already been cut into by the drainage gully. Valuable information about the early development of the building was nonetheless recovered.

The natural subsoil (L22) was orange clay mixed with decayed limestone fragments. Towards the chancel wall, irregular hollows in its surface were filled with a fine grey water-laid silty clay (L21) rich in crushed snail-shell fragments, containing occasional flecks of burnt daub in its top few centimetres.[3]

A grave (F20) cut L22 and L21. The skeleton, an adult male,[4] had the left arm straight and the right arm flexed across the pelvis, with the hands together over the left thigh; a bone sample yielded a radiocarbon date of cal. AD 1060-1384 at 2-sigma (see Table 1). The fill, of grey silty clay mixed with redeposited yellow clay, contained a small, roughly dressed piece of oolitic limestone immediately over the pelvic area. Cutting F20 was a pit containing two disarticulated skulls (F19), which from its fill of redeposited orange clay may have been another relatively early feature.

Overlying L22, L21 and F20 was a footing (F1) of rubble with orange-brown clay bonding, 0.8 m. wide. The bottom two courses were pitched, above which survived fragments of four irregularly-laid flat courses; the rubble core contained a fragment of Roman brick. The footing emerged from under the SW. corner of the chancel, where it was overlain by stones of footing F5, and ran S. for 2.0 m., at which point its inner face turned W. under the SE. corner buttress of the nave. The S. end of its outer (E.) face was destroyed by graves and a 1991 pipe-trench. A small fragment of similar footing was observed to the W. of the buttress in 1991, but a series of burials precluded its being traced further W.

To the E., also overlying L21, was another N.-S. footing (F2) of rubble with buff-coloured mortary clay bonding, 0.75 m. wide. The bottom course, of large pitched stones, was overlain by three surviving courses laid flat. It emerged from under the S. wall of the chancel, where it was abutted by footings F5 and F8, and continued S. for 1.0 m., beyond which point it was totally destroyed by graves.

Underlying the standing chancel wall, but on a slightly different alignment, was a footing (F5) of flat rubble courses with orange-brown clay bonding. It abutted F1 and F2, slightly oversailing what was presumably the projecting face of the footing on the former.

A W.-E. linear spread of rubble (F18) was almost certainly the upper fill of a grave, which cut F20 and F2. The other, probably relatively late, graves which occupied the SE. part of the trench were defined but not excavated. The topsoil and late grave fills produced a small group of mixed potsherds: two Roman, the rest 12th- to 16th-centuries including Wiltshire flinty ware, Potterspury ware and Brill/Boarstall bottle fragments.

[3] Mark Robinson, who kindly analysed a sample, identifies it as a grey silty clay with much secondary calcium carbonate. The snail species are mostly woodland varieties. The presence of *Discus rotundatus* shows that this assemblage is not very early in the holocene; on the other hand, such woodland assemblages are common up to the Neolithic but not beyond. Thus the wet conditions in which the layer was laid down existed long before the historic period, though they suggest an environment in which water would tend to re-emerge in conditions of high water-table.

[4] Identification by Angela Boyle.

Fig. 4. Area B: plan and sections.

Fig. 5. Area B: view looking north, showing F1 and F2 but before the excavation of F20.

Salvage observations outside the church

Cut by footings F3, F4 and F10, and apparently underlying the whole E. half of the N. side of the church, was a layer of dark grey-brown clay loam at least 30 cm. thick. Where observed N. of the E. part of the nave it was rich in lumps of burnt daub and charcoal; flecks of burnt daub were also noticed to the N. of the chancel. (The subsequent excavation N. of the nave, reported above, clarified this `layer' as a complex of intercutting layers and features, L25/1, L25, etc.) In a pipe-trench running SE. from the chancel the surface of the dark layer(s) was observed sloping off towards the churchyard boundary, and its failure to appear at the W. end of the church (where the footings cut a matrix of medium-brown clay silt) suggests that it ended well short of the W. edge of the churchyard.

The footings revealed by the cutting of the French drain are described in the numerical sequence shown on Fig. 1, excluding those discussed already. Footings believed contemporary with the existing 13th-century walls are also shown in outline on the plan, but except for 8, 9 and 10 they are not numbered or described.

F3: The footing of the W. half of the N. chancel wall, extending *c.* 3.7 m. E. from the nave to a point just past the E. jamb of a blocked round-headed doorway (Fig. 9), after which its line was continued E. by footing F4. The bottom one or two courses were pitched, with a bonding of fine white mortar.

F4: The footing of the E. half of the N. chancel wall, of flat courses with orange-brown clayey bonding. The wall rises straight up from the continuous face of footings 3 and 4 with no offset. F4 returned S. along the E. end of the chancel, where the standing wall was set back from it to form an offset, but returned W. 25 cm. short of the present SE. corner. The footing F5 under the S. chancel wall, described above, was aligned towards this W. return and was of similar construction to F4.

F6: A footing with orange-brown clayey bonding, lying S. of the porch, imperfectly observed in a narrow W.-E. pipe-trench which ran along its length. It seems to have been aligned roughly parallel with the nave, returning towards it at the E. end; short lengths of the N. and E. faces were observed.

