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EXCAVATIONS IN ABBEY MEADOW AND WESTFIELDS, WYMONDHAM, 1992–93

by Heather Wallis

with contributions by Trevor Ashwin, Stephen Heywood, Irena Lentowicz, Christine Osborne and Lucy Talbot

SUMMARY

Excavation along the length of a pipeline in Abbey Meadow, Wymondham revealed evidence both of early medieval activity and of the period when the abbey flourished. This included a wall, a possible robber trench, internal and external floor surfaces and debris apparently related to the preparation of food, as well as drainage features. An area dedicated to burials was recorded to the south-west of the present churchyard, as well as a possible trackway. A square flint structure of unknown function was also recorded.

Introduction

Project history

Archaeological investigations to the south of the ruins of the Benedictine abbey at Wymondham were undertaken by the Norfolk Archaeological Unit during 1992–93. Requirements for an

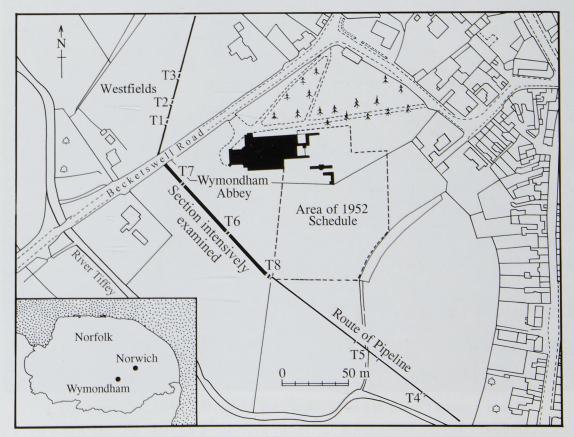


Fig. 1 Site and Trench Location Plan

improved sewerage service, necessitated by the growth of Wymondham in recent years, entailed the construction of a pipeline through Abbey Meadow. The route of the proposed pipeline approached the Abbey from the north, passing its west end at a distance of c. 50m before turning south east and crossing Abbey Meadow, the open ground lying immediately to the south of the church (Fig. 1). Abbey Meadow itself contains the claustral remains of the Benedictine monastery. It was hoped that investigation along the length of the proposed pipeline would not only produce evidence relating to the life of the monastery but might also indicate if there was any earlier activity on the site. The project was undertaken on behalf of Anglian Water who funded the work.

An earthwork survey of the Meadow and trial trenching in both Abbey Meadow and the grounds of Westfields was followed by more extensive excavation in the western part of Abbey Meadow itself. Abbey Meadow is a Scheduled Ancient Monument (No.131). Although parts of the Abbey, including the central tower and standing structures and earthworks immediately to the south and east of the present church, were first scheduled in December 1952 (Fig. 1) the scheduled area was only extended to cover the entire Meadow in 1973. This action was taken as a response to further structures being identified from air photographs (Plate 1).

The exact route of the pipeline was determined by discussions between Anglian Water and English Heritage: the location of an existing pipe and archaeological evidence, both from an earthwork survey by the NAU in October 1992 and from air photographs, were all taken into

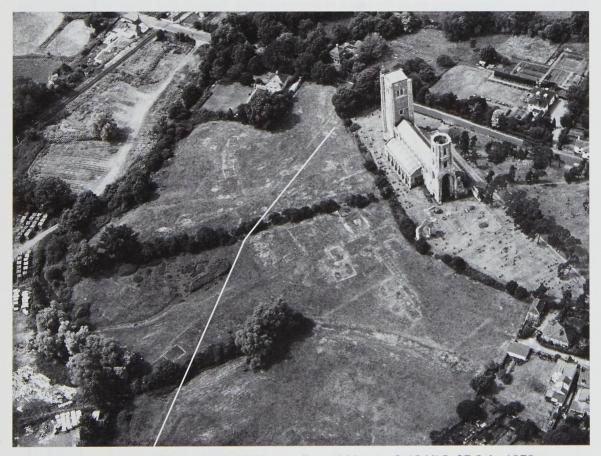


Plate 1 Aerial Photograph of Wymondham Abbey, ref. 194/15, 27 July 1979. The superimposed white line shows the position of the pipeline. Photograph by Eileen A. Horne, reproduced by permission of Aerial Archaeology Publications.

consideration. It was decided that the new pipeline would run parallel to the existing pipe, and immediately adjacent to the northern side, in order to minimise disturbance to known features.

Historical background

The earliest ecclesiastical foundation is probably of pre-Conquest date. There is evidence to suggest that Wymondham was an early Saxon estate centre with a minster church (Williamson 1993). Physical evidence for this is scant, although Blomefield states that a church stood near to the banks of the River Tiffey at the time of the Norman Conquest, in the field now known as Abbey Meadow (Blomefield 1806). He goes on to say that the foundations still existed hidden under the turf, although he could have been confused by the remains of the medieval monastery. William D'Albini founded a Benedictine monastery sometime before 1107, the date at which its foundation charter was issued, the church of which was designed to serve both the monks and parish. If Wymondham was indeed an early Saxon estate centre, it is possible that the presence of a Saxon Minster here attracted D'Albini to this site. During the construction of the monastery D'Albini destroyed both the Anglo-Saxon church and his own manor house (Woodward 1836). The latter he rebuilt on a new site, shown by Woodward to be on land north of the present day Becketswell Road (Fig. 2).

