

**An Archaeological Watching Brief  
On Land at Tortington Priory Barn, Priory Lane, Arundel, West Sussex**

**(NGR TQ0065 0594)**

**SMR ref HSD 9/2/6442**

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## **Archaeology South-East**

*Archaeology South-East is a division of the University College London Field Archaeology Unit one of the largest groupings of academic archaeologists in the country. Consequently, Archaeology South-East has access to the conservation, computing and environmental backup of the college, as well as a range of other archaeological services.*

*The Field Archaeology Unit and South Eastern Archaeological Services (which became Archaeology South-East in 1996) were established in 1974 and 1991 respectively. Although field projects have been conducted world-wide, the Field Archaeology Unit retains a special interest in south-east England with the majority of our contract and consultancy work concentrated in Sussex, Kent, Greater London and Essex.*

*Based in the local community, the Field Archaeology Unit sees an important part of its work as explaining the results to the broader public. Public lectures, open days, training courses and liaison with local archaeological societies are aspects of its community-based approach.*

*Drawing on experience of the countryside and towns of the south east of England the Unit can give advice and carry out surveys at an early stage in the planning process. By working closely with developers and planning authorities it is possible to incorporate archaeological work into developments with little inconvenience.*

*Archaeology South-East, as part of the Field Archaeology Unit, is a registered organisation with the Institute of Field Archaeologists and, as such, is required to meet IFA standards.*

## *Abstract*

*An archaeological watching brief was maintained during groundwork associated with the construction of a new extension at Tortington Priory Barn, Priory Lane, Arundel, West Sussex. The watching brief at this Scheduled Ancient Monument identified extensive remains associated with the medieval Priory including a section of the west wall, buttress and doorway of the original Augustinian Priory church. Wall footings and a buttress associated with a probable cloister to the south and a probable post-dissolution lime kiln were also discovered.*

## CONTENTS

**1.0 Introduction**

**2.0 Archaeological Background**

**3.0 Archaeological Methodology**

**4.0 Results**

**5.0 Finds**

The Pottery by Luke Barber

The Building Materials by Susan Pringle

Metalwork by Luke Barber

The Slag by Luke Barber

Animal Bone by Lucy Sibun

The Worked Bone by Luke Barber

**6.0 Environmental Results** by Lucy Allot

**7.0 Summary**

**Bibliography**

**SMR Summary Sheet**

## FIGURES

- Fig. 1:** Site Location  
**Fig. 2:** Site Plan (showing location of archaeological work)  
**Fig. 3:** Site Plan  
**Fig. 4:** Elevation of West Wall 109  
**Fig. 5:** Section Drawings:  
    **5.1:** S facing baulk section  
    **5.2:** E facing section of cut 105  
    **5.3:** N facing section of cut 103  
    **5.4:** S facing section of cut 118  
    **5.5:** N facing section of cut 125  
    **5.6:** N and W facing section of 121  
    **5.7:** W facing section of wall 138/137  
    **5.8:** North facing section of buttress 142  
    **5.9:** S facing section through 'room 1'
- Plate. 1:** General site shot  
**Plate. 2:** Section of baulk  
**Plate. 3:** Western entrance to Priory Church  
**Plate. 4:** The Buttress  
**Plate. 5:** Wall 120 and Feature 134  
**Plate. 6:** Feature 121 and 125  
**Plate. 7:** Feature 125  
**Plate. 8:** Medieval Ridge Tile  
**Plate. 9:** Encaustic tile with Griffin Motif
- Table 1:** Quantification of bulk finds from TPB06  
**Table 2:** Small Finds from TPB06  
**Table 3:** Date range for the building materials from TPB06  
**Table 4:** Flot quantification  
**Table 5:** Residue quantification

## **1.0 INTRODUCTION**

- 1.1** Archaeology South-East, a division of University College London Field Archaeology Unit, was commissioned by Neil Holland Architects (on behalf of Sir Arthur Watts) to undertake an archaeological watching brief during works connected with the construction of an extension at Tortington Priory Barn, Priory Lane, Arundel, West Sussex (NGR TQ 0065 0594) (see Fig. 1).
- 1.2** Tortington Priory is a Scheduled Monument (No 116). This listing comprises the upstanding remains of the former Augustinian priory church and the buried remains of the cloistral buildings.
- 1.3** Scheduled Monument Consent (SMC) has been granted for the construction of a single story extension to the former shelter shed, (now considered part of Tortington Priory Barn and converted into residential accommodation) and the creation of an adjacent sunken courtyard garden (SMC reference HSD 9/2/6442). The proposed groundwork included the reduction of ground level within the imprint of the new extension, the creation of a sunken courtyard, and the excavation of servicing trenches with associated manholes.
- 1.4** Due to the archaeological potential of the site, English Heritage advised Neil Holland Architects that the groundwork would require a programme of archaeological work. The recommended programme was in the form of a watching brief.
- 1.5** A Written Scheme of Investigation outlining the requirements was prepared by Archaeology South-East (hereafter referred to as ASE) with reference to the West Sussex County Council *Recommended Standard Archaeological Conditions* (version 2b) and was submitted to Mark Taylor of West Sussex County Council and Judith Roebuck of English Heritage for approval. This required that all intrusive groundwork undertaken by engineering contractors (Nutborne Construction) were to be monitored by an archaeologist until it becomes clear beyond reasonable doubt that no archaeological remains were present.
- 1.6** The fieldwork was undertaken by Alice Thorne and Clive Meaton with the assistance of Deon Whittaker and Jim Webster during June and July 2006. The project was managed by Neil Griffin (Project Manager) and Louise Rayner (Post-excavation Manager).

## **2.0 ARCHAEOLOGICAL BACKGROUND**

- 2.1** The site lies c. 1.2km to the south-west of Arundel and c. 400m west of the Arun on slightly elevated ground (c. 8m OD). The centre of the

site is given as TQ 0064 0596. The site is located on a slight east facing hillside, on the western limit of the flood plain of the tidal river.

- 2.2** The British Geological Survey map Sheet 317 (Area Chichester) Drift Edition (1:50,000 scale) indicates that the site lies on Brickearth and alluvial deposits of the River Arun.
- 2.3** The current property includes three primary buildings with associated structures. Tortington Priory Barn is a C17th or C18th barn incorporating part of the northern aisle and eastern facing wall of the north transept of the original C12th Augustinian Priory. Part of the former north nave aisle wall was breached to form an opening for the barn's opposed double doors. A Victorian shelter shed, which was constructed immediately over the remains of the original west wall of the church, has been converted to form another residential dwelling within a walled courtyard. A modern house is located to the south.
- 2.4** The site is considered to have archaeological potential. The area of the barn and surrounding earthworks is a scheduled ancient monument (SAM 116). The priory church was founded in c.1180 and dissolved c.1536. The degree of destruction at the dissolution was thorough, but did not totally level the site. The listed status of the barn reflects the historic interest in the remaining upstanding fabric of the former church.
- 2.5** Augustinian priories tend to follow the conventional post - conquest layout of monastic houses, albeit on a smaller scale, and Tortington Priory, probably one of the more substantial properties, is believed to be no exception to this rule (Taylor, 2003, 164). A typical property would include a cruciform church and cloisteral buildings.
- 2.6** Excavations were carried out by P M Johnston at Tortington Priory in 1909. However, the plans which were prepared at the time have never been found. A set of notes were apparently given to Worthing Library after Johnston's death and a summary of the findings was published by Saltzman in 1946. It was concluded that the remains were recoverable over an extensive area. A large cruciform aisled and vaulted church, probably with a central tower was described, together with foundations of numerous buildings to the south of the church (Taylor, 2003, 167).
- 2.7** There have been several previous phases of work on site undertaken by ASE (See Fig. 2). In 1997 an initial evaluation, desk top survey and appraisal of the upstanding remains within the former shelter shed identified substantial elements of in situ medieval masonry, including the remains of the west wall of the priory church and the foundations of the south wall of the nave of the priory church (Stevens, 1997). In 1998 a watching brief during groundwork for a new residential

dwelling revealed sections of the west, south and south transept walls of the priory church, as well as two human burials. A north aisle door was also identified in the west wall (Johnson, 1999). A watching brief by ASE (Griffin, 2001) during the excavation of foundation trenches for an extension to Priory Farm revealed remains of two walls and a drain, thought to be related to the former cloister. In 2002 an archaeological evaluation, approximately 20m south of the current site, revealed a substantial east-west aligned wall with a brick and ceramic tile fireplace, in addition to a fragmentary stone floor with a tile hearth set into it (Griffin, 2002). The wall identified in 2002 aligned with a wall partially exposed during the watching brief undertaken in 2001. The excavation of three trial trenches during an evaluation in the area of the current watching brief during December 2004 exposed a stretch of the western wall of the priory church and the southern extent of the west entrance (Griffin, 2005).