F7: The N. end of a N.-S. footing 55 cm. wide, of flat courses with orange-brown clayey bonding, observed to the E. of the porch where it terminated 50 cm. from the S. wall of the nave.

F8 and *F9*: A length of footing under the S. wall of the chancel (F8) continued E. from footing F2 towards the SE. corner, where it met, and may have been integral with, a small buttress footing (F9).

F10: A broad footing along the N. side of the nave, its outer face running *c.* 1.25 m. from the standing wall. The stone content was variable, dense-packed rubble being confined to intermittent areas; elsewhere there was little more than the bonding material derived from the underlying layer, and the footing stopped three-quarters of the way along the nave. This is interpreted as an unusually broad stone-saving footing contemporary with the 13th-century nave, the solid sections being perhaps intended for buttresses which were never built.

F11: The inner face of what was evidently an earlier phase of the revetting-wall around the churchyard. It adjoined the footings of the SW. buttresses, but the relationship was not defined.

Salvage observations inside the church

Two large and two small areas of the pew floors were removed, and trenches dug for concrete sleeper-beams to support the new floor. The large area on the N. side of the nave was opened and replaced without any archaeological recording, but colour photographs taken by the architect, Mr. C. Rayson, show a broad rubble footing with white mortar bonding (F12). On Fig. 1 this has been plotted from Mr. Rayson's photographs with approximate accuracy, using fixed furnishings as points of reference.

The large area on the S. side of the nave was trowelled clean and recorded. All features cut a layer of dark grey-brown clay loam (L13), which in the NW. corner was seen to overlie clean compacted pale-yellow sand. (In retrospect it seems likely that L13 was related to L35 and L21 recorded in the excavations.) A N.-S. footing of pitched rubble with orange-brown clay bonding (F14), observed on the extreme W. edge of the area, abutted, or was cut by, a broad footing of pitched rubble with white mortar bonding (F15), partly robbed out towards the E. end. A small disturbance cut into the surface of F15 contained medieval pottery. F15 was cut by a large 19th-century feature (F16), with brick sides and a floor of paving-slabs, which filled the NE. third of the area.

A small area in the SW. corner of the nave, next to the southern of the two piers which support the tower, was examined to a depth of *c.* 20 cm. It contained disturbed grey-brown loamy soil (F17), with no sign of footings.

INTERPRETATION (Fig. 6)

Phase I: The timber church: c. *1000-80*

Probably the most important result of the Woodeaton exercise was the discovery of an early timber building, destroyed by burning. The evidence comprises the excavated 1.8-m. length of wall-trench (Fig. 3) and the lumps of burnt daub found in its fill (Fig. 7). Obviously this cannot provide a plan, though the butt-end of the slot which ran along the base of the wall-trench suggests a doorway, and the presence of burnt daub flecks on the S. as well as the N. side of the chancel indicates that the burnt building extended S., under the site of the standing church. This is the basis of the wholly conjectural outline shown on Fig. 6, which assumes that the building had the proportions and orientation of a church.

Assuming an original ground-level some 0.4 m. above the surface of the natural clay, the wall-trench was *c.* 0.4-0.5 m. wide at the top and *c.* 0.35 m. deep. However, the shallow slot along its bottom, which though only intermittently visible was clear and well-defined at its E. end, housed a timber or timbers only 80 mm. thick. This is impossibly narrow for a sill-beam and points almost inevitably to earth-fast vertical timbers, either of extremely light scantling or of plank-like proportions.

Recovered from the wall-trench (F31) were 46 fragments of burnt daub weighing 6 kg. in all; a further 2.5 kg., in very small amorphous fragments, were residual in L25/1 and L25. The material is evidently normal clay daub, fortuitously fired by the burning of the building. Its colour is mainly dull orange-red, though ranging through brown to black in a few cases; occasionally a red outer surface shades into a black core.

Thirteen fragments were sufficiently large and unabraded to show clear impressions of wattles, all running in one direction, in bundles of at least two stems in six cases and at least four stems in one case. The stems ranged in diameter from 20-22 mm. (35% of impressions) through 14-18 mm. (55%) to 8-10 mm. (10%). Also in F31, and intermixed with the daub,