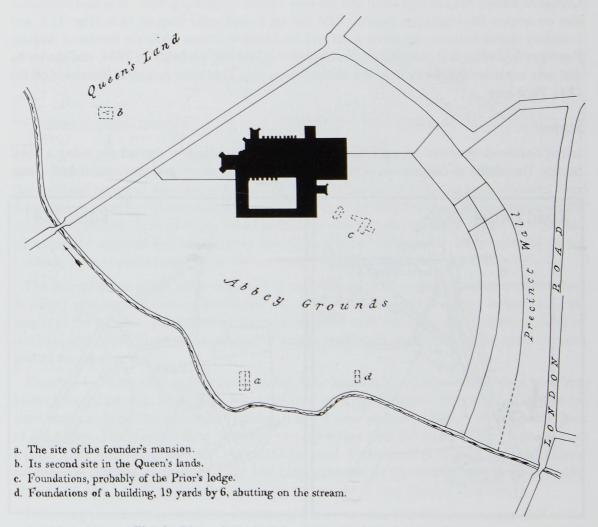


Fig. 2 Plan of Abbey Meadow, after Woodward 1836

The documented history of the church is dominated by almost-continuous disputes between the parish and the monastery. These began in the early 13th century and led to the church itself being formally divided into two when the nave and north aisle were appropriated by the parish and the chancel and south aisle by the monks. In 1249 matters were so serious that the problem was referred to the court at Rome and Pope Innocent IV. This did not end the disputes, however, which continued until the mid 15th century.

In 1448 the monastery was raised to abbatial status by a mandate from Pope Nicholas V. Only 90 years later, however, the monastic buildings were destroyed at the Dissolution when the Abbey passed to Henry VIII. Part of the church remained in parochial use. Soon after the Dissolution the parishioners rebuilt the north and south aisles of the nave on a grander scale; probably they used some material from demolished abbey buildings, most of which lay to the south within present-day Abbey Meadow.

Very few changes have taken place in the Meadow since the Dissolution. Both the Enclosure map of 1806 and the Tithe map of 1841 (Fig. 3) show that this land was used for pasture and indicate two property boundaries which can be seen today as tree-lined ditches. The only encroachment on the Meadow occurred in the south-west part of the field where a single small structure is shown on the Tithe map. The buildings in this corner are shown on the 1906 Ordnance Survey map as a sawmill and are now known as Becket's Well. It is also noticeable that on neither the Enclosure map of 1806 nor on a road order map of 1826 (Fig. 3) is any boundary shown between the abbey itself and the Meadow. It was while the Reverend William Papillion was vicar that the present churchyard was laid out, probably in 1834, and the ha-ha that now separates the abbey from the Meadow was dug. This latter feature is illustrated on the 1841 Tithe map.

Method

Initial fieldwork involved an earthwork survey of Abbey Meadow, carried out using a Total Station Theodolite in conjunction with a Datalogger. An arbitrary grid was established across

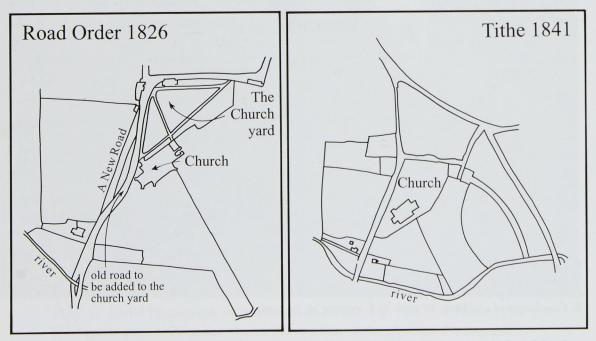


Fig. 3 Adaptation of Road Order Map (1826) and Tithe Map (1841) showing Abbey Meadow

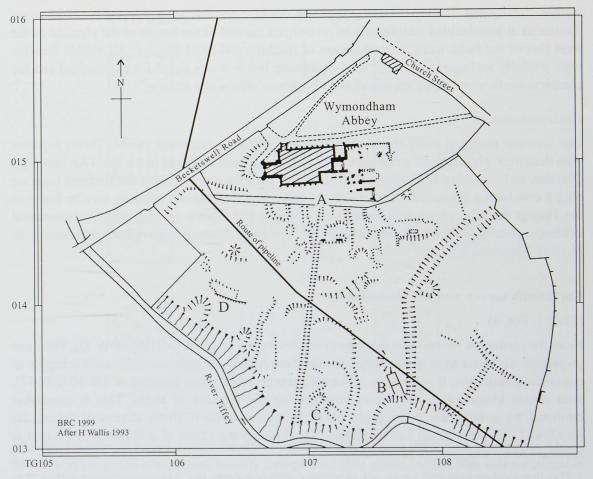


Fig. 4 Results of Earthwork Survey

the field and later tied into Ordnance Survey 1:2500 mapping. A series of measurements were taken where breaks of slope were observed, the density of measurements depending upon the complexity of each break of slope. This information was then plotted out at a scale of 1:100 and subsequently checked and hachured in the field. Further refinements were made by Brian Cushion, who examined the site in 1999 as part of the Norfolk Earthworks Survey (Fig. 4).

The second phase of the work consisted of the excavation of eight evaluation trenches (five in Abbey Meadow and three in Westfields: Fig. 1, T1–8) and a metal-detecting survey along the length of the pipeline. Responses to the metal-detector were not excavated, but the number of readings was noted. There was a noticeably greater number of readings from the north-western half of the pipeline.

Trenches 1–3 were sited in Westfields garden, their location being primarily dictated by recent landscaping of the area. Trenches 4–8 were located in Abbey Meadow: Trenches 4, 5 and 8 were sited across existing ditches while Trenches 6 and 7 were placed on higher ground south-west of the Abbey. The trenches were 1m wide, corresponding with the width of the proposed pipe trench. They were excavated and backfilled by hand. Excavation continued until the natural subsoil was reached, a depth of 1.2m had been achieved or the trench became unworkable. Trenches 4 and 5 proved difficult to excavate and record as they flooded frequently.

Following consideration of the evaluation results it was decided that the western half of the pipeline, from the west boundary of the meadow to the first visible ditch (T8: Fig. 1), should be

further investigated. The topsoil was stripped by machine and five areas selected for excavation. Thereafter it was decided additionally to investigate the rest of the length of the pipeline in the west part of the field, using a combination of machine and hand-digging. All visible features were partially sectioned (and augered if continuing below a safe depth for excavation) and the complete south-west facing section of the trench was drawn at a scale of 1:10.

