

# Recent work at Meaux Abbey

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*Meaux Abbey, a daughter house of Fountains Abbey, is extremely fortunate in that it has excellent documentation; a number of buildings were described in Abbot Thomas Burton's Chronicle of 1396-9, spanning 250 years; we know that the abbey developed from early flimsy wattle and daub temporary structures to timber and later, when a quarry was available, to stone. Although there are no extant buildings, documentation illustrates much of the history, economic activities and architectural development of the convent; and because the site was preserved under permanent pasture since the 1540s significant archaeological remains are believed to survive largely undisturbed by antiquarian and later investigations. Research for a doctoral thesis at the University of Sheffield has used documentary evidence, the results of earlier excavations and survey, an RCHM earthwork survey and new resistivity survey to provide greater understanding of the outer precinct, its layout, the way it was used, and its relationship between the inner and outer courts. The site has enormous potential for further investigation, including a need for limited carefully targeted research excavation which could be justified by the increasing levels of desiccation and damage.*

## Introduction

The Cistercian abbey of Meaux (SM21183 (NGR:TA092395) lies almost 7 miles east of Beverley, near the east bank of the River Hull and 5 miles north of the Humber in Holderness (Fig 1). Much of the area during the Middle Ages was either permanent peat marsh and bog, coastal marsh or seasonally inundated flood plains forming the 'Isle of Holderness'. Road access was limited to only the Hull Bridge east of Beverley and boats were a major form of transport. Drainage works began in the medieval period and navigable dikes were constructed by the monks of Meaux among others (Knowles, 1990, 366-367, Ellis, 1993, 18). The low lying clay wet lands were scarcely endowed with both timber and good quality building stone, which were highly prized resources - earth, turf, under wood, clay and reeds were the main building materials.

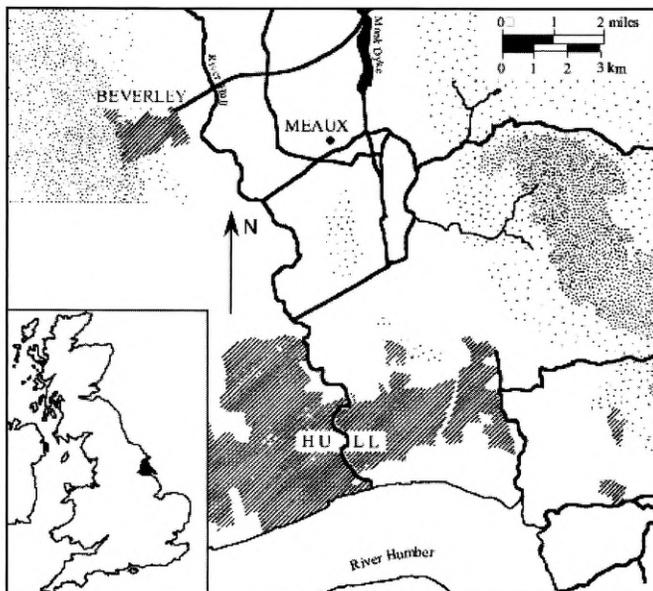


Fig 1 Location plan

The Abbey site has a particularly high archaeological potential because it has remained largely undisturbed, under permanent pasture, in this wetland location since its demolition in the 1540s. Although only the precinct mill, which remained in use after the Dissolution, survives as an extant structure, the precinct includes significant buried remains, which survive as a series of well-preserved earthworks. Parch marks and crop marks in and around the Abbey site attest to further survival of buried remains. In addition the Abbey is exceptionally well documented; a Chronicle (Bond, 1866), a Chartulary (Orange, 1965), and a partial Register of economic transactions survive, (BM, COTTVIT) illustrating much of the history, economic activities and architectural development of the Abbey. Peter Fergusson has produced an excellent account of the buildings as described in the Chronicle (Fergusson 1984).