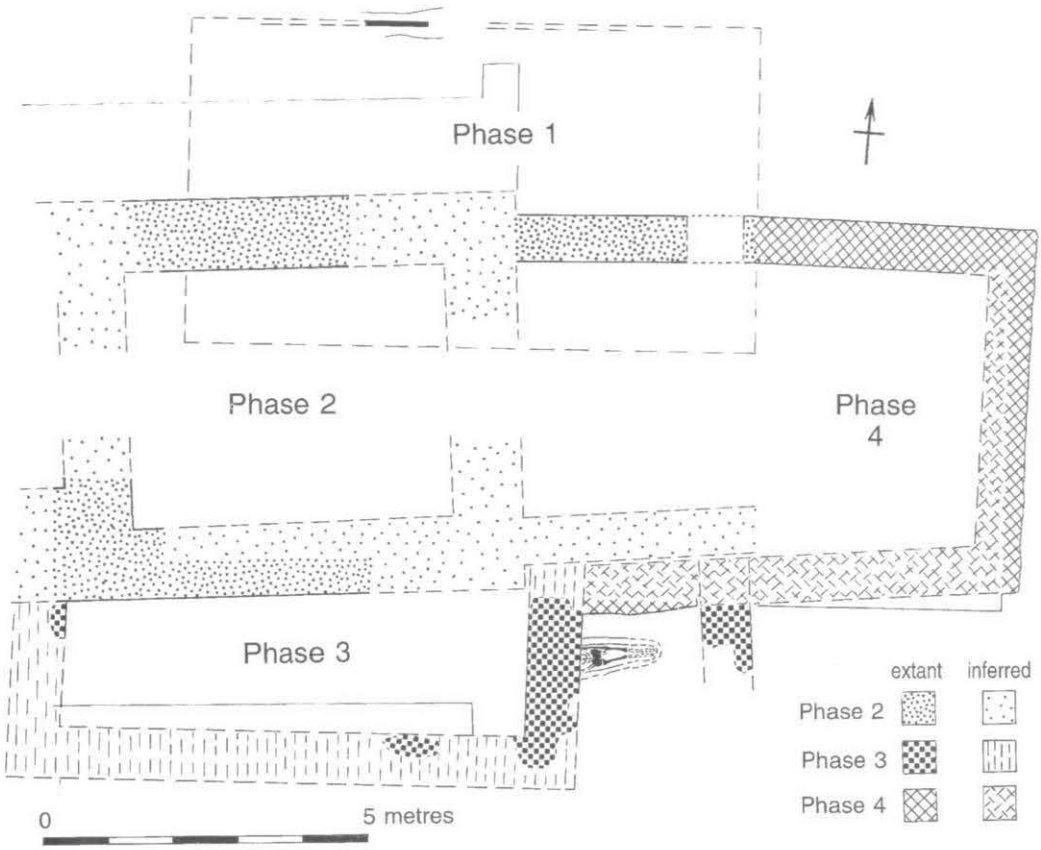

Fig. 6. Woodeaton church: interpretative plan of known features earlier than the 13th-century rebuilding of the nave.

were numerous charcoal fragments from hazel rods of a comparable range of diameters, clearly from the wattles around which the daub was moulded.[5]

Four daub fragments were big enough to provide further information (Fig. 7). The largest has one broken side, fractured along the line of the two wattles which passed through it; the other three sides have a soft, gently undulating surface texture which the clay must have acquired while wet. This can therefore be identified as a fragment of a strip or panel some 75-80 mm. thick in one dimension. The other three fragments are more damaged, but all combine a face which is fractured through the wattles with an opposing face which is textured; on two pieces the maximum width is 75-80 mm., the third being narrower but broken longitudinally.

These fragments could derive either from narrow columns of daub, or from the edges of panels. The first option is overwhelmingly more likely. First, it seems significant that no piece is wider than 80 mm. on any surface. Secondly, there is no sign of the wattles interwoven at right-angles which might be expected in a wattle-and-daub panel of normal size. Thirdly, the hard-firing of the daub at a high temperature implies that each piece was in close contact with timber as the building burnt; it is hard to see how this could occur

[5] Mark Robinson kindly identified the charcoal as hazel.