### **3.0 ARCHAEOLOGICAL METHODOLOGY**

- 3.1** The general objective of the archaeological work was to monitor the groundwork in order to ensure that any features, artefacts or ecofacts of archaeological interest exposed and affected by the excavations were recorded and interpreted to appropriate standards. The watching brief was carried out under Section 2 of the Ancient Monuments and Archaeological Areas Act 1979 (as amended).
- 3.2** All work was carried out with reference to the West Sussex County Council *Recommended Standard Archaeological Conditions* (version 2b) and the relevant *Standards and Guidance* of the Institute of Field Archaeologists.
- 3.3** The specific aims of the archaeological work were to maintain a full drawn and photographic record of any exposed medieval masonry (1:20 elevation and 1:10 section) before any conservation work is carried out.
- 3.4** The groundwork comprised the excavation of:
- The extension foundation
  - Service trenches, including drainage, inspection chambers and soakaways
  - Creation of a sunken courtyard garden
- 3.5** The machining was undertaken using a 5 tonne machine fitted with a flat blade ditching bucket. The area was CAT scanned prior to excavation. The spoil was removed by a dumper truck and used in landscaping work to build up the ground level towards the south of the property. All machining was taken down to the impact level of the



footprint of the extension unless significant archaeological deposits or structures were encountered.

- 3.6** An area was initially stripped of topsoil in the area to the west of the converted Victorian shed. This revealed the site to be occupied by several structures and features. These included the main western wall of the priory church, the western doorway, a buttress located to the south of the main doorway, and an east- west aligned wall with a southern return abutting the southern end of the main west wall.
- 3.7** The original ground plans had included proposals for a sunken garden in the south eastern corner of the site. However, in addition to the buttress and wall identified in this corner a large post medieval feature was identified cutting the post dissolution demolition deposits. On the basis of these discoveries the ground plan was modified by the architects. The southern part of the site was therefore left preserved in situ, as were all structural features revealed (see Fig. 3).
- 3.8** In the northern part of the site within the imprint of the new extension the ground was reduced to impact level (Fig. 3) thereby fully exposing the elevation of the remaining priory wall in this area (Fig. 4).
- 3.9** All encountered archaeological deposits, features and finds were recorded according to accepted professional standards in accordance with the Specification using standard Archaeology South-East context record sheets. Deposit colours were verified by visual inspection and not by reference to a Munsell Colour chart.
- 3.10** The spoil from the excavations was inspected to recover any artefacts or ecofacts of archaeological interest.
- 3.11** The features were levelled using the same Site Datum (Value 10m) as were used in the previous phases of archaeological work on site. The TBM is located on the top of the westerly of two round drain covers adjacent to the south wall of the southern brick range of Tortington Priory Barn. This value has also been transferred to a second TBM located on the wooden threshold of the west door of Tortington Prior Barn that leads into the walled garden (value 11.16). All heights referred to in the text are suffixed 'SD' (Site Datum).
- 3.12** A full photographic record of the work was kept (black and white prints, colour slides and digital images) and will form part of the site archive. The archive is presently held at the Archaeology South-East offices at Ditchling and will be offered to a suitable local museum.

## 4.0 RESULTS

### 4.1 Reduction of Extension area

4.1.1 In the northern part of the site the ground within the footprint of the new extension was reduced to impact level. The stratigraphic sequence revealed here was as follows: (see Fig 5.1, Plate 2).

- The topsoil (Context **100**), a dark brownish- grey friable clayey silt, was found to contain frequent fragments of West Country slate, oyster shell and tile (generally red flooring or peg tile but occasionally also fragments of green glazed tile). There were also frequent sub angular flint nodules, smears of charcoal and frequent small fragments of chalk. Occasional fragments of sandstone and angular struck nodules of flint, including garrets for flint wall construction were also noted. This deposit had a depth of 0.30 - 36m.
- Below this, Context **101** was encountered only in the western and south-western corner of the site. This was a dark grey-brown clayey silt containing the same range of background material as Context **100**, and including a concentration of tar fragments and charcoal staining. It contained mid/late 14th century pottery, medieval peg and ridge tile and a piece of probable post-medieval tile. This deposit, up to 0.15m thick appears to relate to previous machine movement and ground disturbance on site.
- Below these deposits a mid orangish - grey brown friable clayey silt was identified across the site (Context **102**). This deposit was found to contain frequent fragments of West Country slate (some showing evidence of burning), oyster shell, cattle bone, and tile (orangish - red flooring and peg tile and also some green glaze including fragments of ridge tile). Internal decorative encaustic tile fragments were also recovered. There were also frequent small fragments of sandstone, laminar ironstone blocks, roughly faced flint nodules, occasional garrets, smears of charcoal and lime mortar and fragments of chalk. The finds had a mixed date range. The pottery had a 13<sup>th</sup>-14<sup>th</sup> century date, the tile a broad 'medieval date' and fragments of brick had an early post-medieval date. A probable intrusive 18<sup>th</sup>/19<sup>th</sup> century iron screw was also recovered. This deposit is likely to represent a post-dissolution demolition rubble deposit, and was encountered across the site. It was found to have increasingly fewer artefactual inclusions towards the west, away from the church. This deposit had an average depth of 0.28m.
- Below this layer an light orangish – brown deposit was encountered (Context **107**). This comprised up to 70% chalk fragments contained in a clayey-silt matrix. It contained occasional deposits of flint pea grit and occasional pieces of tile, West Country slate, and oyster shell

inclusions. The deposit occurs close to the level of the surface of the entranceway to the church (10.59m SD). 13<sup>th</sup> -15<sup>th</sup> century ceramic building material (CBM) was recovered from this deposit, and it is thought that this may represent a pre-dissolution deposit. It may represent a deposit of trample at the entrance to the church, or possibly a deposit associated with a construction phase at the property. This deposit ranged in thickness up to 0.10m and was concentrated in the east of the site. It gradually diminished towards the west away from the wall of the church.

- Below this a mid orange-brown loam was encountered (Context **108**). This was a firm deposit containing occasional pockets of rounded/sub-rounded flint nodules and pea grits, and occasional chalk smears. This has been interpreted as the natural brick earth or deposit of alluvium.
- The geology was not consistent across the site. Towards the west of the site the drift deposit becomes much sandier in texture and contains more frequent patches of sub angular patinated flint nodules and small flint gravels and grit (Context **117**).

**4.1.2** Two features were identified and removed following full recording in this area of the site (Fig. 3).

**4.1.3** Context **103** was an elongated oval shaped feature in plan. It had a maximum length of 1.10m, a width of 0.44m and a maximum depth of 0.10m. It had a concave profile with a gradual break of slope at the top of the cut. It was filled by a Context **104**, a friable light greyish-brown silty clay containing frequent tile fragments, shell, smears of burnt clay, occasional small flint nodules and pea grit. It also had a 'halo' of degraded wood demarking its edge, which was visible in both plan and section. This feature was cut into Context **102**, and is likely to represent an area within the demolition rubble where a timber or plank of wood has rotted in situ (Fig. 5.3) (10.78m SD). Following its full excavation and recording, Context 103 was fully removed to allow further investigation at the site.

**4.1.4** Context **105** was noted below deposit **107** cutting into the underlying natural **108**. Cut **105** was a small circular feature in plan, with a diameter of 0.24m. It had a concave base with a slightly steeper northern edge. It was filled with Context **106**, a firm light orangish-grey silty clay containing frequent chalk fragments, and occasional small flint nodules, flecks of charcoal, pea grit, and very occasional smears of burnt clay. This was a pale, ephemeral fill, particularly in comparison to the clarity of the archaeology revealed within the rest of the site. It was interpreted as the base of a post hole, possibly a feature related to an early constructional phase of activity at the church (Fig. 5.2) (10.39m SD).