Finds and archive

The site was recorded using the NAU's standard proforma recording sheets. These, together with drawings, photographs and analytical reports, have been archived in the Field Archaeology Division archives store at Gressenhall. This report presents a synthesis of the findings together with a concluding discussion. Full details of individual features and deposits may be found in the Project Archive, along with listings of artefacts and reports dealing with environmental evidence, pottery, animal bone and other finds. The finds themselves have been deposited with Norfolk Museums Service.

Earthwork survey and air photography

(Plate 1, Fig. 4)

From the earthwork survey four main areas of activity can be identified (Fig. 4, A-D). The most prominent of these (A) is located to the south of the Abbey and represents the main complex of conventual buildings. It is possible to identify the claustral range (centred at TG 1070 0147), with ridges identified in the survey representing the remains of walls. This is somewhat confused by a later tree-lined ditch which follows a north-to-south alignment across the meadow. Little other detail can be picked out, although the extent of a building to the east is represented by a noticeable promontory.

The three other featured areas, all at greater distance from the Abbey, represent either outbuildings of the Abbey or (possibly) the remains of earlier (pre-Norman) buildings. The remains of building **B** (TG 1074 0135) show up as a rectangular two-cell structure, the south side of which seems to have eroded towards the river. To the east of this, standing on a higher flat area defined by the river to the south and a ditch to the east and north, is a further concentration of earthworks, **C** (TG 1070 0134). The survey clearly indicates two rectangular structures at rightangles to each other, along with a possible third structure.

Traces of a long, thin rectangular structure with a single square cell at the eastern end (\mathbf{D}) are visible in a predominantly flat area to the west (TG 1064 0141).

Excavation

Over 450 archaeological contexts were defined, excavated and recorded. Interpretation of these has often proved difficult, however, due to the linear nature of the trench and the fact that many deposits were excavated by machine and identified in section only. Matters are not helped by the fact that very few artefacts were recovered so that definitive dating of deposits has seldom been possible. Nevertheless, four main periods of activity were identified:

- 1. pre-/early monastic;
- 2. monastic;
- 3. Dissolution;
- 4. post-Dissolution.

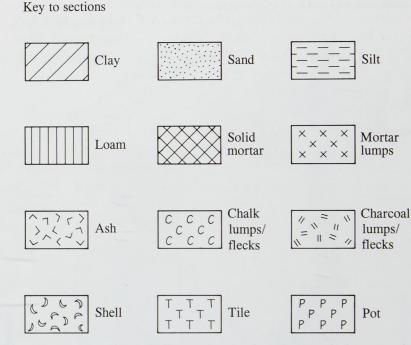


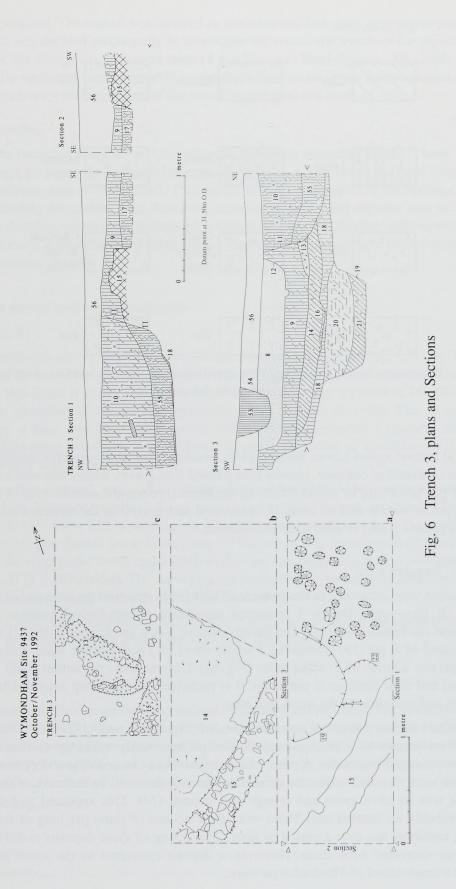
Fig. 5 Illustration conventions. Soil type conventions have only been used on contexts described in the text.

The natural subsoil varied across the site. In the western 72m of the trench's length in Abbey Meadow it consisted of compact, heavily iron-panned flint gravel. Above this was a noticeable deposit of pea grit rising to within 0.60m of the topsoil. Along the eastern 52m of the trench natural deposits were a mix of areas of clean sand and gravel. In the trenches excavated in Westfields natural gravel or sand were encountered.

Westfields (Trenches 1-3)

Three trenches were excavated in the grounds of Westfields, opposite the west end of the Abbey (Fig. 1). Of these only Trench 3 contained significant archaeological remains, including masonry and cut features (Fig. 6). The earliest feature was a single post-hole (22) which had been truncated by a pit (19) containing a single sherd of Thetford-type ware. Contemporary with this pit was a group of 27 stake-holes (Fig. 6a). Unfortunately no pattern could be seen in their layout and their function is unknown. It is probable that the group extended beyond the north, west and east sides of the excavated area.

Part of a later masonry structure was also revealed (Fig. 6b). A wall (15) crossed the corner of the trench on an east-to-west alignment. It was predominantly made up of flint set into a creamy-brown sand/lime mortar. A piece of roughly-worked limestone, probably reused, and a piece of tile were recorded within the section cut through the wall. To the north of the wall and abutting it was an olive green and orange clay deposit (14). This appeared to form a floor surface, probably an internal one. There was also evidence of some patching of this surface, indicating continual use over a period of time. The dating of these deposits is difficult as no pottery was recovered from them. However, a deposit excavated to the south of the wall contained a single sherd of Thetford-type ware.