When considered together with the documentary evidence a basic plan of the church and cloisters can be identified among the earthworks. No significant recent excavations have taken place on the site. During the 1890s some wall chasing occurred (Cox 1894), and at an earlier date antiquarians mentioned the removal of tile pavements from within the church and the use of some remains as hard-core in local road construction. During the 1920s, part of the main sewer system was pumped out, planned and photographed. A number of organic remains were destroyed, some small finds recorded and the 'excavations' demonstrated that substantial buried stone remains survived (Sheppard, 1929). The former owner Mr GK Beulah undertook limited excavation within the Abbey site until the site was scheduled in the 1970s. Mr Beulah confirmed that significant buried building remains and artefacts survive over a substantial area of the monastic precinct; he kindly

donated his archive to the present project in 1992. Meaux provides an excellent opportunity to consider the relationship between inner and outer courts in greater detail than at many other more disturbed or less well-documented sites.

### *History of the Abbey*

William Le Gros, Earl of Aumale, Lord of Holderness, founded Meaux Abbey in 1151 on a site which he had recently acquired with a view to creating a hunting park (Bond, 1866, I). The foundation grant contained over 80 acres of land, as well as marshes and the wood of Routh. The house was a daughter of Fountains Abbey and the first monks built their earliest wattle buildings upon a small clay hill surrounded by peat marshes. Substantial timber buildings soon replaced these (Bond, 1866, I). As the estates and resources of the house increased under the influence of the Earl and patronage of other powerful northern lords, priority was given to the erection of a stone church and cloister range. Under Philip, the second abbot (1160-82), a quarry at Brantingham provided stone for the first permanent church (Bond, 1866, I). As other quarries were acquired, a traditional cloister range was developed. Before it was completed the church was rebuilt three times, achieving its final form by 1264, later alterations being either internal or superficial.

During the same period a number of granges were established. These contained domestic, agricultural and industrial buildings, used to administer the estates and to process the produce of the abbey. There were substantial stone buildings including mills, granaries, kilns and dwellings erected upon the major granges from the period 1235-1249 (Bond 1866, I). This suggests that by this date the resources were available to invest in domestic and agricultural rebuilding in stone. Many other essential agricultural buildings remained timber structures throughout their history.

The community was never large; the 13th-century population peaked at 40 monks and 90 conversi (Bond, 1866, I). Despite its large estates and flourishing woollen industry and tileries, the convent was frequently in debt and on two occasions was forced to disperse until its debts could be reduced. The demands of an ongoing and comprehensive building programme, a reluctance to liquidise capital assets and a number of politically injudicious acts by Alexander, the fourth Abbot, appear to have been the main cause of financial difficulties during the growth period of the house.

By the time of the Reformation, the monastery owned substantial estates largely within the East Riding with outliers in York and Lincolnshire. Shortly after the Dissolution of the convent the Abbey was granted to the City of Hull to use as a quarry from which to expand the fortifications of the city. The site was cleared to the foundations, or below in places.

### *The Meaux Abbey project*

The Meaux Abbey project, forming research for a doctoral thesis at the University of Sheffield, includes an assessment of the surviving archaeological resource at the Abbey site and a number of its granges; it includes reflections concerning the form and function of the property, considering the multi-functional nature of the monastic complex. This paper focuses upon survey work undertaken in the outer court of the Precinct.

Several recent works have summarised current knowledge concerning the layout and function of the outer court (Coppack 1998, Williams 1998). These served to emphasise the considerable gap in our knowledge concerning the intricacies of the Cistercian response to the realms of physical labour, self-sufficiency and interaction with lay society. The Meaux project aims to contribute to the debate.

### *The outer court at Meaux*

The site of the conventual buildings and the inner court were bounded by moats, acting both to define the area and to drain it; these can still be seen on the ground. Indications of the layout of the outer court buildings are evident as earthworks, others can be inferred at Meaux from documentary references, and some features may only be identified by geophysical survey. The only features of the outer court that can be securely identified are the mill, mill-pond and stream (Fig 3). Other features described in documents include:

1. the brew house whose facilities were improved c1339-49 when Abbot Hugh used the stones prepared for the construction of a chapel to make, *'a certain vessel of very beautiful stone adjoining the kiln in which our heap for making malt used to be steeped'* (Bond, III, 36);
2. the lay brothers' infirmary and a great granary roofed with lead near the bake house, erected under the ninth Abbot (1249-69) (Bond, II, 119);
3. however, this infirmary for the conversi with its own kitchen was dismantled a century later by Abbot William (1372-96), after the decline of their ranks (Bond, III, 226).