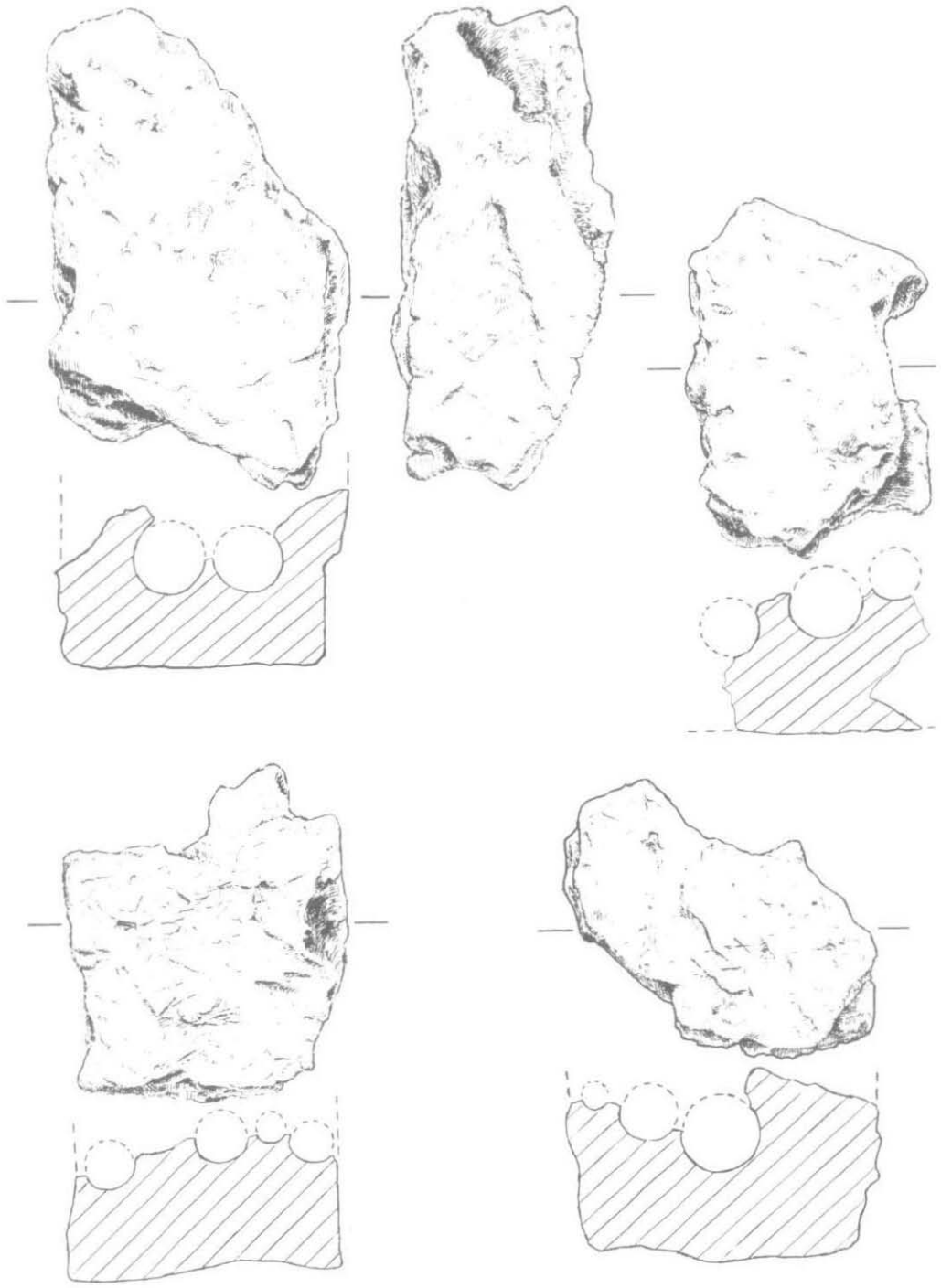

Fig. 7. Burnt daub from F31. Scale 1:2.

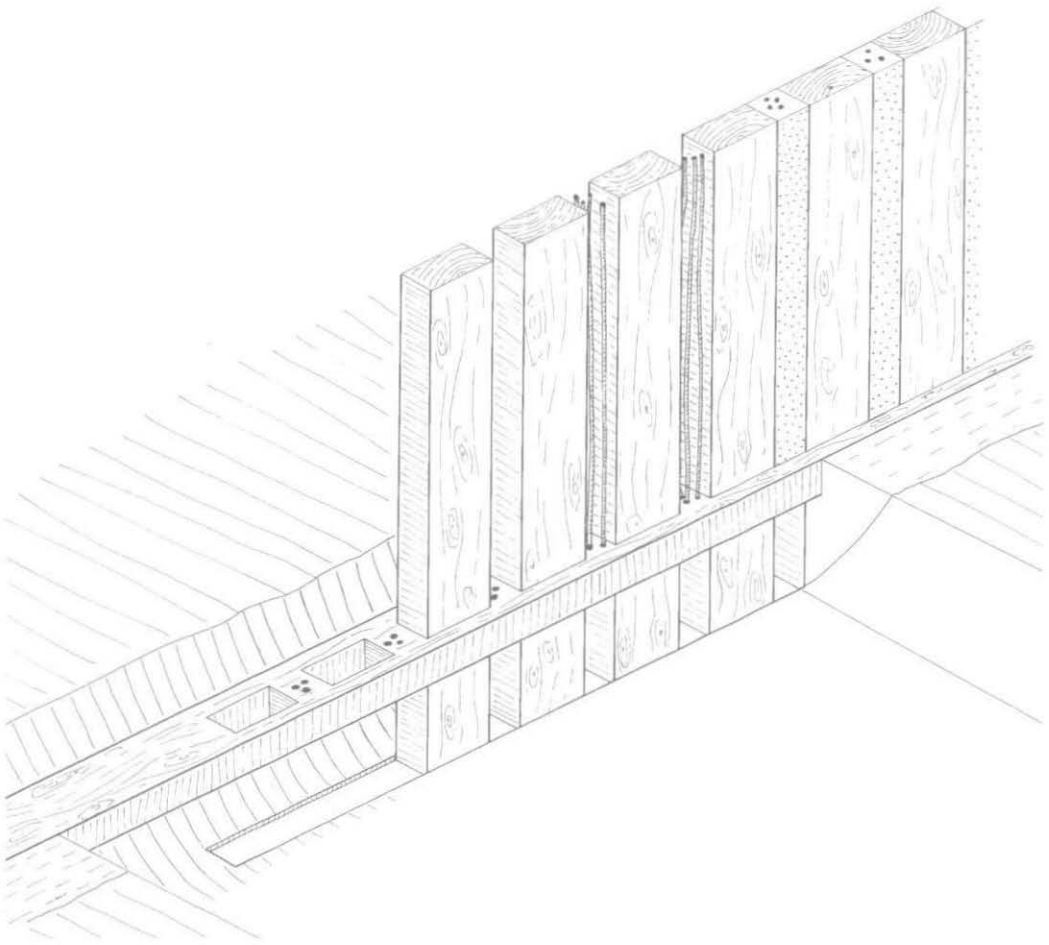

Fig. 8. Interpretation of the wall construction of the timber church, based on F31 and the burnt daub fragments found in it.