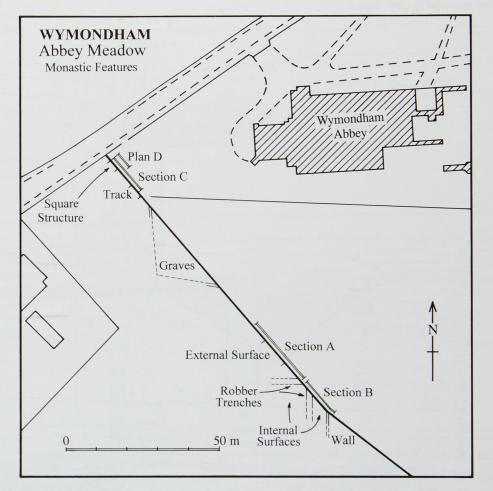


Fig. 7 Plan of Abbey Meadow showing locations of detail plans and sections, and of the principal ?monastic features recorded

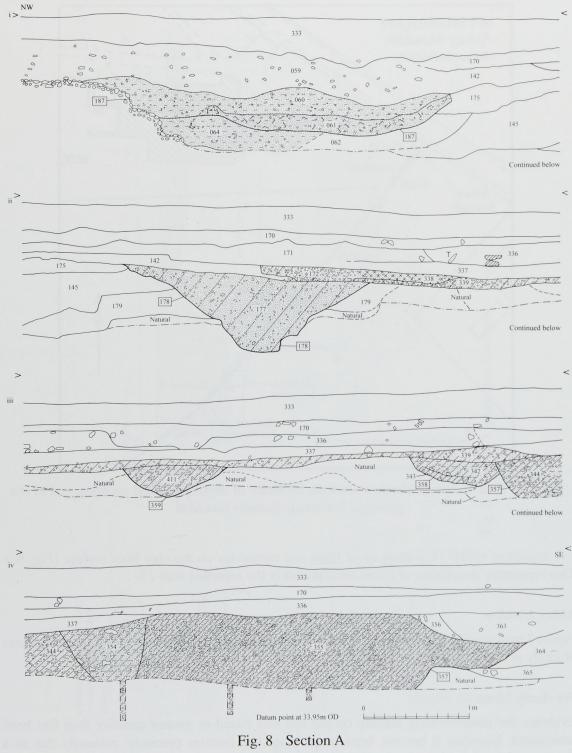
A deposit of rubble (13) made up of flints and mortar lay on the clay floor surface (Fig. 6c). This represents demolition of a structure, probably the recorded wall 15.

Abbey Meadow

Figure 7 indicates the location of all detail plans and sections, and of the most significant features of likely monastic date.

Pre-/Early Monastic activity

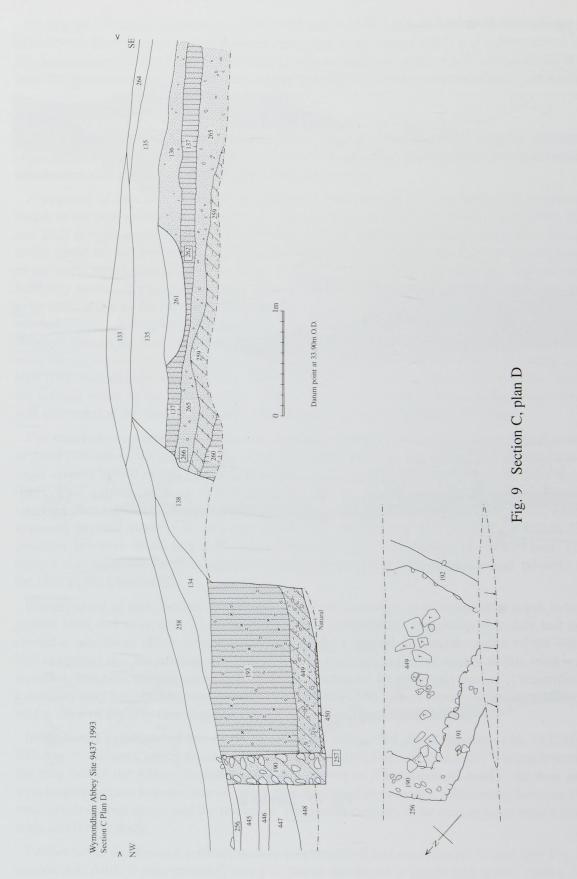
Evidence for possible early activity on the site was found in greater quantity than had been anticipated. However it has not been possible to date features precisely, primarily due to a shortage of artefactual evidence. Four features which may have been pre-monastic, however, were located in the central section of the of the pipe trench (Figs 7 and 8, section A), while a further group was located 12m further east. A wide ditch or a large pit was identified (*187*, section Aii). A second ditch (*178*, section Aii) ran north-to-south. Its fill produced an iron arrow head and two sherds of 12th-century pottery (a very early type of Late Medieval Unglazed ware). Two small pits (*359* and *358*, section Aiii) were also excavated but these lacked finds.



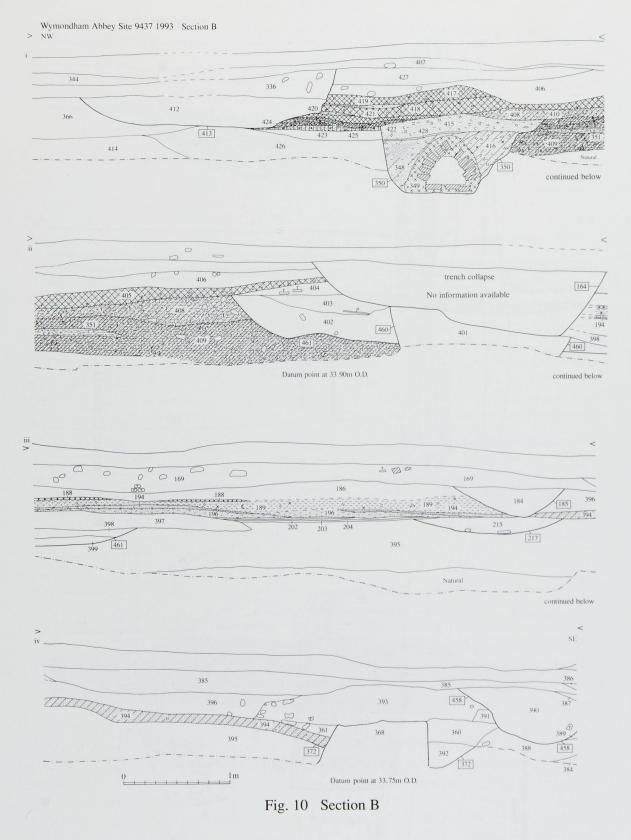
Wymondham Abbey Site 9437 1993 Section A