**4.1.5** One other linear feature was noted in the north-western corner of the stripped area (Context **118**). This comprises a north to south orientated linear located below deposit 102, and cut into the natural deposit 117. It had an exposed length of 3.40m, a maximum width of 0.76m and a maximum depth of 0.12m. It had ephemeral edges, a rounded terminus and a shallow concave profile. It was filled with a compact mid orangish brown loam containing angular flint nodules and very occasional smears of charcoal and burnt clay (Context 119). (Fig. 5.4) (10.39 m SD). The feature was ephemeral and only partially exposed in plan, and as a result its function is not clear. It is likely to be related to the monastic complex, and although no dating evidence was recovered it underlies the demolition deposits, and possibly may have been related to the functioning priory.

## **4.2 The west wall of the Priory Church (Plates 1 and 3, Fig. 4)**

**4.2.1** The watching brief exposed a further stretch of the west wall of the priory church, a structure which had been partially recorded during the 1997, 1998 and the 2004 phases of work. The full extent of the west doorway was now revealed, as was a buttress, flanking the doorway.

**4.2.2** The west wall of the priory church (Context **109**) survives up to a height of up to 400mm above the stone plinth. It was located immediately below the flint and brick built Victorian barn wall (Context **116**) which had been bonded directly onto the surviving surface of the priory wall (approx 11.29m SD). The exposed wall consisted of up to six courses of faced knapped flints on the outer (west facing) vertical face. These were tightly bonded with a hard creamy yellow sandy lime mortar. The flints used on the outer face were generally well sorted, between 70-100mm in size, with regular level courses. Part of the core of the wall was visible for inspection, and consisted primarily of rough flint nodules, with very rare sandstone fragments bonded by the same hard creamy yellow sandy lime mortar.

**4.2.3** Below the flint wall a finely shaped chamfered stone plinth was located (Context **111**) (approx 10.85m SD). It had a regular height of 240mm and the lower section protruded from the outer face of Wall 111 by 60mm. The blocks varied in length from 200mm-500mm, and were tightly coursed. Identification of the stone type in the field was not possible, although it may have been Caen or Fiddleworth stone. The stone type was the same as the moulded door entranceway (Context **110**).

**4.2.4** The western entranceway to the priory church had been identified during the 2004 evaluation, when it was partially exposed. During the

course of this watching brief the full extent of the entranceway was revealed (Context **110**) (10.59m SD). Three moulded stone column bases were revealed on either side of the doorway, bonded with the flint wall and located above the chamfered plinth course. On the southern side of the entranceway the bases of the columns remained intact. The northern columns have disappeared, but their original location can be ascertained due to the moulded surface of the stone plinth. The internal width of the doorway measured 1.32m. A broken chamfered stone block was located abutting the northern side of the entranceway, and may comprise a door step into the church. The doorway had been blocked up by regular courses of flint nodules, including some areas of brick and pieces of tile (Context **115**). In the area of the doorway however the brick and tile appear more weathered than the primary wall of the barn above with its regular brick buttresses (Context **116**), and are likely to represent an earlier phase of the Victorian barn. The courses of **115** have been bonded with a hard creamy yellow lime mortar, and the courses of **116** above appear to have used concrete. However the use of the concrete above may simply show that the barn has been more recently re-rendered above ground.

**4.2.5** The plinth course was bonded onto a mortared rubble foundation (Context **112**), which stepped out between 100-200mm from the base of the plinth course, and in-filled the entranceway to the church (10.59m SD). It comprised a firm creamy yellow lime mortar appearing very similar to the mortar used elsewhere on the wall itself. It contained occasional small flint nodules and occasional larger blocks of chalk in the area of the entranceway. On the northern side of the entrance way several faced flint nodules and a block of stone appear to edge part of the foundation deposit. The deposit had a minimum depth of 150mm, and was located upon the surface of the natural (Context 108).

**4.2.6** No indications of a porch structure at the central west door was observed.

### **4.3 The buttress (Plate 4, Figs. 3 & 4)**

**4.3.1** A buttress (Context **113**) was uncovered at 11.12m SD located against the west wall of the priory four meters to the south of the doorway. Auguring at an equidistant point on the other side of the doorway within the garden also located a hard surface at a depth of between 160mm-200mm, suggesting that a second buttress may exist to the north, mirroring the location of **113**. It may be possible to identify this structure from parch marks.

**4.3.2** The buttress measured 1.14m long by 0.88m wide and had a

surviving depth of 0.28m. It was constructed from the same stone as the plinth **111**, and was formed from rectangular blocks, variable in length and width but uniform in depth. The chamfered edge of the blocks on the western edge of the buttress aligns with the chamfered edge of the plinth course **111**. The plinth course forms a continuous foundation underlying both wall and buttress. As with the plinth, the joins between the blocks are fine and tight. The buttress has been built into the fabric of the main west wall of the church. The core comprises irregular chalk blocks contained within a hard creamy yellow sandy lime mortar (Context **114**).

#### **4.4 The east-west orientated wall (Context 120) and associated feature (Context 135) (Plate 5, Figs. 3 & 4)**

**4.4.1** Following a topsoil strip, wall **120** was revealed in plan at approx 10.93m SD. No further intrusive digging was undertaken as the area was to be preserved in situ, and therefore the depth and section of this wall was not ascertained. However, it was possible to establish that the wall has a width of 0.66m and that that the outer face of the wall (the northern side) was formed by chalk blocks and flint nodules, some of which had evidence of rough facing. The inner face (south side) appeared to be formed of chalk blocks with very occasional flint nodules. The core of the wall was again comprised of irregular chalk blocks and fragments. A yellowish cream sandy lime mortar containing occasional small rounded flint grits formed the bonding agent.

**4.4.2** Context **120** was located adjoining the southernmost extent of wall **109** and was orientated east- west. A length of approximately 7.20m was uncovered. To the west the wall turns and returns to the south, whilst to the east the wall aligns with the southernmost extent of the western priory wall, before its route is concealed by the converted Victorian barn. It is possible that wall **120** may represent a northern wall of the priory cloister.

**4.4.3** The wall appears to be bonded up against wall **109**, and therefore may be a later construction. However, the adjoining corner was largely obscured by a brick buttress from the converted Victorian barn, and therefore it was not possible to establish the relationship with certainty.

**4.4.4** To the north the wall was abutted by the demolition deposit **102**, which was left in situ in this area. To the south of the wall however a spread of creamy white chalk rubble contained within a greyish brown silt matrix was revealed (Context **129**) (10.92m SD). This contained irregularly sized chalk blocks and patches of a creamy yellow lime mortar. This deposit was not excavated, and left in situ. It is likely to



represent a deposit relating to the demolition of **120**.

**4.4.5** Located at the western extent of wall **120**, and situated perpendicular to it was a heavily disturbed patch of mortar and tile (Context **134**) (10.63m SD). The feature lay below **102** and consisted of a badly preserved linear spread of tile approximately 1.4m in length and 0.90m in width. The material included a rough line of large chalk blocks to the west with pieces of red tile located adjacent to the chalk, set upon a deposit of lime mortar. One fragment was set vertically within the matrix, and another vertical tile on the same orientation was observed during machining. Located adjacent to this was a small area of grey tiling. Underlying these materials was a thin (30mm) greenish-orange sand layer (Context **131**). **131** overlay Context **132**, a friable greyish-white chalky deposit of approximately 60-80mm thickness (10.58m SD). **132** may represent a surface spread or may be a deposit of chalk trample related to Context **107**. Five fragments of pottery recovered from this deposit produced a 14<sup>th</sup> century date. On the western side of the Context **134** Context **131** also partially overlay a compacted greyish-white spread containing blocky chalk pieces, some fragments of lime mortar with a greyish brown silt matrix (Context **133**). This deposit was not removed as this area was no longer scheduled for ground reduction. Context **134** consisted of an irregular and inconclusive area of archaeology, which may possibly relate to a damaged area of external drainage against wall **120**.

**4.5 Feature [121 / 125] (Plates 6 & 7, Figs. 3,5 & 6).**

**4.5.** Located approximately 2m to the west of the western wall of the priory church a large elongated '8' shaped feature was revealed measuring approximately 5.5m in length (Contexts **121 and 125**). This feature was located below the topsoil (Context **100**) and cut through deposit **102**. Due to the presence of this post medieval feature the building plans for the proposed extension were modified, allowing for partial preservation in situ of the feature in the southern part of the development area.