except in a construction similar to late medieval 'close-studding', in which close-spaced vertical timbers were separated by very narrow daub-filled gaps. The 80-mm. scantling agrees with the information already obtained from the wall-trench.

This was therefore a form of construction in which studs or planks alternated with narrow, probably square-sectioned columns of daub formed around bundles of wattles. (The width of the timbers is unknown; in Fig. 8 it is assumed to be 160 mm., in other words twice their thickness.) Similar building technology is recorded in England from the 7th century; a local and near-contemporary parallel is provided by a 10th-century building at Eynsham Abbey, where broader gaps between the vertical timbers were filled with plaster over close-spaced horizontal wattles.[6] At Woodeaton the timbers would have been seated in

[6]M. Millett and S. James, 'Excavations at Cowdery's Down, Basingstoke, Hampshire', *Archaeol. Jnl.* cxl (1983), 232-4; J. Blair and H. Hamerow, 'The Section of Plaster-Infilled Timber Wall', in A. Hardy, A. Dodd and G. Keevill, *Excavations at Eynsham Abbey* 1990-92 (forthcoming). A comparable though much larger assemblage of burnt daub is illustrated and described by P.V. Addyman, 'Late Saxon Settlements in the St. Neots Area', *Proc. of the Cambs. Antiquarian Soc.* lviii (1965), 62-5.

the slot at the bottom of the wall-trench. A possible additional refinement (adopted in Fig. 8), which would enable the wattles to be sprung between fixed timbers at top and bottom, is suggested by the 'mortised base-plates' used in 11th- and 12th-century London.[7] These evidently functioned as sills, but they are pierced with hollow mortises and it seems that their main function was to align and stabilise the vertical members which passed through them. The examples published from London (all *ex situ*) indicate close-spaced planking or studding of a similar general kind to that proposed for Woodeaton.

The radiocarbon range for the timber building extends between the late 10th and early 13th centuries, but the stone church which replaced it indicates a *terminus ante quem* of *c.* 1080: it can therefore be dated to the first two-thirds of the 11th century. The discovery is of interest both as a rare glimpse of the above-ground structure of a late Anglo-Saxon timber church, and as evidence for the 11th-century transition from timber to stone.

Could the church have been burnt deliberately? Long before, Archbishop Theodore had ruled that timber from a church should not be put to secular uses, but re-used in another church or burnt; Wulfstan, writing in about 1005, advised that consecrated material 'is to be burnt in a pure fire unless it can otherwise be used'.[8] Timber phases found in other parish church excavations have not generally shown signs of burning, but the possibility deserves bearing in mind with an eye to future discoveries.

Phase 2: The first stone church: c. 1070-1120

The broad footings F12 and F15 must be interpreted as the N., S. and W. walls of a nave or tower. On F15 a west-facing projection 1.75 m. wide, only a very small part of which lay within the investigated area, is hard to interpret except as a stair-turret or buttress; in either case it shows that this was the W. end of the building. Footing F3 is of identical construction (pitched rubble bonded with white mortar), and must surely represent the N. wall of a cell to the E. of this nave or tower and contemporary with it. Furthermore, the wall which still stands on F3 is almost certainly the original one: it is thinner than the other chancel walls, and visible in its external face is a blocked round-headed doorway with rubble jambs and voussoirs (Fig. 9).

Stratigraphically, Phase 2 post-dates the timber church, and pre-dates the enlargements of *c.* 1180 onwards. Stylistically, all features point to the building-boom associated with the Anglo-Saxon to Norman 'overlap'. The thick walls of the western cell (1.1 m.) favour a post-Conquest date, whereas the crude doorway would be increasingly unlikely after *c.* 1100; this replacement of a 'vernacular' timber church by a larger and more solid stone one points to habits now recognised as characteristic of the mid to late 11th-century 'Great Rebuilding'.[9]

Unfortunately the floor at the easternmost end of the nave was not lifted, leaving undefined the junction between F12 and F3. Fig. 10 illustrates the alternative reconstructions allowed by the evidence currently available: (a) a W. tower of normal square plan, with a diminutive nave and presumably an even smaller sanctuary; or (b) a rectangular tower-nave with a chancel. The former would be more conventional (though

[7] G. Milne, *Timber Building Techniques in London c. 900-1400* (L.& M.A.S. Special Paper 15, 1992), 86-105. Doubt has, however, been cast recently on the interpretation of these re-used members (D. Goodburn pers. comm.).