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Cutting pit 358 was a major linear feature (357, section Aiii-iv), apparently a ditch with a depth of c. 0.95m. Both in section and in plan a 'post-pipe'-type feature (354) was visible within its fill. Interpretation of this feature is difficult as such a small part of the whole was revealed. It is possible, however, that 357 represented a large construction feature with associated post-holes.

Monastic features

Features and deposits more certainly associated with the monastic period included structural elements as well as floor surfaces and occupation deposits (Fig. 7). A number of human burials which were also excavated probably date from this period.

A structure of flint and mortar construction was excavated at the west end of the examined length of the pipe trench (Fig. 9: section C, plan D). This was made up of three walls (190, 191 and 192) at right-angles to each other forming either a square or rectangular structure. Its full extent could not be determined as it extended beyond the north section of the trench. All three of the walls were constructed of medium sized (0.05–0.12m) flints bonded with a light orange sand/clay mortar. It was evident that a construction trench (257) for this structure had been dug to its exact shape as the flint walls were seen to be built hard up against this foundation cut. An internal facing of coursed, rounded flints was present on two of the structure. Flints often fell away during excavation, making work difficult and somewhat hazardous. The facing of the east wall (192) had already collapsed. The thickness of each complete wall was 0.25–0.35m, while the internal width of the structure was 1.60m. A compacted creamy yellow mortar floor (450) was excavated at the foot of the walls, which stood to a maximum height of 0.90m.

The material excavated from within the structure does not seem to have been related to the original function of the building. The lower fill (449), sitting on top of the floor surface, was a loose creamy brown mortary loam 0.25m thick with frequent chalk lumps and medium sized flints. This appears to have been destruction debris, perhaps from the demolition of this structure above ground. The rest of the structure was filled with a single deposit (193), which appeared to have been burnt at some time. This burning had not taken place within the structure, however, as the flint walls did not show any sign of having been affected by heat. The deposit may represent the dumping of a demolished roof along with burnt material, possibly at the time of the Dissolution.

Interpretation of this structure is difficult. The walls extended to a considerable depth below ground level and were not of a particularly strong construction, suggesting that they had not carried a substantial above-ground structure. The floor surface and faced interior of the walls also suggested that the interior was intended to be used. No means of access to this level was recorded, however, although this could have been achieved by temporary means. Alternatively a doorway may have lain beyond the area of excavation. The lack of slowly accumulated debris on the floor of the structure suggested that it was roofed and/or maintained.

Immediately to the east of this structure a series of compacted gravel deposits (*136*, *137*, *259*, *265*: Fig. 9, section C) were excavated and have been interpreted as a trackway leading towards the west end of the Abbey. Its full width is not known as it had been cut both to the east and west by more recent features, one of which also destroyed any possible relationship between the structure described above and the trackway. The gravel deposits were seen to be at least 4.00m wide and 0.60m thick.

Further to the south-east a cobbled surface was identified and excavated (172 and 339: Fig. 8, section Aii, Aiii). It was recorded along c. 8m of the trench's length and sealed earlier cut

features. The flint cobbles were closely packed within a clay/loam soil matrix forming a firm level surface. In one area they had been replaced by a compacted creamy mortar, probably representing a repair. The nature of the surface, and the lack of any evidence for surrounding walls, suggested that this was an external yard surface. No directly-associated finds were recovered. It had been sealed by a deposit of demolition debris; the lack of occupation debris indicates that the surface probably remained in use until the Dissolution.

To the east of this surface a series of ashy deposits were excavated (Fig. 10, section Bi). These contained a significant quantity of small bones, probably representing food waste, and some 13th–14th century pottery. Cutting through these deposits was a brick-built medieval drain, following an approximately north-east to south-west alignment. The sides of the cut (350) sloped at c. 45 degrees and it had a flat base 0.30m wide. Within this, bricks were laid on a bed of mortar, with twelve bricks being used to form a pointed arch. A thin skin of creamy mortar had laid over this, giving the exterior of the drain a smooth and even look. The drain itself was totally silted up with a light grey silt containing small mammal and fish bones. Its location suggests that it ran from the area of the claustral range down the slope towards the river.

A series of surfaces (188, 194, 204, 394: Fig. 10, sections Bii, Biii, Biv), made up of even but thin layers of sand or clay, may have formed an internal surface bounded by walls which were robbed at the Dissolution (feature 164, a possible robber trench, cut these deposits). The most substantial of these deposits (394) extended up to, and abutted, wall 368 (Fig. 10, section Biv). This wall survived only as a short stump c. 0.40m high. It appeared to cross the trench on a north-to-south alignment and had been constructed of large flints. There was no apparent face to the structure: it appeared to represent the east boundary of this part of the monastery complex as excavations further to the east revealed only post-Dissolution evidence.

A length of the pipe trench passed through an area containing human skeletal remains. These were located to the south of the south-west corner of the present abbey buildings (Fig. 7). A particular concentration of skeletal remains was noted between two cut features (not illustrated), *302* and *278/411*. These could be interpreted as boundaries to the graveyard and as such are discussed below.