**4.5.2** The southern part of the feature comprised a circular structure (Context **121**) 2 meters in diameter with an open neck adjoining feature **125** to the north (10.94m SD). A quadrant was excavated to a maximum depth of 600mm. The excavated slot was not reduced further in order to minimise damage to the feature. The quadrant showed that the feature had vertical internal sides lined with a reddish brown burnt clay, which became dusty under the dry conditions, containing some fragments of tile. This tile produced a broad 'medieval' date. The upper fill of the feature, Context **123**, consisted of a mid orange-brown loam containing frequent tile, brick, slate, oyster shell, animal bone, smears of chalk and fragments of flint. A

few fragments of pottery and some CBM recovered from this fill produced a mixed late 14<sup>th</sup> -18<sup>th</sup> century date. Early post-medieval brick was also recovered. The deposit was very similar to the surrounding matrix **102**, and is likely to represent an in-filled dump of the surrounding material. Part of this backfilled matrix comprised a pocket of loose clayey silt containing frequent loose jumbled blocks of sub angular to angular flint nodules up to 150mm in length (Context **122**) (Fig. 5.6).

- 4.5.3** At the base of the quadrant an additional context was partially encountered before excavation ceased (Context **124**). This comprises a friable mid orange grey loam, which was less finds rich than the deposit above but also contained occasional fragments of tile, flint nodules, chalk fragments, very occasional fragments of bone and frequent charcoal. Some slag recovered from this deposit suggested a broad 'medieval' date. The quadrant was not reduced further and as a result it was not possible to investigate the depth and profile of the base of the feature, or the existence of any lower deposits
- 4.5.4** However, the northern part of the feature was located within the imprint of the building extension, and as a result full excavation of part of the feature was possible. The cut was sub-oval in plan, with vertical sides and a flattish base (Context **125**). The far north had a shallow semicircular dished edge. The feature had a sharp break of slope at the top, and at the bottom, and measured approximately 1.40m in width. The feature had been excavated to a depth of 1.36m from the base of the overlying topsoil (Fig. 5.5).
- 4.5.5** The upper fill of **125** was formed by context **128**, a firm mid brownish grey loam deposit containing frequent tile (some of which was burnt), chalk fragments, charcoal smears, occasional pottery, bone, slate, slag and fragments of building stone. It had a maximum excavated depth of 0.30m. This deposit appeared to comprise backfilled material and is the same as Context **123**. The finds recovered included pottery dating from the 15<sup>th</sup> -16<sup>th</sup> centuries and CBM dating from the 15<sup>th</sup> -18<sup>th</sup> century.
- 4.5.6** Context **126** was a creamy yellowish-white burnt chalk with frequent fragments and large patches of grey black ash and charcoal comprising around 40% of the deposit. The charcoal and ash often formed lenses within the deposit. Context **126** had a maximum depth of 0.46m. The environmental samples of this deposit confirmed that there were few cereal remains within the fill, and that the fuel used within the feature was oak wood. In addition to frequent charcoal fragments the deposit also contained small quantities of brick and tile, which were often burnt or crazed, showing evidence of heating. The CBM recovered returned a late 15<sup>th</sup> -mid 17<sup>th</sup> century date.



**4.5.7** At the northernmost extent of the feature, located in the semicircular 'dished' area and contained in parts within the ash and burnt chalk layer **126** was a concentration of roughly shaped sub rectangular stone blocks up to 250mm in length and occasional unworked flint nodules (Context **127**). The stone blocks ranged in colour from reddish- brown to creamy grey, some appearing to have been burnt.

**4.5.8** Below **126** Context **130** was encountered. This was a 0.21m deep deposit of a firm mid orangish brown silty clay containing occasional fragments of oyster shell, tile, smears and lumps of burnt clay. It also contained frequent flint grits, small nodules and fragments of chalk. This formed the primary fill of the feature. Tile and brick recovered from this feature had a wide date range spanning the period from the late 15<sup>th</sup>- mid 18<sup>th</sup> century. Environmental evidence showed that the charcoal within the fill derived from oak. No burnt clay lining as identified in the southern part of the feature was revealed.

#### **4.6 The north-south orientated cloister wall and associated structures (Figs. 3,& 5.7 & 5.8).**

**4.6.1** A 6 metre stretch of the southern return of wall **120** (contexts **137** and **145**) was exposed during groundwork (10.40m SD). A modern cut and fill possibly relating to the construction of the modern courtyard wall (Contexts **135** and **136**) were also noted in the northern section of the wall. A width of up to 1m was revealed, making this wall **137/145** substantially wider than the east to west orientated stretch of **120**. A maximum depth of 620mm was recorded in the area of Context **145**. The wall was constructed of up to 80 % sub angular flint nodules to 200mm and occasional chalk nodules with significantly more chalk blocks noted in the southern stretch of the wall. The building materials were mostly irregular, although there was some evidence of external facing. No evidence of coursing was visible and the wall was bonded with a yellowish orange sandy lime mortar with gravel aggregate. This wall sat directly upon chalk block footings (Context **138**) (Fig. 5.7). A 3.7m stretch of the footings was exposed during the groundwork, although it is likely that these footings will underlie the entire stretch of wall. The footings were constructed of mostly regular rectangular blocks up to 400mm deep, and 100m in length. Three courses were recorded, bonded by a light brownish yellow sandy lime mortar with 10% gravel aggregate. A section of the wall exposed during excavation of a drainage trench indicated that the eastern side of the wall (probability internal?) was rendered/plastered, presenting a smooth face down to its base.

**4.6.2** The footings had been laid at the base of a cut (Context **139**) into the natural brick earth (Context **141**) (Fig 5.7). Cut **139** was not visible in plan, and was noted in section during the groundwork, and otherwise

identified through the presence of a slightly darker deposit than the natural Brickearth located against the wall elevation.

- 4.6.3** A buttress was identified against the western side of wall **137/145** (Context **142**). It was 2m in length and up to 1.12m in width. A minimum depth of 450mm was observed. It was constructed of a mix of irregular and faced chalk blocks, with no clear coursing. It was bonded by a yellowish sandy lime mortar with 10% gravel aggregate. This relatively coarsely constructed buttress is believed to have been built to support and consolidate the wall which appeared bowed in the area of Context **145**. A cut for the buttress was partially identified, (Context **147**), cutting through a possible subsoil deposit (Context **146**) (Fig. 5.8).
- 4.6.4** An additional east-west orientated wall was revealed running parallel to, and south of the east to west orientated stretch of **120** (Context **143**). This wall was 0.80m wide and had length of 6.6m. A possible short stretch of a southerly return was revealed at its easternmost extent (Context **151**) contained within the partially exposed footing trench (Context **150**). **143** was constructed of mainly square to rectangular faced chalk blocks (c 200x 150 x 100mm). Some irregular chalk nodules and greensand blocks were also noted. This feature was only seen in plan and therefore the depth and coursing of the wall could not be established. It was bonded with a brownish yellowish sandy lime mortar with 5% rounded gravel aggregate. Context **151** was constructed of the same material.
- 4.6.5** Within the area of 'Room 1' Context **152** formed the upper deposit (Fig. 5.9). This comprised a maximum 0.60m deep loose mid brown loam, much disturbed by rooting. Context **144** lay below Context **152**. Context **144** was a loose mid brown sandy silty clay deposit up to 600mm deep. It contained square-rectangular faced chalk blocks (up to 300x 150x 100mm) and irregular chalk nodules and fragments, sub angular flint nodules and occasional charcoal flecks. This feature contained medieval CBM with early post-medieval brick and was interpreted as a demolition deposit. Below **144** Context **149** was partially located, comprising a c300mm thick compact mid orangish brown silty clay containing sub angular flint nodules and occasional chalk flecks. This had been interpreted as a redeposited natural/levelling deposit. Context **148** represents the possible foundation cut for the room itself. The natural Brickearth (Context **141**) lay below this level (Fig 5.9).

## 5.0 FINDS

5.1 A large assemblage was recovered from the watching brief at Tortington Priory Barn. The bulk finds are quantified in Table 1 and the Small Finds in Table 2.