[8] Theodore's 'Penitential', II.3 (A.W. Haddan and W. Stubbs (eds.), *Councils and Ecclesiastical Documents*, iii (1871), 190); the so-called 'Canons of Eadgar' c.43 (D. Whitelock et al. (eds.), *Councils & Synods: I* (1981), 328).

[9] E. Fernie, *The Architecture of the Anglo-Saxons* (1982), 162-73; R. Gem, 'The English Parish Church in the 11th and Early 12th Centuries: a Great Rebuilding?', in J. Blair (ed.), *Minsters and Parish Churches: the Local Church in Transition 950-1200* (1988), 21-30.

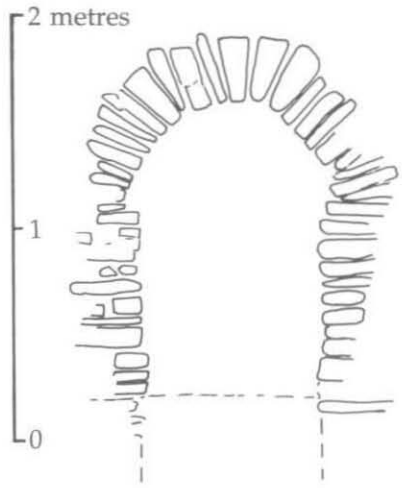

Fig. 9. The exterior of the Phase 2 doorway in the north chancel wall: sketch elevation.

unusual at this very small scale),[10] but overriding arguments can be adduced for (b) on the strength of the later development of the chancel. The chancel arch is normally a fixed frontier within the geography of a parish church, separating parochial from clerical responsibilities as defined by the early 13th century.[11] At Woodeaton the chancel assumed its present basic form – the rectangular square-ended plan general in the 13th century – soon after 1200 (Phase 4), while the Phase 2 tower or nave was still standing. Reconstruction (a) would imply that the nave was entirely absorbed into the chancel in Phase 4, leaving only the tower as parochial space, and that the chancel arch was then moved 1.5 m. eastwards again when the tower was replaced by the present nave in Phase 5. Reconstruction (b) allows the nave/chancel division to remain in the same place throughout, and thus makes much better sense of the 13th-century developments.

Although the tower-nave of reconstruction (b) would be unusual, it would belong very clearly to a small but important group of 11th-century churches. There is a basic difference between a tower which forms a mere adjunct to the nave, and one which actually serves as the nave in the sense that the cell extending eastwards from it is reserved for the altar and the clergy. Tower-naves belong to the broad category of centrally-planned churches, stemming ultimately from Charlemagne's octagon at Aachen and including such diverse forms as the square palace chapel at Hereford and the round-naved domestic chapels found over much of northern Europe.[12] The best-defined English case is the late 10th- or early 11th-century church at Barton-on-Humber (Lincs.), where a square tower-nave had the

[10] For a local church of this type, with parallels, see J. Blair et al., 'The Early Church at Cumnor', *Oxoniensia*, liv (1989), 57-70.

[11] R. Morris, *Churches in the Landscape* (1989), 321.

[12] A. Hamilton Thompson, *The Ground-Plan of the English Parish Church* (1911), 30-5, for tower-naves in this context. See also R.D.H. Gem, 'The Bishop's Chapel at Hereford: the Roles of Patron and Craftsman', in S. Macready and F.H. Thompson (ed.), *Art and Patronage in the English Romanesque* (Soc. Antiq. Occasional Paper n.s. 8, 1986), 87-96; I. Fisher, 'Orphir church in its South Scandinavian context', in C.E. Batey et al. (eds.), *The Viking Age in Caithness, Orkney and the North Atlantic* (1993), 375-80.