Between 29 and 33 individual skeletons were represented, although no complete skeletons were excavated. This was due to the limited width of the trench and the oblique angle at which it crossed the east-to-west oriented burials. Accordingly the information available from the study of the skeletal material was limited, with both ageing and sexing proving difficult. However both female and male, immature and adult skeletons were recovered. A mixture of articulated and disarticulated human bones was recorded. Few grave cuts were identified, and some were only recognised in section due to the similarity of their fills to the surrounding material. Other articulated skeletons had been disturbed in antiquity by the insertion of later burials. Stratification of burials suggests that either the graveyard was in use for a considerable period of time or that space was very limited. A few of the burials extended west beyond the suggested boundary, indicating that it was not maintained or respected through the full life-time of the graveyard.

To the east of these grave deposits two linear features were excavated. One, a ditch, crossed the trench in a north-to-south direction turning through a right angle to run east-to-west immediately before entering the north section of the excavation. There was no indication of its function or its date but it appeared to have been cut from the same level as the graves. A second ditch with a broad 'U'-shaped profile crossed the trench on an east-to-west alignment. It has been interpreted as the south boundary ditch to the cemetery as no burials were found beyond it.

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A large feature (278/451) c. 9.5m wide (as measured in the section) appeared to have formed the western boundary of the burial area. The west side of this feature sloped down at c. 45 degrees while the east side was vertical. It was excavated to a depth of 0.60m and, as the maximum depth for safe working in the trench had been reached, was then augered. Deposits extended for at least another 0.40m below the limit of hand-excavation, and probably further as the soil matrix became too flinty for augering to continue. The sheer size of the feature was striking: perhaps it was originally dug for the extraction of flint which may have been used as building material, and that its use as a boundary to the graveyard was a secondary function.

There is no documentary evidence indicating whether or not the monastery and the parish shared a single graveyard. It is apparent from documentary sources, however, that the present boundary between the Abbey graveyard and the Meadow is comparatively recent, and that before the 1830s there was no physical boundary limiting the extent of the burial ground to its present size. The evidence from this excavation shows that the current graveyard once occupied an area considerably larger than it does now.

The Dissolution

The Dissolution of the monastery in 1538 rapidly changed the landscape around the Abbey. The conventual buildings were destroyed and the church handed over to the parish. Archaeological evidence for this period was observed in the upper deposits along the majority of the trench length and commonly took the form of tile fragments, flints of varying sizes and mortar lumps. One exceptional find from this general layer of demolition debris was a carved limestone corbel (Fig. 11). The quantity of debris varied but was concentrated along the eastern half of the trench.

Overlying the cobbled surface already described, the density of building materials within the deposits (*171* and *336*) was so great that they made up 80% of the soil matrix. This seems to indicate that a substantial building once stood in this part of the Meadow. Further east the amount of building debris in the deposits significantly decreases. A demolished brick wall (*169*: Fig. 10, section Biii) was also recorded. The bricks lay in courses as though the wall had been pushed over from the vertical to the horizontal plane. The alignment of the bricks seems to indicate that the wall had followed an east-to-west alignment.

Post-Dissolution

A few deposits can be phased to the period between the Dissolution and the start of the 20th century. These include a flinty deposit (135) which had been dumped over the possible medieval trackway at the west end of the trench (Fig. 9: section C). It sealed a grave which had been cut into the top of the track. A large pit (453: not illustrated), which cut the fill of the possible medieval flint quarry, appeared to date from this period; it contained fragments of building materials and some redeposited human skeletal remains.

To the south-east of wall 368 (Fig. 10, section Biv) lay two parallel linear features (T8, Fig. 1). The fills of the west ditch probably represented natural erosion of deposits to the west. The east ditch also appeared to have been filled by naturally accumulating deposits. This ditch is still visible as an earthwork across the field and is first documented on the Enclosure map of 1806. Excavation *c*. 70m to the south-east (T5, Fig. 1) identified a ditch running north-west to south-east from the river towards the Abbey. Approximately midway up the field the ditch curved eastward, becoming broader and shallower. It was excavated to a depth of 0.35m; augering to establish its full depth was not possible due to the waterlogged conditions.

	R	RB	THET	ET	EMW	IW	EM	EMSW	TMU	MU	Z	NLM	GRIM	SIM	LANG	DNG		LMT
	No	No Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt
Early features	1	б	1	7	1	,	1	19	5	57	1	ı	ı	ı	1	1	1	ı
Burial features	17	106	3	10	1	1	1	12	1	2	ı	I	I	ı	ı	1	1	I
Other medieval features	1	5	4	38	ı	1	I	ı	49	280	1	9	I	I	ı	ı	ı	ı
Later features	2	42	1	8	ı	1	13	06	1	14	1	4	1	21	20	77	-	68

- RB Romano-British
- THET Thetford-type ware
- EMW Early Medieval ware EMSW Early Medieval Sandw
- MSW Early Medieval Sandwich ware MU Late Medieval Unglazed ware
 - LMULate Medieval Unglazed vNLMnon-local medieval ware
 - GRIM Grimston Glazed ware
- LANG Langerwehe
- LMT Late Medieval Transitional ware

Table 1: summary of stratified pottery assemblage by feature type

EXCAVATIONS AT ABBEY MEADOW

A further trial trench (T4, Fig. 1) had been excavated 30m to the south-east. Flooded conditions, however, meant excavation could not be undertaken to any depth. In consequence the only deposits excavated here date to the post-Dissolution period and represented a gradual accumulation of meadow deposits. One small area of mortar was excavated in the corner of the trench and below the natural water table, however; this may have been structural or demolition debris, although it was the only evidence for building materials in the east section of the meadow.

Modern features

Few features of likely 20th-century date were identified. One, a linear feature of unknown function, lay at the west end of the trench and crossed it at a very oblique angle, cutting through the medieval trackway deposits. A possible modern pit was also excavated. It is not securely dated but appeared to have been cut from just below the base of the topsoil, although this was unclear.

The cut and fills of the pre-existing pipe trench were also encountered at various points. In many places the south section of the archaeological excavation was made up of the fills of this pipe trench.

The Finds

Full documentation of the artefacts, including record sheets, catalogues and specialist reports, are held in the Project Archive.