Other alterations to the outer court occurred during the 1390s:

1. the removal of the old common guest house and the chamber formerly assigned to the use of the chaplain of the chapel in the woods (Bond, III, 226);
2. the peat house next to the fish house was moved as far as the new guest house and a pigsty was made on the site of the old turbarry (Bond, III, 226);
3. there are also references to the offices of the plumber and carpenter and a chamberlain's office, and the sub-cellarer's stables (Bond, III, 166).

Parts of the outer court were wooded, for between 1396-99 'there used to be many ash trees growing between the pulley gate and the door of the sub cellarer's office, the sight of which delighted viewers, and the abbot had them chopped down, up rooted and levelled.' (Bond, III, 354).

### *The Abbey site, recording and geophysics project*

Resistivity survey using an RM4 twin array meter has been employed, under licence from English Heritage, in order to examine the extent of survival of the remains of the outer court of the monastery. The results to date are presented and analysed below.

The extant mill and mill pond lie 150m west of the site of the Abbey church and form one of the few reference points from which to construct interpretations of the site plans at Meaux. Earthworks lying between the mill stream and the west end of the church suggest that the buildings of the outer court were located here. It had been assumed that the outer court continued to the west beyond the millpond, occupying most of the adjacent field. However, initial resistivity survey in 1992 (Fig 3) suggested that this area probably remained under plough during the monastic period. Its only structures were those visible as earthworks; a possible windmill east of the precinct mill pond, and some additional ponds to the east, whose most likely use was as fisheries. The remainder of the survey focused on the area between the mill stream and the entrance to the church. (Fig 2 earthwork plot) The significant features revealed in 1993-4 are discussed here; they are numbered on Fig 4.

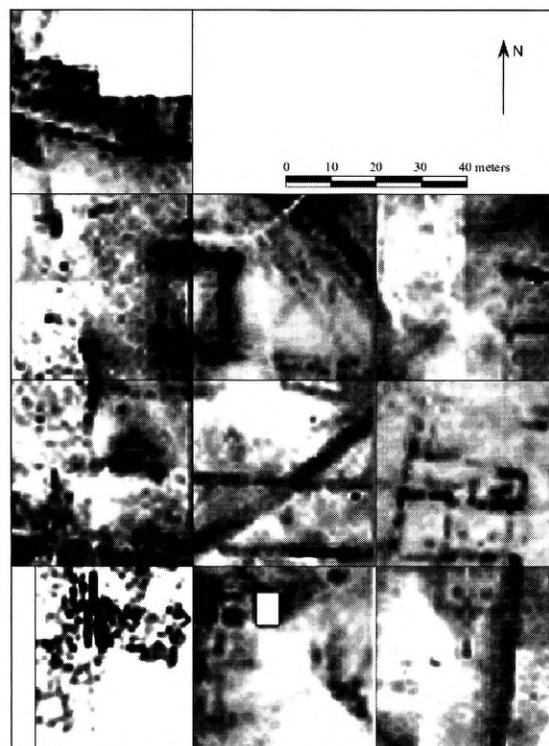


Fig 3 Greyscale plot.

for F1 are most consistent with a linear negative feature, a ditch, dike or drain, but lined with high resistance material such as stone.

#### Interpretation

There is some doubt about the date of this ditch: if the feature is monastic then it may be a drain serving the structures apparent as features 3, 4, 5, & 6; the wide ashlar faced sewer to the south of the claustral range, explored by Beulah, would have similar proportions.