Context	Date	Pottery		CBM		Stone		Bone		Metal		Slag	
		Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt
[101]	Mid/late C 14th and ?post-medieval tile	10	318	6	1082								
[102]	C13th-C14th with early post-medieval brick (?intrusive C18th/19th iron screw)	5	60	16	3516	9	142	8	84	7	222		
[107]	C13th-C15th			2	60								
[109]						1	670						
[121]	medieval			12	686								
[123]	mixed late C14th-C18th with early post-medieval brick	2	20	28	2644	4	192						
[124]	medieval							1	2			8	296
[126]	late C15th-mid C17th			2	2026								
[128]	C15th-C16th pottery, C 15th -C18th building material	4	44	19	2502	3	518	2	86			2	252
[130]	late C15th-mid-C18th			9	364								
[132]	C 14th	5	12										
[144]	medieval with early post-medieval brick			4	694	1	254						
Unstrat.		2	40	1	148					2	1388		

**Table 1: quantification of bulk finds from TPB06**

SF no.	Context	Material	Object	Weight
SF1	[102]	Bone	Knife handle	
SF2	[102]	Bone	Needles	2g

**Table 2: Small Finds from TPB06**

## 5.2 The Pottery by Luke Barber

**5.2.1** The excavation work recovered only 28 sherds of pottery, weighing 494g, from six individually numbered contexts. The largest context group consists of a mere 10 sherds (context [101]). The sherds range in size from small to large (up to 100mm across) but are unabraded and in good condition. The vast majority of the assemblage is of typical 14th-century type. There are a few fine/medium sand tempered coarseware vessels represented, all of which are bowls rather than cooking pots (four rims are present). The largest bowl sherd is from [101] and consists of a large unglazed vessel with horizontal applied thumbed strips and sooting on its exterior face. The same context also produced a bowl with incised wavy line decoration on both interior and exterior faces under a mottled all over green glaze. This vessel is probably of later 14th- to early 15th-century date. Bodysherds of a similar vessel, with adhering mortar, were recovered from [132]. The majority of the 14th-century assemblage consists of jug sherds (17 sherds, including two rims) of typical 'High Medieval' types. Most vessels are in a well fired fine sand tempered fabric with good quality green glazes, though a few have fine/medium sand tempering and sparser glaze. Decoration, where present, usually consists of incised/combed lines (i.e. in context [102]) below the glaze, usually with white slip on the interior of the neck. A few vessels have applied strips with stabbing (mimicking rouletting) instead of incised line decoration, [101]. Such jugs are typical of 'West Sussex Ware' (Barton 1979) and it is likely that the 14th- to early 15th-century kiln/s at Binsted were the source of these, as well as the coarsewares. Two fine sand tempered whiteware sherds, both with bright green glaze and one with applied strips, were also recovered (contexts [101] and [102]). These are almost certainly Surrey Whitewares (Pearce and Vince 1988). Context [101] also produced a large fragment from a fine/medium sand tempered lid-seated jug/pitcher with horizontal incised lines on the shoulder and an all over patchy/dribbled pale green glaze. This vessel is likely to be of later 14th- to mid 15th-century date.

**5.2.2** The only later pottery from the site consists of four sherds from [128]. These include the knife-trimmed base of a jar/pitcher in hard fired fine/medium sand tempered oxidised ware with spots of glaze and three sherds of German stoneware. The stoneware consists of one unglazed possible Sieburg sherd and two iron-washed, salt-glazed late Langerwehe/early Raeren sherds. One of the latter has rouletted decoration. The pottery from this context suggests a mid 15th- to early/mid 16th-century date.

**5.2.3** During the 14th century the source of the material is predominantly local, with some regional material from Surrey. A larger assemblage may include imported ceramics. Although there are up to six 14th-

century rims which could be illustrated these are not considered to be essential for the report. The Transitional group is similarly small but does demonstrate the early importation of German stonewares.

### 5.3 The Building Materials by Susan Pringle

**5.3.1** A total of 95 fragments of medieval and post-medieval ceramic building materials weighing 13.5 kg and 11 pieces of building stone were examined from stratified contexts. The ceramic building material has been quantified by form, weight and fragment count and entered on an Excel spreadsheet. The tile fabrics were examined but have not been recorded in detail. All the material has been retained as it forms part of a Scheduled Ancient Monument.

**5.3.2** Material was examined from 11 contexts. Of these, one context [123] is large (25 to 49 fragments), three [102], [121], [128] are of medium size (10 to 24 fragments) and the remainder are small (fewer than 10 fragments). Three contexts contain only medieval building materials [107], [121] and [124]; the remainder contain either late medieval/early post-medieval or mixed medieval and post-medieval brick and tile. The date range for the building materials in each context is set out in Table 3 below.

CONTEXT	FORM	CONTEXT DATE
+	floor tile	C14th-C15th
[101]	floor tile, ridge and peg tile	C13th-C14th with ?post-medieval tile
[102]	floor tile, ridge and peg tile, brick, stone roof tile, Purbeck Marble shaft	C13th-C14th with early post-medieval brick
[107]	floor tile, peg tile	C13th-C15th
[109]	sample of stone plinth	?
[121]	peg tile	medieval
[123]	floor tile, ridge and peg tile, brick	mixed late C14th-C15th with early post-medieval brick
[124]	peg	medieval
[126]	peg tile, brick and ?chalk	late C15th-mid C17th
[128]	floor tile, peg tile, slate roofing, chalk rubble and sandstone slab	C15th-C18th
[130]	peg tile and brick	late C15th-mid-C18th
[144]	floor tile, peg tile, brick, ?Caen stone moulding	medieval with early post-medieval brick

**Table 3: date range for the building materials from TPB06**

**5.3.3** Context [101]: contains peg tile (x3) and probable post-medieval quarry tile, and a large fragment (two conjoining sherds) of crested

ridge tile with light yellowish-green glaze; the peg tile and quarry are reduced, probably burnt.

- 5.3.4** Context [102]: contains medieval peg tile (5 fragments) and glazed crested ridge tile (two conjoining sherds). Seven fragments of medieval two-coloured decorated floor tiles (6 tiles). Also a slab, probably a roofing slate, of yellow fissile sandstone approximately 300 x 200 x 27mm thick with a neatly made biconical circular hole 17.5mm in diameter and a fragmentary Purbeck Marble shaft c. 405mm long and 100mm in diameter. It also contains an unfroged brick, 107mm wide and 49mm thick. The brick and floor tile fabrics are reduced.
- 5.3.5** Context [107]: contains peg tile (x1) and part of a triangular floor tile 17mm thick with bright brown glaze and a notch in the base, probably for keying.
- 5.3.6** Context [109]: stone sample from plinth consisting of a coarse-grained yellow calcareous sandstone with altered glauconite, probably a greensand oxidised by burning.
- 5.3.7** Context [121]: peg tile (x12) in a mixture of coarse and sandy fabrics.
- 5.3.8** Context [123]: contains peg tile (x 23) in coarse medieval fabrics with round nail-holes; glazed and crested ridge tiles (x 2), in coarse orange/buff and red fabrics; a yellow-glazed Flemish floor tile, an unfroged brick 48mm thick and two thin slabs (8mm, 10mm) of glauconitic sandstone.
- 5.3.9** Context [124]: contains a single fragment of peg tile with a round nail-hole.
- 5.3.10** Context [126]: contains peg tile (x 1) in early coarse fabric, a brick, probably burnt, with an indented margin (223 x 111 x 45mm), and some burnt chalk.
- 5.3.11** Context [128]: contains peg tile in various fabrics (x 17), some of which is very reduced and vitrified, with a very small nail-hole and a polygonal nail-hole, and a brown glazed floor tile. The building stone comprises medium grey phyllitic roofing slate (x 2), from the West Country, a thin slab of sandstone (9mm thick) and chalk rubble.
- 5.3.12** Context [130]: contains peg tile (x 7) and an under-fired unfroged brick, 48mm thick.
- 5.3.13** Context [144]: contains peg tile (x 1), a green-glazed floor tile (an identical tile was unstratified), an unfroged red brick 55-60mm thick and a ?Caen limestone moulding.