Pottery

by Irena Lentowicz

A total of 270 sherds of pottery was recovered. Table 1 shows the stratified assemblage by phase.

The majority of the Romano-British pottery was of locally produced Grey Wares, although a small quantity of finer fabrics were recorded. The pottery was recovered primarily from deposits associated with the burials. This does not indicate that the burials were Romano-British in date and a number of contexts also contained Early Medieval Wares.

Late Saxon wares were represented by twenty-five sherds of Thetford-type Ware (nine of them stratified: Table 1). Much of the material was abraded and only a few sherds showed signs of sooting and use. One bowl rim was recorded and two bases. These wares were found associated with every phase of activity and their distribution, along with that of the Romano-British wares, indicates the disturbed nature of many of the deposits.

Early Medieval pottery was represented by a small quantity of Early Medieval ware and Sandwich ware. No forms were identified. Medieval material was much more frequent, 123 sherds being recovered. The most common fabric was Local Medieval Unglazed ware: forms identified included jars with plain, everted rims and sooted body sherds from cooking vessels. Most of this fabric type appeared to be very early, possibly of 12th–13th century date. Glazed vessels were represented by fragments of Grimston Glazed ware, including decorated body sherds. Non-local material was represented by small quantities of both unglazed and glazed body sherds.

Pottery of later medieval and early modern type was characterised by small quantities of Late Grimston Glazed ware, a larger quantity of Late Medieval Transitional ware (LMT) and imported German Stonewares. Late Grimston Glazed ware was represented by a strap handle of a jug, while LMT vessels recorded include rims from a three jars (including one handled jar) a pancheon and a sooted base. The imported Stoneware present included a large sherd from a Langerwehe stoneware vessel and a rim and body sherds from a Raeren-Aachen jug.

Post-medieval material and one modern sherd accounted for the remainder of the assemblage. Wares each represented by one body sherd included Local Early Post-Medieval ware, Iron Glazed Black ware, Frechen Stoneware and Black Jackfield ware.

Human skeletal remains

by Christine Osborne

Estimating the number of individuals within this group was difficult because of the incomplete and fragmentary nature of the material. Archaeological skeleton sheets were issued on site for each skull, whether articulated with a skeleton or not, and for any skeletal remains which were seen to be articulated.

In total twenty-six adults and three juvenile/infants were identified. If, however, the maximum number of individual bones within the entire group is used in a minimum number count them a figure of thirty-three adults and three juvenile/infants, on the basis of the number of skulls, may be suggested. Because many of the skulls are fragmented a more accurate figure may be obtained by looking at the total number of right femora (the next highest bone in abundance), of which there are twenty-six adults and one immature.

Of the twenty-six adults identified in this group one is young, one is young/mature, five are mature/old, two are old and the remaining seventeen can only be said to be adults: two are male, ten are ?male, eleven are of unknown sex, one is ?female and two are female. Of the three juvenile individuals in this group one is twelve years old, one eleven years and the third can only be said to be an infant.

Fourteen of the twenty-nine individual skeletons had at least some surviving dentition. Of these, six (42.9%) have lost teeth ante mortem to caries, abscesses, deliberate extraction or periodontal disease. The latter affects the alveolar bone and soft tissues of the mouth, eventually leading to recession of the bone and the loosening and loss of teeth. It can be caused by a number of different factors such as poor diet, deposits of calculus or an unclean mouth (Brothwell 1972).

Much of the pathology observed in this group is degenerative in nature. The term 'degenerative' is used to describe pathological lesions thought to be related to ageing or trauma rather than indicating specifically (for example) osteoarthritis. Not only is the aetiology of the latter not fully understood, it is also difficult to diagnose in dry bone. Degenerative disease manifests itself in the bone in the form of wear, pitting, lipping and eburnation (polishing). It is observable in the spines of nine of the skeletons in this group. It is also seen in other areas including ribs, elbows, wrists and shoulders.

Three of the skeletons display areas of periosteal reaction on their leg bones. This thickening of the bone is a consequence of damage to the periosteum, either from disease or trauma. One skeleton in particular (267) has indications of periosteal reaction running along the shafts of both tibiae and fibulae and all surviving metatarsals. It is also found in patches over both calcaneii. Certainly in this skeleton it would seem to indicate disease, possibly the early stages of leprosy.

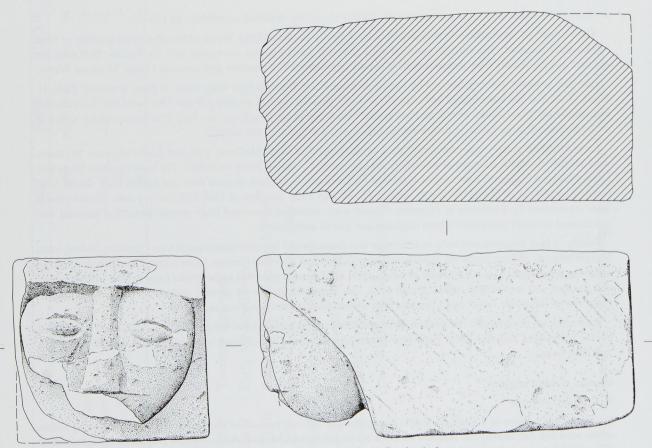


Fig. 11 Limestone corbel. Scale 1:4

Another skeleton (240) has a spondylolysis of the fifth lumbar vertebra. This is a condition whereby the inferior articular processes are only attached to the vertebra by fibrous tissue. It may have resulted from an injury such as a stress fracture in childhood, and might have given rise to some pain in the lower back

Two skeletons (181 and 252) and an isolated skull display cribra orbitalis. This pitting in the roof of the eye socket is thought to be associated with dietary deficiency.

The incomplete nature of the assemblage has meant that some pathological evidence has been lost. This means that it has not been possible to obtain a clear picture of the patterns of pathology throughout the group as a whole.