The Abbey site had previously been agricultural land pertaining to the village of Melsa, located to the north-east. Because F1 appears to be high resistance, probably stone or fired clay, it is unlikely to predate the monastic period. The monks shipped stone to the site from considerable distances, but it is unlikely that any earlier occupant would have had the resources or inclination to do so. Any non-monastic feature of this length is most likely to have been constructed from turf or timber rather than stone. If F1 relates to Melsa's agricultural arrangements, its form would suggest either a drain or a boundary. In either case such a feature, in any period from prehistory to the Middle Ages, in this locality, would be most likely to have been a dike. If F1 had been a dike then it must later have been in-filled or culverted with high resistance material. F1 may have formed part of the boundary of William Le Gros' original hunting lodge and park, which he had already begun to enclose with a dike prior to the foundation. This partially constructed boundary would then have formed part of the first monastic precinct and was later in-filled, as the precinct expanded in order to

Fig 2 Meaux Abbey earthwork survey. Thanks are due to English Heritage's Survey Department, formerly RCHME York.

### *Feature 1*

#### Description

A linear feature curving from north-west to south-west across the survey area, formed of parallel high resistance readings separated by a low resistance area. The readings

accommodate the church and conventual buildings. If F1 was either an agricultural boundary or drain, or an early park pale, which was later in-filled, the waterlogged conditions at Meaux would require that it be culverted in order to keep the area drained and prevent the occurrence of a morass.

F1 then, may represent the earliest boundary of the site, begun for other purposes, park pale or agricultural enclosure, and culverted or in-filled at a later date, or F1 may be a monastic drain serving buildings in the outer court. See Fig 4 below for a plan of numbered Features.

## *Feature 2*

### **Description**

This is a small area of alternating parallel high and low resistance linear features orientated from north-east to south-west.

### **Interpretation**

The area is most likely to be remnant ridge and cultivation remains and may have formed part of the agricultural lands of the pre Domesday village of Melsa. The linear features appear to respect F1, which would suggest that F1 is also pre-monastic and agricultural.

## *Feature 3*

### **Description**

A high resistance feature, indicating a rectangular structure of 20m x 30m with substantial foundations approximating at least 3m wide. Located in the middle of the outer court area and aligned with the nave of the church 100m to the east.

### **Interpretation**

Feature 3 is a large square structure with substantial footings in alignment with the nave of the church; it does not conform to any standard form for a monastic building other than perhaps the base of a tower. There is no record of a tower as such at Meaux, nor any precedent at other Cistercian houses for a free standing bell tower in the western court. However, the Chronicle describes how Abbot William of Driffeld (1249-69) built a belfry, covered it with lead, and had a great bell installed inside; it is not clear whether this bell tower was erected over the crossing or was free standing. As F3 appears to have massive walls and as it is aligned with the nave of the church, a free-standing belfry is a serious option.

F3 is not conveniently sited to form part of a gatehouse and there is little evidence for any associated boundaries or thoroughfares demanded of a Cistercian gatehouse. Nor is there evidence for the associated buildings such as chapels, kitchens, lodges, guesthouses etc as described at Meaux (Bond, 1866). The structure is located between the church and the entrance to the precinct, in a site suitable for one of the two-mentioned guesthouses at Meaux (Bond, 1866,

II). It does not, however, demonstrate the complexity of form, internal divisions, hearths, courtyards, drainage features, suites of rooms and so on to be expected of a Cistercian guesthouse. At Meaux in particular, documentary references bear witness to the complexity and multi phase nature of the sites of both the guesthouses (see below).

The feature does not easily fit any of the standard Cistercian buildings known to exist at Meaux. Although the precinct is located upon former agricultural lands associated with Melsa, F3 is unlikely to have a manorial origin. There was no church or castle at Melsa, and the manor house was converted by the monks for use as the focus of their grange buildings at the home farm North Grange (Bond 1866, I). There is no evidence for any Roman to Late Saxon settlement on the site.

Feature 3 could immediately pre-date the convent, relating to William le Gros' hunting lodge: a simple first floor hall with storage for hunting and trapping equipment etc below. Other possible associated features may represent more ephemeral buildings such as timber framed lean-to stabling and kennels. If such a lodge did exist however, it was overlooked in the Chronicle's foundation story, which records initial wattle and daub buildings followed by later buildings constructed from timbers reused from Mount Ferraunt Castle (Bond 1866, I). In the hagiography of Cistercian creation myths, hardship and deprivation was expected of pioneering monks; the provision of a ready made lodge would not suit this image and may have been expunged. The Meaux Chronicle is, however, remarkable in its detail and records considerable deviation from Cistercian norms in the form of the early buildings (Bond 1866, I), to the extent that its veracity has long been accepted (Fergusson, 1984). It is therefore unlikely that Le Gros provided a stone or substantial timber lodge on the site which the monks occupied but failed to record in the Chronicle.