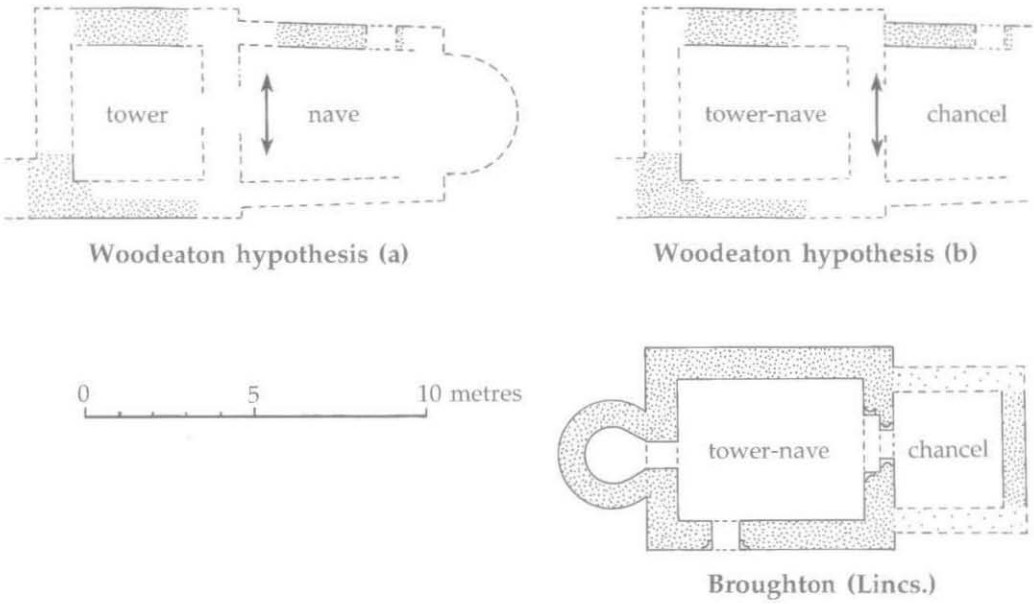

Fig. 10. Alternative reconstructions of the Phase 2 ground-plan, compared with Broughton church (Lincs.). The double arrows mark the line of the later chancel arch. (Broughton after Micklethwaite, op. cit. note 14.)

chancel (containing an altar W. of a screened-off vestry or presbytery) on its E. side, and a baptistry on its W.[13] Broughton (Lincs.), a tower-nave some 12 m. high with classic 'overlap' details of the later 11th century, is very close in plan to Woodeaton reconstruction (b), as shown in Fig. 10.[14] There are several other examples in the east midlands and the south-east, the most lavish at Earls Barton (Northants.);[15] another seems to be King Malcolm Canmore's chapel at Dunfermline, comprising a square tower with a rectangular eastern annexe.[16] The round tower-nave recently found at West Thurrock (Essex) probably belongs more in this group than with the Templars' churches which it superficially resembles.[17]

How many tower-nave churches existed in 11th-century England? Socially, the form indicates seigneurial rather than parochial use: its prototypes are palace chapels, and it is most unsuitable as a means of providing congregational space. Culturally, the location of almost all known examples in the Danelaw or Danish-influenced areas reinforces links with

[13] W. Rodwell and K. Rodwell, 'St. Peter's Church, Barton-upon-Humber', *Antiq. Jnl.* lxii (1982), 283-315.

[14] J.T. Micklethwaite, 'Something about Saxon Church Building', *Archaeol. Jnl.* liii (1896), 335 (with evidence for the excavated E. end of the chancel); H.M. and J. Taylor, *Anglo-Saxon Architecture* (3 vols., 1965-78), i, 115-17.

[15] M. Audouy et al., 'The Tower of All Saints' Church, Earls Barton, Northamptonshire: its Construction and Context', *Archaeol. Jnl.* clii (1995), 73-94, gives a full inventory and discusses the English tower-naves as a group. See also L.P. Wenham et al., *St. Mary Bishophill Junior and St. Mary Castlegate: The Archaeology of York* 8 (1987).

[16] G. Baldwin Brown, *The Arts in Early England, II: Anglo-Saxon Architecture* (1925), 452; Taylor & Taylor op. cit. note 14, ii, 710.

[17] B. Milton, 'Excavations at St. Clement's church, West Thurrock, Essex, 1979', in *Four Church Excavations in Essex* (Essex County Council, 1984), 1-14.

the round and other centrally-planned churches of southern Scandinavia:[18] it may not be irrelevant to Woodeaton that Danish thegns are known to have held manors on Otmoor in the first two-thirds of the 11th century.[19] The context is therefore a specific one, and it would be perverse to argue that churches of this kind were ever common. But they may not have been quite so uncommon as they now seem, for their lack of adaptability would have militated against their survival. The form was restrictive, wasteful of space, and hard to modify for normal use. At Woodeaton an aisle was added around 1200, but the only really satisfactory means of providing an adequate nave was total demolition: it is a direct consequence of the form of this destroyed nave that the existing nave is so architecturally unified.

Phase 3: A south aisle and possible south chapel: c. *1180-1220? (Fig. 6)*

Footing F1 was the SE. corner of a structure with walls 0.8 m. thick at ground-level. The fragment F14 observed inside the church, which either abutted or was cut by the Phase 2 stone church, was of identical construction (pitched rubble with orange-brown clay bonding), and can probably be identified as the W. wall of the same building. The association of F14 with F1 indicates a rectangle of 7.0 m. internal length.

A *terminus post quem* for F1 is provided by the underlying burial F20, which on radiocarbon evidence dates from after 1060 (at 2-sigma) or 1223 (at 1-sigma). Given that F1 was itself replaced by the standing mid to late 13th-century nave, the burial must be early within this range. Nonetheless, it provides almost conclusive evidence that the structure was later than, in other words an addition to, the Phase 2 stone church. The only plausible interpretation is that it was a small S. aisle (probably with a two-bay arcade piercing the wall of the Phase 2 tower-nave), of a kind commonly added to Oxfordshire churches around the turn of the 12th and 13th centuries.[20] Doubtless it was a welcome addition to what must have been a constricted and rather oddly shaped nave space.