- 5.3.14** The medieval tile assemblage consists of peg and ridge tiles and floor tiles. Of the roof tiles the ridge tiles are crested and glazed; their broad date range is c. AD 1200–1500 (Plate. 8). The crests are knife-cut; the example from [123] has a complete crest 20mm in height and 40mm long at its highest point. More than one fabric is present, suggesting that ridge tiles were supplied from more than one source. The peg tile fabrics are generally light orange in colour, sometimes with a grey core, and contain coarse or very coarse inclusions of quartz, flint and cream or dark red clay pellets in varying proportions; some tiles have more abundant and finer sand. None of the peg tiles is glazed, but their relatively thick, coarse fabrics and round nail-holes suggest that they are medieval and would have roofed some of the priory's structures.
- 5.3.15** The floor tile assemblage includes two-colour decorated tiles and plain brown, yellow and green-glazed tiles. The decorated tiles, all from context [102], are fragmentary but at least three and probably four designs are present. Design 1 (?two tiles, 20mm and 24mm thick, three fragments) is part of an elaborate repeating four-tile design of paired griffins within a roundel; size is c 140mm square (Plate 9). Design 2 (two tiles, 23mm and 27mm thick) is a foliate design radiating from a central four-petal rosette; a complete tile would have measured c 130mm square. Design 3 (one tile, 19mm thick) may also be a foliate motif, and Design 4 (one tile, 21mm thick) is too worn to be identifiable but may be matched to other examples from Tortington in the future. None of the designs appear to have been published, although P M Johnston's notes report finding encaustic tiles with designs including foliate patterns and griffins on the site of the east walk of the cloister. The decorated tiles and the brown-glazed tiles in contexts [107] and [128] are all made from similar red fabrics with abundant fine quartz sand and sparse inclusions of yellow silt, white calcium carbonate and dark red iron-rich material; these may be made from local deposits of Brickearth. They are likely to be late 13th or 14th century in date.
- 5.3.16** Context [123] contains a tile with yellow glaze over a white slip, 30mm thick. The fabric contains abundant fine sand and has a white calcareous speckle; the nail-hole in one corner confirms that it is a Flemish tile of a type that was imported in quantity in the later 14th and 15th centuries. Much more unusual are two bright green-glazed floor tiles 23–25mm thick (context [144] and unstratified) which have a very distinctive white fabric with abundant medium sand and fine lenses or speckles of orange. Fabric and glaze are identical to a rare tile found in London (MoL fabric 3066 dated AD1300-1500). The clay appears very similar to that used to make tin-glazed 'Delft' tiles in the 16th to 18th centuries, and on this basis the most likely source of the tiles is the Low Countries (Ian Betts pers comm.).

- 5.3.17** The post-medieval assemblage consists of five bricks and a small amount of peg tile. None of the bricks is frogged which gives a likely date range of late 15th to later 18th century, although the brick from [126] has an indented margin and is thus probably earlier, as is the soft-textured orange brick from [123]. Three of the bricks (contexts [102], [126], [144]) are reduced, probably from fire damage.
- 5.3.18** Stone building materials include mouldings, roofing material and chalk rubble. Roof tiles are present in a yellow fissile sandstone with a neatly drilled biconical nail or peg hole [102] and in a medium-grey phyllitic slate, imported probably from the West Country [128]. Thinner fragments of sandstone slab 8-10mm thick could be either decayed roofing or paving ([123], [128]). The architectural elements in Purbeck Marble [102] and ?Caen Stone [144] almost certainly derive from the fittings of the priory church or associated high-status structures.
- 5.3.19** The assemblage is small but it is of both local and regional interest for the following reasons. First, the range of tile types present provides evidence for the building materials used for roofing and flooring the medieval priory buildings. Although none of the material is *in situ*, it is likely that the decorated tiles were used in the church, probably as panels of decoration set into a floor of plain glazed tiles. Evidence for later 14th and 15th century floors or repairs is provided by the plain glazed Flemish tiles and the unusual green-glazed, white-bodied, tiles. Second, the roof tiles and the earlier floor tiles were probably supplied from fairly local tileries. Perhaps the most likely source is the kiln site at Binsted, located approximately 2 km west of Tortington, which were producing decorated floor tiles and roof tiles, including crested and glazed ridge tiles, as well as pottery in the late 13th and 14th centuries (Wilson and Hurst 1968, 316; Eames 1980, 212). If the material from Tortington can be shown to have come from Binsted, it would provide valuable evidence for the range of building materials made at this medieval kiln-site.

#### **5.4 Metalwork by Luke Barber**

- 5.4.1** A small assemblage of metalwork was recovered. The ironwork is in poor/fair condition with moderate amounts of adhering corrosion products though, object form is discernable without x-ray. Of interest is a cast iron die for stamping the reverse of commemorative/souvenir medals (unstratified). This has a diameter of 65mm and maximum height of 52mm and is similar to 19th-century types (Cooper 1983, 24). The diameter of the medal would be 47mm and the reverse design depicts a square shield surrounded by a laurel wreath. The legend (which is in reverse) is only partially legible but ‘...ROYAL SUSSEX REG...’ can be discerned around the top edge. The



lettering is similar in style to 19<sup>th</sup>- century examples (Fearon 1986). The precise military souvenir medal this comes from is uncertain at present. Other material consists of part of an iron socketed knife and ?intrusive iron screw (later 18th- to 19th- century date) from [102]. The same context produced a copper alloy sheet metal lock escutcheon of shield form with three fixing iron rivets (51 x 37mm). An identical example, though larger and in iron, from London has been dated between 1350 and 1400 (Egan 1998, no. 334). The only other material consists of two elongated pieces of 'molten' lead waste from [104].

## **5.5 The Slag** by Luke Barber

**5.5.1** A small assemblage of slag-like material was recovered from [124] and [128]. This consists of vitrified clay/fuel ash slag, many pieces with self-glazing evident. The material is not associated with metal-working but could be derived from a number of high temperature processes.

## **5.6 Animal Bone** by Lucy Sibun

**5.6.1** Three contexts [102], [124] and [128] produced fourteen fragments of bone. [102] contained fragments of tibia and metapodial from both sheep and cattle. The cattle fragments were from a newborn/foetal calf (Silver, 1969). [124] contained an immature (< 1.5 years; Silver 1969) cattle phalanx and [128] a cattle tibia and a rib displaying a single knife mark.

## **5.7 The Worked Bone** by Luke Barber

**5.7.1** Context [102] produced four fragments of medieval worked bone (SF2) from at least three objects. Two consist of pierced terminals from needles possibly associated with weaving or net making (Margeson 1993, 186). The other item consists of part of a handle from a scale-tanged knife (SF1). This has the remains of two fixing rivet holes and is decorated with a border of single incised dots with two rows of four-dot clusters down the central portion of the handle. A similar handle from London has been dated to the 14th century (Cowgill, de Neergaard and Griffiths 1987, no. 134).

## **6.0 ENVIRONMENTAL RESULTS** by Lucy Allott

**6.1** Four samples were taken during the excavations to establish evidence for environmental remains and to confirm the interpretation

of the features. One sample, <1001>, was taken from a spread outside the west side of the Victorian wall. Three further samples (<1002>, <1003>, and <1004>) were collected from a feature described as a possible lime processing kiln/furnace.

## **6.2 Methods**

**6.2.1** Samples were very chalk rich and to remove large chalk nodules they were passed through 30mm sieves directly into the flotation tank. Residues (heavy fraction) and flots (light fraction) were retained on 500µm and 250µm meshes respectively. The flots and residues were air dried and passed through graded sieves to aid the sorting process. Flots were sorted using a stereomicroscope at magnifications of x7-45. Botanical remains have been identified using reference literature (Martin & Barkley 2000, Jacomet 2006) and modern and archaeological comparative material at University College London.

## **6.3 Results**

**6.3.1** Samples contained predominantly archaeological remains including pottery, ceramics, flint, fire cracked flint, iron, copper, lead, mortar and plaster, stone building materials, glass, burnt chalk and charcoal. Environmental remains, including charred plant remains, bone and land snail shells, were less abundant. Archaeological and environmental materials from the flots and residues are classified and quantified in Tables 4 & 5.

## **6.4 Discussion**

**6.4.1** Sample <1001> taken from an extensive chalk rich context [107] outside the Victorian wall, contained small charcoal fragments although some indeterminate cereal caryopses and charred weed seeds were present.

**6.4.2** Cereals were absent in the three kiln samples. Two of the kiln samples did contain small amounts of weed seeds but none of the samples produced large charred macroplant assemblages. The small assemblage of charred seeds is almost certainly incidental to activities in this area of the site and the function of the kiln.

**6.4.3** Charcoal (identified as *Quercus* sp. – oak) was most abundant in samples <1003> and <1004> while sample <1002> produced relatively little charcoal. Contexts [126] (sample <1003>) and [130] (sample <1004>) were extracted from the southern end of the kiln feature. Context [126] is also rich in burnt chalk and may represent either a fuel stoking area or an area to which fuel and chalk were cleared from the main burning section of the kiln to the north. As the opposing (north) end of the feature could not be fully excavated it is

not clear whether a charcoal and burnt clay rich layer equivalent to context [126] is present under the rubble layers from which sample <1002> was taken, and therefore further interpretation of this feature is difficult.