The second phase of monastic buildings, a substantial two-storey hall formed of timber, large enough to accommodate 40 monks sleeping on the ground floor and studying above, may correspond to the form of F3. These second phase buildings survived, re-used in other capacities, into the 1390s (Bond 1866, I). By 1399 they served as a malt house, which may have involved some fire proofing in stone or more probably, clay bricks or tile, incidentally preserving the reused timbers from Mount Ferraunt Castle for at least 250 years. The location of F3, west of the church, corresponds with documentary descriptions and would form an appropriate site for first temporary buildings. They would not impede the construction of the planned monastic complex along Bernadine lines, and being in the outer court could be converted to other uses once vacated by the monks. If F3 is the site of the earliest monastic buildings, it appears to be enclosed by F1, perhaps as part of the early boundary.

Only excavation will clarify the situation and explore the relationship between Features 1, 3, & 8 and the wider monastic complex. The more ephemeral readings around F3 may represent the remains of either the temporary, initial, wattle and daub phase of buildings, or of contemporary but less substantial structures constructed in timber as part of phase 2, or the remains of later structures relating to the adaptation into a brew house.

### Feature 4

#### Description

Feature 4 represents a complex series of linear high resistance features indicative of a number of related rectangular structures, with internal features, including possible pier bases or packed postholes. It is located south-west of the western claustral range.

#### Interpretation

The location of F4 corresponds with that of the guesthouses at Fountains Abbey, the motherhouse of Meaux (Coppack, 1998, 108), and Kirkstall Abbey an earlier sister house of Meaux (Robinson, 1998, 132-4). Indeed, topography allowing, this location is often seen in Cistercian guesthouses. Of the six other Cistercian abbeys in Yorkshire, only Rievaulx Abbey is known to deviate due to geographical restrictions at the site. F4 covers the most likely position for Meaux's guesthouse.

Although geophysical survey cannot clarify phasing within a structure, the remains of F4 appear to be complex, including possible pier bases, hearths, doorways, recesses as well as chambers, yards and pentices. A similar complexity is seen at Kirkstall and Fountains, (Coppack, 1998,108) which are believed to have provided several classes of accommodation for guests of different social status. The Chronicle refers to the existence of segregated accommodation at Meaux, which suggests some similarity in arrangements to its mother and sister houses.

One guest house, with kitchens and a peat house near by, was located above the pulley gate; it had existed for some time before it was renovated by Abbot William (1372-96). He moved some of its facilities to the new guest house, located elsewhere (Bond, 1866, III, 226). The new guest house must have been substantial for in 1396 its high chamber was large enough to accommodate the whole community of 40 monks, with guests and witnesses for the investiture of Abbot Thomas Burton.

### Feature 5

#### Description

Two parallel high resistance features 15m apart, orientated directly east-west located immediately to the east of the mill and opposite the mill pool.

#### Interpretation

*'Now there was a certain water mill roofed with lead, within the abbey, adjoining the great granary, and enclosed by the outer*

*wall having its pool opposite the common stable'* (Bond,1866,II:82.)

The shape of F5 suggests an extremely long building extending for over 100m from the south-western angle of the claustral complex as far as the mill, fitting the description of the great granary. Granaries have often traditionally been located above stabling and the two functions appear to have been associated at Meaux. In a monastic setting one would also expect that the common stable would be near the guesthouse. F4, the complex suite abutting the eastern end of the F5, may indeed be guest housing. Unfortunately the relationship between the mill and the end of F5 is obscured by hard core and cannot be clarified without excavation. See F6 below.