Animal bone

by Trevor Ashwin

The excavations produced a total of 24.525kg of animal bone from 56 stratified contexts and an additional 4.475kg of unstratified material was recovered. The whole assemblage was subject to a rapid assessment scan. Anatomies of cattle were identified from 34 contexts, sheep/goat from 30 contexts, pig from 29 contexts, and horse, dog and red deer from one context apiece. Bones of domestic fowl, rabbit and small rodents were occasionally noted.

While the quantity of bone was in fact quite large, given the small scale of the intervention, the assemblage did not warrant detailed analysis. The largest groups of bone were mostly from subsoil layers and therefore from disturbed or post-Dissolution deposits. The presence of small amounts of disarticulated human bone in most of these contexts made it clear that these collections were probably of very mixed origin, as did occasional findings of 'large' sheep and cattle bones clearly representing animals of recent date.

The predominance of immature cattle and of pig remains made clear that most of the assemblage probably derived from food waste. The absence of horse — represented only by a single phalanx identified from context 103 — was striking. Evidence of butchery was frequently encountered. This usually took the form of chop-marks inflicted by knives and heavier implements, deliberate shattering of longbones to retrieve marrow, and axial splitting and chopping of cattle vertebrae.

Canid gnawing, particularly of the ends of longbones, was noted frequently. While horse bone was sparse, bones from contexts 59 and 71 displayed possible signs of ungulate gnawing, suggesting that live horses had been present in the environment in which the bones had been deposited as rubbish!

Brick and tile

by Lucy Talbot

Fifty-nine fragments of brick, weighing 60.283kg in total, were recovered from the main phase of excavation. The material was divided into five groups according to fabric type. At present there is no reference series for medieval and post-medieval brick in rural Norfolk so the material could not be dated. A comparison was made with the brick fabric series for Norwich, but the fabrics found at the Abbey appeared so different that no conclusions could be drawn.

The main excavation phase also produced a total of 378 fragments of tile, weighing 38.301kg. The majority was flat peg tile, although a few fragments of ridge tile were also noted. The tile was divided into two fabric groups and subdivided further according to presence of glaze. Most came from contexts related to the backfilling of the square structure at the west end of the trench.

Worked stone

by Stephen Heywood

A single piece of decorative Barnack limestone was retrieved from within the topsoil. This has been identified as an eaves-corbel from a principal roof in the form of a carved head (Fig. 11). The head protrudes from a hollow chamfer and the bridge of the nose meets the upper rim of corbel stone. The upper rim is curved to follow the contour of the eyes of the image. The eyes are crudely executed and there is a suggestion of drilled nostrils. Chisel marks are evident to the side elevation and mortar traces are visible on the bedding plane. The protruding head is similar to those found at Norwich Cathedral Priory but dissimilar in that the bridge of the nose meets the upper rim. It is probably of early 12th century date.

Small finds

by Lucy Talbot

A total of 125 small finds were recovered from the site. Ironwork makes up the largest proportion of the assemblage and includes an arrowhead and two iron knife blades. Other artefacts include four possible lock keys, five possible tools

and seven unrecognisable objects. In addition sixty-four nails, varying in length from 29mm to 100mm, were found unstratified. These were mainly from the west end of the site where the burials were recorded, so many were probably coffin nails from disturbed graves.

Thirteen copper alloy small finds were recorded and comprised fragments of flat and rolled sheet. Nine lead small finds were recovered; eight of these were window came fragments and the remaining artefact was possibly a weight or bung. In addition eighteen window glass fragments were recorded, including one that was painted with a trefoil design.

The finds of lead came and window glass reflect the rich nature of the destroyed buildings. However the small quantity recovered illustrates the comprehensive nature of the robbing of the building material from the site.

Conclusions

The pipelaying provided a valuable opportunity to examine the deposits associated with this major monument. Interpretation of the excavated deposits has been difficult, primarily due to the linear nature of the excavation, but important evidence has been recorded.

Evidence of likely pre-monastery date took the form of cut features sealed by monastic deposits. These were mostly undated: they could either be Saxo-Norman or associated with the early phases of the construction of the Abbey. The structural evidence from Westfields was impossible to date but the building observed there could have been of relatively early date. These few early features and the lack of stratified Saxon pottery suggest that this area was not intensively settled during the Saxon period, although this does not detract from the already-mentioned theory that Wymondham was the location of a Saxon Minster.

Evidence from the monastic period was plentiful. Two possible robber trenches were identified which appeared to enclose a building's floor on two sides. To the west of these an external cobbled surface was also recorded. It has been difficult to suggest the exact nature of the activities being carried out in the area of the excavation, but the indications from the drain and the deposits surrounding it are that this was probably an area which served a domestic function. This is supported by the fact that these structures lay on the periphery of the main complex of monastic buildings.

That the graveyard was once larger, as suggested by the documentary evidence, has been confirmed and its western limit has been defined. It was unfortunate that the human skeletal remains were of insufficient quality to yield more information on the age and sex of the buried population. Little or no evidence for diseases, other than those of a degenerative nature, could be recorded.

Perhaps the most puzzling features — the structure and possible trackway — lay at the west end of the trench. It is difficult to imagine what function they served, especially considering their proximity to the west end of the church. The direction the trackway takes is unknown. It is unlikely to have been used by the monks as access to the church, however, especially as their part of the church lay beneath the central tower and to its east.

The Abbey claustral buildings seem to have been thoroughly demolished at the time of the Dissolution, with much of the site subsequently left as open land. Various topographic changes thereafter, although few, were recorded by excavation and through the earthwork survey. The earthwork survey was the first to be carried out across the whole of Abbey Meadow and in itself acts as an accurate record of the size and location of all the earthworks at the present time. Archaeological deposits and features have been fully recorded; consequently any future work on the site may now take place within an informed context.

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The figures were drawn by Steven Ashley, David Fox and Piers Wallace. The editing of the drawings was completed by David Dobson. The plate was photographed by Eileen A. Horne and is reproduced by kind permission of Aerial Archaeology Publications.

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