## 6.5 Conclusions

**6.5.1** These samples have confirmed the presence of archaeological and botanical remains. With the exception of oak charcoal, charred plant remains were scarce which might be anticipated in a kiln feature used for lime extraction. It was interesting that only one wood type was identified in the kiln feature showing clear evidence for fuel selection. Oak wood must have been relatively abundant in the local environment because kilns require large quantities of fuel to sustain prolonged use.

Sample No.	Context No.	Total Weight	Uncharred %	Sediment & fine charcoal %	Charcoal >4mm frags	Charcoal <4mm	Seeds Charred	Seeds Uncharred	Cereals	Shells
1001	107	8	40	15	*/<2	**/<2	*/<2	*/<2	*/<2	**/<2
1002	123 Kiln?	8	35	10	*2	**/<2	*/<2	*/<2		**/<2
1003	126 Kiln?	162	<5	30	****/44	*****/52				*/<2
1004	130 Kiln?	8	20		*2	****/<2	*/<2	*/<2		**/<2

**Table 4 Flot quantification** (abundance: \* = 1-25, \*\* = 26-50, \*\*\* = 51-75, \*\*\*\* = 76-100, \*\*\*\*\* = >100 / weights given in grams).

**Table 5 Residue quantification** (abundance: \* = 1-25, \*\* = 26-50, \*\*\* = 51-75, \*\*\*\* = 76 – 100, \*\*\*\*\* = >100 / weights given in grams)

Sample No.	Context No.	Charcoal >4mm	Charcoal <4mm	Bone	Shell	Pottery	Ceramics	Worked Flint	FCF	Fe	Cu Alloy	Lead	Mortar	SBM	Burnt Chalk >4mm	Burnt Chalk <4mm	Glass	Kiln Structure ?	Plaster?	
1001	107	*/<2	**/<2	*/<2 Ma mm al and smal l amo unt fish	*/<2		**/60 CBM	1/<2	1/<2			1/5 6								
1002	123	*/<2	***/<2	7/<2	*/72	2/12	>4mm = **/ 352 <4mm =**<2		7/2	1/1 0			2/14 4	*/9 0						
1003	126	****/3 6	****/12	1/<2	1/<2		>4mm = **/770 <4mm = **/2	1/<2 2	2/4	3/4					***/6	****/2 142	*/4	*/678	2/<2	
1004	130	***/4	****/8	5/<2 One fish bone	*/<2	1/<2	>4mm =****/4 60 <4mm =**/<2		*/<2 2		1/<2 2									

## 7.0 DISCUSSION: Feature 121 and 125

7.1 Located immediately to the west of the western wall of the priory a large elongated sub oval feature was identified, and partially excavated (Contexts 121 and 125). This feature was cut through deposit 102, with the upper fills formed from backfill of this surrounding deposit. The northernmost extent of the feature was fully excavated. Large quantities of tile and brick were recovered from the uppermost fills of this feature and the lower deposits were found to be primarily formed of large quantities of burnt chalk and ash. Small quantities of glass, iron and a slag-like material consisting of vitrified clay/fuel ash slag were recovered during field work and post excavation processing. However, it is thought that the quantities recovered are not substantial enough to be associated with metal- or glass working.

7.2 It is considered that the tile and brick deposits may represent either the collapsed roof of the structure or secondary in-filling. Where the lower deposits could be investigated they were formed primarily of ash and burnt chalk and on this basis the feature has been interpreted as a possible lime kiln.

7.3 There are many different forms and scales of lime kiln. Flare or Draw kilns have a similar construction, generally with calcareous material being loaded from the top and fired from the bottom, where air can access the furnace. Whilst Flare kilns allow single firing, Draw kilns can operate on a continuous basis (Siddall, 2000). There are fewer known examples of flue- less Pit kilns. However three medieval examples have been identified in Eastbourne. They are believed to have been filled with fuel and calcareous material, possibly in alternate layers and been used for single firings, after which the burnt limestone would have been removed and the pit recharged with fuel and chalk for the next firing (for a conjectural reconstruction of a pit kiln see Stevens 1990, fig. 6). In cases where it was not possible to construct lighting ports near the base of the feature, a wooden 'chimney' could be built into the centre of the kiln, allowing for ignition of the lower layers (Stevens 1990, 84).

7.4 The burning and subsequent processes of the lime has been summarised thus by Lawrence Stevens (ibid, 79):



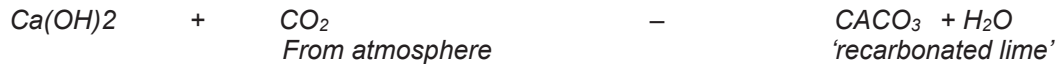
Then:



*Water from environment*

*Calcium Hydroxide  
(slaked lime)*

*Then:*



- 7.5** As full excavation of the feature was not possible, understanding of its technical design is limited. However, it appears the elongated area of Context 125 may represent a stoking pit, flue or entrance to the main circular body of the furnace to the south. The lack of burning to the edges of 125 supports this interpretation, as does the red burnt clay lining of Context 121. The feature may therefore constitute a form of basic flare kiln.

## **8.0 SUMMARY**

- 8.1** The watching brief produced extensive evidence relating to the Medieval Priory. A section of the west wall of the priory church was exposed, allowing recording of the centrally placed western entranceway and identification of a hitherto unknown buttress located against the west wall of the church to the south of the doorway. Auguring has indicated that an additional buttress may await identification at an equidistant point to the north of the doorway. It may be possible to identify this structure from parch marks.
- 8.2** A series of walls identified to the south – west of the priory church appear to represent part of the remains of the cloistral buildings one might expect to find in association with an Augustinian Priory. The location of these walls appears to add credence to the notes left by P.M Johnston, who recorded that the foundations of numerous buildings had been located to the south of the church during the 1909 fieldwork (Taylor, 2003, 167).
- 8.3** The walls discovered during the current phase of work at the site appear to partially define two rooms, which may have been two of a series of cloistral cells orientated around a large open central space. The buttress identified to the west of wall 137/145 may have been constructed to support and consolidate a weak area of the external wall. The walls were generally only exposed in plan. However where monitoring of the service trenching allowed inspection of the sequence of deposits contained within the internal areas, no evidence of flooring was identified. The deposits identified appear to be demolition deposits, possibly dating from the dissolution period. However there is also the possibility that ground disturbance in this

area and redeposition of material may have resulted from the 1909 excavations at the site.

- 8.4** To the west of the priory church Context 102 contained a concentration of refuse and building material including shell, bone, pottery, slate, roofing and flooring tile, stone roof tile, and deposits and smears of lime mortar. This context appears to represent dissolution or post dissolution demolition deposit, and may represent detritus resulting from the demolition and removal of the monastic buildings and ecclesiastical furniture.
- 8.5** Feature 121/125, a possible lime kiln, was cut through deposit 102. The finds recovered from the feature produced a mixed date range, ranging from the 15<sup>th</sup> - mid 18<sup>th</sup> century. The lack of evidence for a substantial stone or brick built roofing structure perhaps suggests that this feature was not intended to be used on a large industrial scale or for long- term production of agricultural lime. It may have had a more expedient, short term function, and constitutes an interesting relic in the post-medieval history of the site. It may have been utilised for burning and reusing building materials from the priory complex following the dissolution of the monastery. The materials produced may have been utilised in construction in the surrounding area, or possibly even for repair and reuse of some of the existing structures on site, such as Tortington Priory Barn itself.