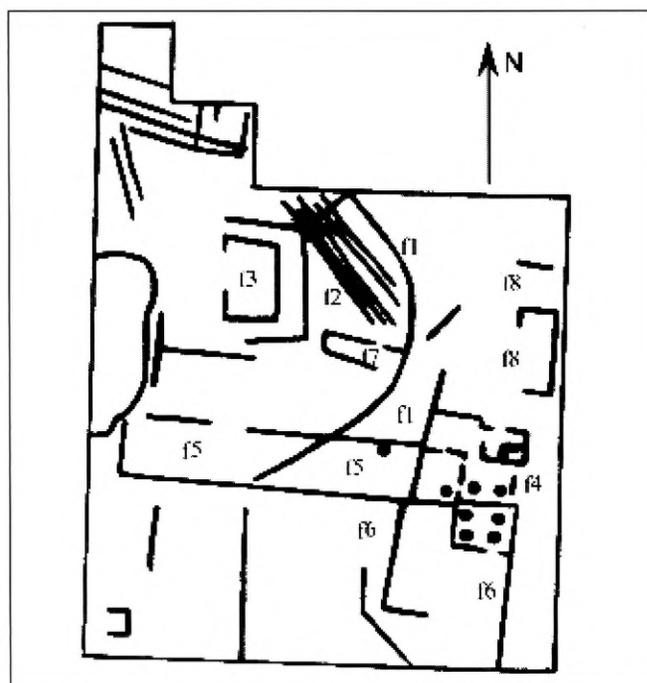


Fig 4 Interpretation of probable features; the numbers are Feature numbers

### Feature 6

#### Description

A high resistance linear feature orientated east- west extends for over 100m across the southern edge of the outer court; it was aligned with the rear wall of the mill in the west and the rear walls of F5 and F4 with an apparent 90° turn to the south at its extreme eastern edge which extends for over 60m and exceeds the survey area.

#### Interpretation

A linear high resistance feature suggests a footing following the basic form of outer court walling. The Chronicle states that the mill was enclosed on the south by the precinct walls. F6, extending towards the mill, likewise appears to be enclosed by F5 and F4. Feature 6 appears to form an integral

part of several other structures; F4 and F5 may represent buildings, either lean-to structures, or fully integrated later buildings. The accretion of buildings onto extant walls, the creation of pentices and covered walkways, the extension of walls to create courtyards and the covering of courtyards to create rooms, is a feature of all monastic complexes; such accretion is documented at Meaux in many instances. At the eastern extent of F6 a 90° turn to the south suggests an entrance or thoroughfare. This would provide a route to the Ash Dike wharves, the meadows to the south of the precinct, and through to the turbarry of Meaux. Here substantial earthworks survive which are believed to correspond with wharves associated with Ash Dike, the watercourse engineered by the monks to bring heavy loads from the Hull to the precinct.

It is possible that Features 5 and 6 may be the north and south walls of the same structure.

### **Feature 7**

#### **Description**

A rectilinear high resistance feature.

#### **Interpretation**

Feature 7 appears to represent three walls of a structure with traces of other remains around it. The eastern wall of the building has been obscured by its relationship with F1. It is uncertain which feature cuts which, whether F1 forms the rear of F7 as an enclosure, or passes beneath F7 serving it as a drain.

### **Feature 8**

#### **Description**

Two, or possibly three, parallel high resistance anomalies aligned east-west and were located directly outside the west entrance to the church, possibly the north and south walls of a building extending beyond the limits of the survey.

#### **Interpretation**

F8 appears to be two or three cross walls of a structure located outside the west entrance of the church. Too large to be buttressing, they may represent the footings of a Galilee porch, a common feature at Cistercian houses. There are no documentary references to a Galilee at Meaux, although one is extant at Roche, a sister house of Meaux. The church at Meaux was begun *de novo* from its foundations on three occasions and it is possible that it was slightly moved along its alignment and that F8 represents earlier phases of church building.

Numerous additional smaller features are apparent in the survey which are not discussed in detail here, in addition a further 24 grids have been surveyed and await analysis at a later date. The sample provided above merely serves to illustrate the excellent archaeological potential at surviving Meaux.

### **Further work and conclusions**

Consideration of the nature and form of the Cistercian precinct and its gatehouses and other external offices is limited at many sites where the location of the boundary is uncertain. Yet we know from contemporary documents that a sense of enclosure and isolation was a central tenet of the Cistercian lifestyle.