The N.-S. footing F2 was bonded with clay of a slightly different consistency and colour, and was also on a slightly different alignment from F1. It was certainly earlier than the footing F5 which is assigned here to Phase 4, and seems best interpreted as the E. wall of a tiny chapel or vestry built in the angle between the Phase 2 chancel and Phase 3 aisle.

Phase 4: The enlarged chancel: c. *1200-50 (Fig. 6)*

Footings F4 and F5 clearly represent the N., E. and S. walls of an enlarged chancel, which re-used part of the N. wall of the Phase 2 chancel but extended further to the E. and S. The standing N. wall contains two simple lancets of early to mid 13th-century form, one pierced through the earlier walling and the other in the E. extension, and it seems a reasonable assumption that they belong to this phase. At its W. end, the new S. wall (F5) would have butted against the E. wall of the Phase 3 aisle; the Phase 3 chapel or vestry presumably no longer existed. This is again a standard development at this period, when a more elaborate mass liturgy required augmented chancel space.[21]

[18] Fisher, op. cit. note 12, 378-9. It is notable that West Thurrock church is dedicated to the distinctively Danish St. Clement (work by Barbara Crawford in progress).

[19] Blair, *Anglo-Saxon Oxfordshire*, 105-6 (Horton, Beckley, Merton, Piddington).

[20] For an added aisle of similar date and scale (one example out of many in the region), see J. Blair and J. M. Steane, 'Investigations at Cogges', *Oxoniensia*, xlvii (1982), 86-90.

[21] Cogges is again a good, though larger and more lavish, parallel: Blair and Steane, op. cit. note 20, 87-91.

The E. and S. walls of the chancel were later rebuilt on a different alignment (below, Phase 6), the S. wall re-using a small lancet window and a doorway which had presumably come from the Phase 4 chancel. The doorway is pointed, of two square orders, with nook-rolls on the jambs and arch of both orders and simple roll-moulded abaci; it would support a date of *c.* 1200-30.

Phase 5: The rebuilt nave: c. 1250-1300 (Fig. 1)

The nave, including the chancel arch, is of a single, very consistent phase with all features pointing to a date in the second half of the 13th century. The aisleless plan and broad, squat proportions can now be seen to have had a pragmatic cause: the need to build around the outside of the Phase 2 tower-nave while the latter continued in use (presumably after the demolition of its added aisle). By this means the parishioners of Woodeaton more than quadrupled the floor area of their nave, from 20 sq.m. to 84 sq.m.

The N. and S. (but apparently not the W.) walls rest on an expanded footing of big, roughly laid slabs, which on the N. side overlies the broad sub-footing F10. The buttresses are of a standard Early English type, and a roll-moulded string-course runs continuously around the external walls. There are N. and S. doorways with continuous mouldings (the former blocked). Most windows are single-light cusped lancets, but in the middle of the N. wall is a two-light window with simple Y-tracery. The easternmost windows in the side walls were also probably of two lights, though the northern is blocked and the southern has had the reveals heightened and the tracery replaced in the Perpendicular period. The chancel arch is pointed, of two chamfered orders, with small-scale impost and base mouldings including filleted rolls. The internal walls bear a consistent scheme of ashlaring painted in double-thickness red lines, with running foliate scrolls framing the doorways; this has every appearance of being original.

Phase 6: The later middle ages

On the evidence of the footings, the E. and S. walls of the Phase 4 chancel were later rebuilt on a slightly different plan. Footing F8 probably belongs to this rebuilding, even though it follows the old rather than the new alignment (being presumably built alongside a Phase 4 footing linking F5 to F4). The 13th-century doorway and lancet window in the S. wall are clearly *ex situ*: they are crammed awkwardly together, the window and its rere-arch are misaligned, and the doorway has a flat timber lintel instead of a rere-arch. The rebuilding is undated, and could be relatively late. There are standard late Perpendicular windows in the E. and S. walls, and the small 13th-century piscina in the SE. corner of the chancel could easily have been re-set with the other features.

The late medieval tower, built inside the W. end of the nave on two columns, clearly owes its odd position to the sharp fall of the ground immediately W. of the nave, which would have precluded the addition of a normal W. tower. The chancel-arch screen and some of the seating are late 15th- or early 16th-century and probably represent a unified liturgical scheme. Another element of this, a rood tympanum of vertical oak boards, is said to have been removed before 1846;[22] a fragment now re-used in the reading-desk bears traces of a painted figure, apparently holding a scroll, and some foliage.[23] It seems likely that the painted panels recently recovered from the pew floors, analysis of which is in progress, also

[22] A. Vallance, *English Church Screens* (1936), 17, citing information from E.T. Long.
[23] A report on this woodwork by Ric Tyler is deposited with the site archive.

derive from the rood tympanum. The black-letter inscription painted on the easternmost tiebeam of the nave roof, *Benedicte …, maledicte in ignem eternam*, suggests that the tympanum bore a Doom painting.

Undated

The mysterious footings observed to the S. of the nave, F6 and F7, are undatable and impossible to interpret with any confidence. They clearly belong to a single structure which is difficult to relate to the standing church (except conceivably as an improbably large porch).

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