Much of the precinct boundary at Meaux was formed of moats or dikes, acting both to enclose the convent and to drain the site and safeguard it from flooding. The location of much of the encircling dike can be traced as earthworks today. Turf and earth from the digging of the dike were probably used to construct banks or earth walls to increase the sense of enclosure. Part of the site was already enclosed by a dike, intended to act as a park pale, when the monks acquired the land from William Le Gros in 1150. Other records mention the construction of navigable dikes used to bring building material to the precinct, but there is no mention of the method or date of completion of the remainder of the precinct boundary. The earliest references to works upon the perimeter of the precinct occur during 1235-49 when Peter of Wawne caused a pentice to be built outside the great gate and a causeway to be built through the woods there, (Bond, 1866, II, 4) indicating that not only had a permanent boundary been constructed by this date, but that a gate complex of some sophistication was in place.

Although its location remains to be confirmed by survey work, the gate house complex at Meaux is well documented. The importance of the gates and boundaries to the convent is demonstrated in numerous references to alms and donations given for rituals at the gates, chapels at the gates and even the maintenance of the fabric of the gates and boundaries (Orange 1969). Closer consideration of the ritual importance of the gatehouse complex will be the subject of a forthcoming paper.

A chapel was constructed outside the gates during the same period, *'the chapel in the wood near the Abbey'* was dedicated to the Virgin Mary and acted as a chantry for the de Thurnam family (Bond, 1866, II, 60). The chamber which had been allocated to its chaplain survived until c1372-96, when it was relocated elsewhere (Bond, 1866, III, 226). Between 1286-1310 a chantry from the manor of Ottringham was established in another chapel located outside the gates where it was served by six monks (Bond, 1866, II, 176). In c 1334 the abbot obtained a licence to move the chantry to a new chapel *'above our great gates'* (Bond, 1866, II, 296).

Certain of the domestic offices also appear to have been sited outside the Abbey gates. In 1396-99 we find *'There was a smithy outside the gates of the abbey as well as other offices adjoining the old common stable, the same smithy and hay barn Abbot Thomas Burton had transferred and placed within the abbey next to the abbots stable, on its northern side'* (Bond, 1866, II, 296).

By the 14th century the entrance to the precinct at Meaux constituted a major complex of gates, inner and outer, linked by a covered walk way and approached by a causeway, with associated chapels, chambers, kitchens and ancillary rooms, some accommodated in upper stories. There were several chapels associated with the Meaux complex, one above the gates, one in front of the gates and the chapel in the woods outside the gates. A watch house existed for some time before being relocated to a grange. The Pulley Gate included a guest house with kitchens which was renovated in the later 14th century. Indeed the Ministers Accounts of 1540 record *'one plot of meadow situated at the entrance, otherwise in front of the "hosteum" there'* (Henry VIII, 31-2, 177), suggesting that a Guest House survived at the gates until the Dissolution. There are no records to tell us if the Guest House accommodated guests or corrodians. It may have been used by women or servants, those who were not considered suitable to enter the abbey. Its kitchens almost certainly provided food for alms given at the gates, which were funded by several bequests.

The probable location of the Abbey gates is immediately to the north-east of the survey area presented above and it is hoped to examine this in greater detail when the survey is completed.

The survival of stone remains below ground at Meaux is undoubtedly good. In the 1920s when part of the main sewer was emptied waterlogging persisted and organic remains including seeds, bones, vegetable matter and wooden artefacts were destroyed. Since that time the aquifer

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has been denuded and the site has undergone an uncertain amount of desiccation. If timber structures and even the turf walls recorded in the Chronicle still survive, they are under immediate threat. Rabbit burrows occasionally throw up dry bones, indicating some potential survival. Judicious coring for environmental samples, with the appropriate licences, would clarify both the extent of survival and provide evidence for the dates and phases of the deposits. Evidence about the agricultural regime employed by the monks, the natural environment and climate in the locality and even the levels of hygiene, occurrence of pests and dietary information relating to the monks could be reasonably expected to survive. That is a project lying outside the realm of my thesis but I hope that it will appeal to someone in the near future.

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