### ***Acknowledgements***

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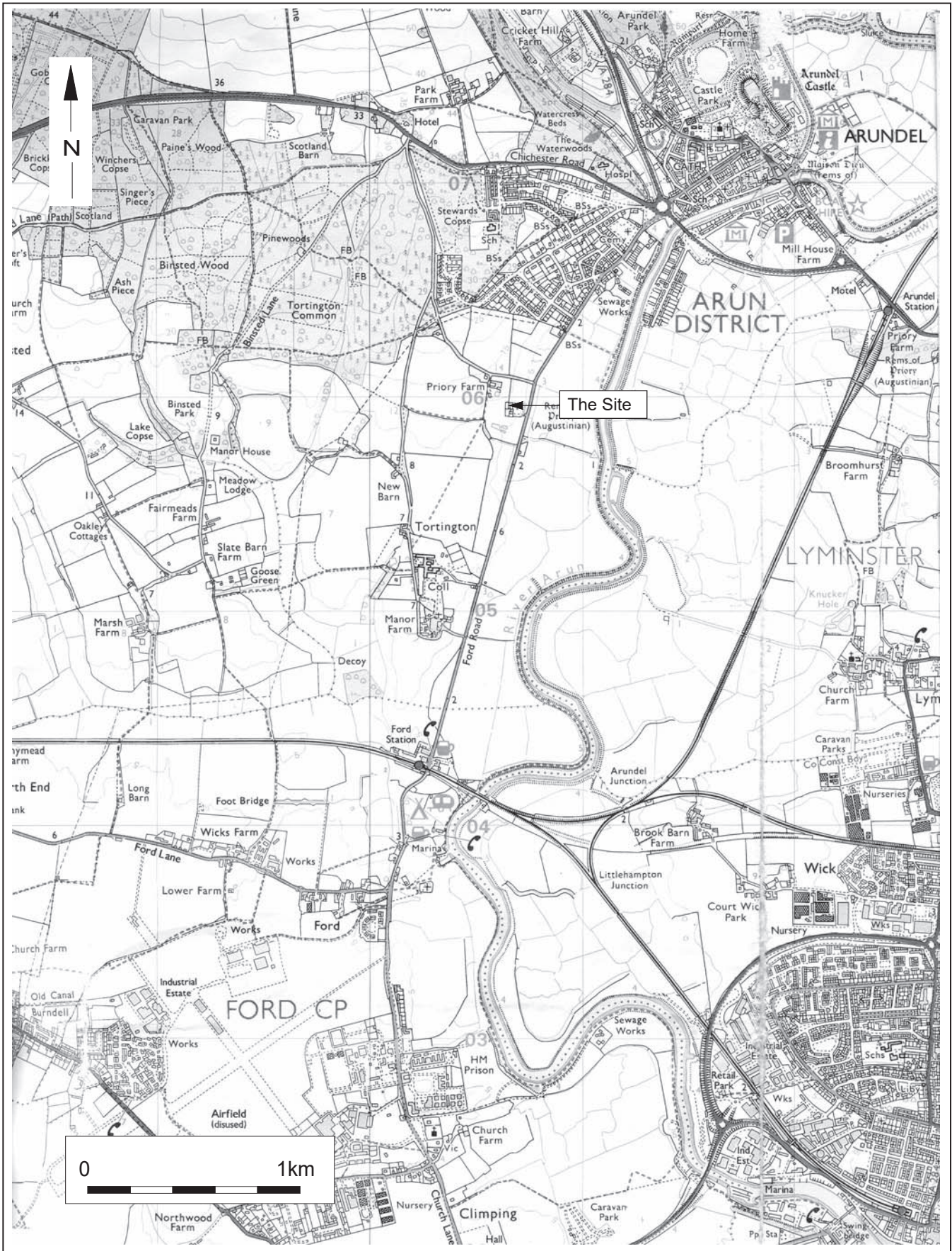
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**SMR Summary Form**

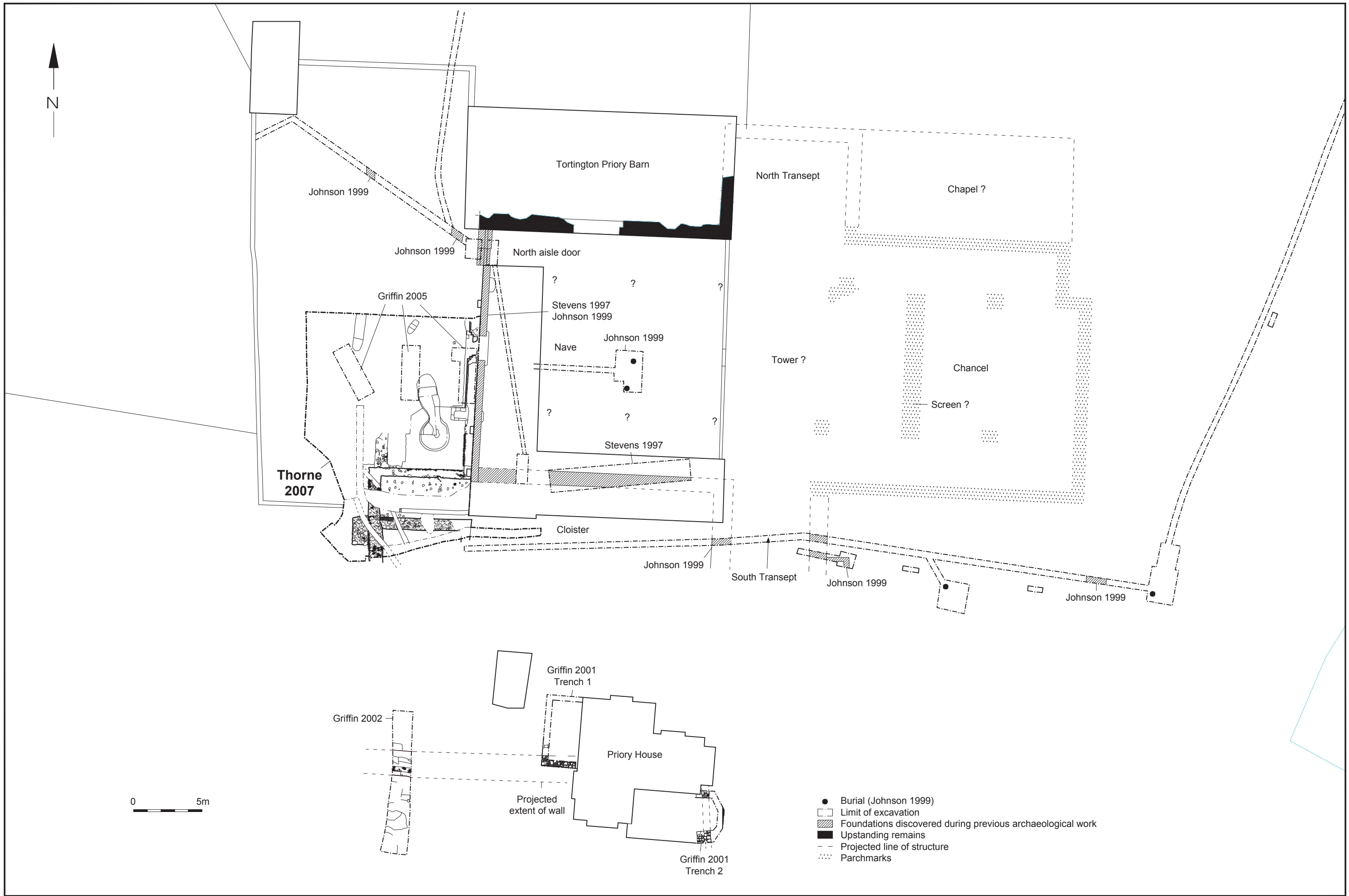
Site Code	TPB06					
Identification Name and Address	Tortington Priory Barn, Priory Lane, Arundel, West Sussex					
County, District &/or Borough	West Sussex,					
OS Grid Refs.	(NGR TQ0065 0594)					
Geology	Brickearth					
Arch. South-East Project Number	2447					
Type of Fieldwork	Eval.	Excav.	Watching Brief ✓	Standing Structure	Survey	Other
Type of Site	Green Field ✓	Shallow Urban	Deep Urban	Other		
Dates of Fieldwork	Eval.	Excav.	WB. June and July 2006	Other		
Sponsor/Client	Mr A Watts					
Project Manager	Neil Griffin					
Project Supervisor	Alice Thorne, Clive Meaton					
Period Summary	Palaeo.	Meso.	Neo.	BA	IA	RB
	AS	MED ✓	PM ✓	Other Modern		
<p>100 Word Summary.</p> <p><i>An archaeological watching brief was maintained during groundwork associated with the construction of a new extension at Tortington Priory Barn, Priory Lane, Arundel, West Sussex. The watching brief at this Scheduled Ancient Monument identified extensive remains associated with the medieval Priory including a section of the west wall, buttress and doorway of the original Augustinian Priory church. Wall footings and a buttress associated with a probable cloister to the south and a probable post-dissolution lime kiln were also discovered.</i></p>						

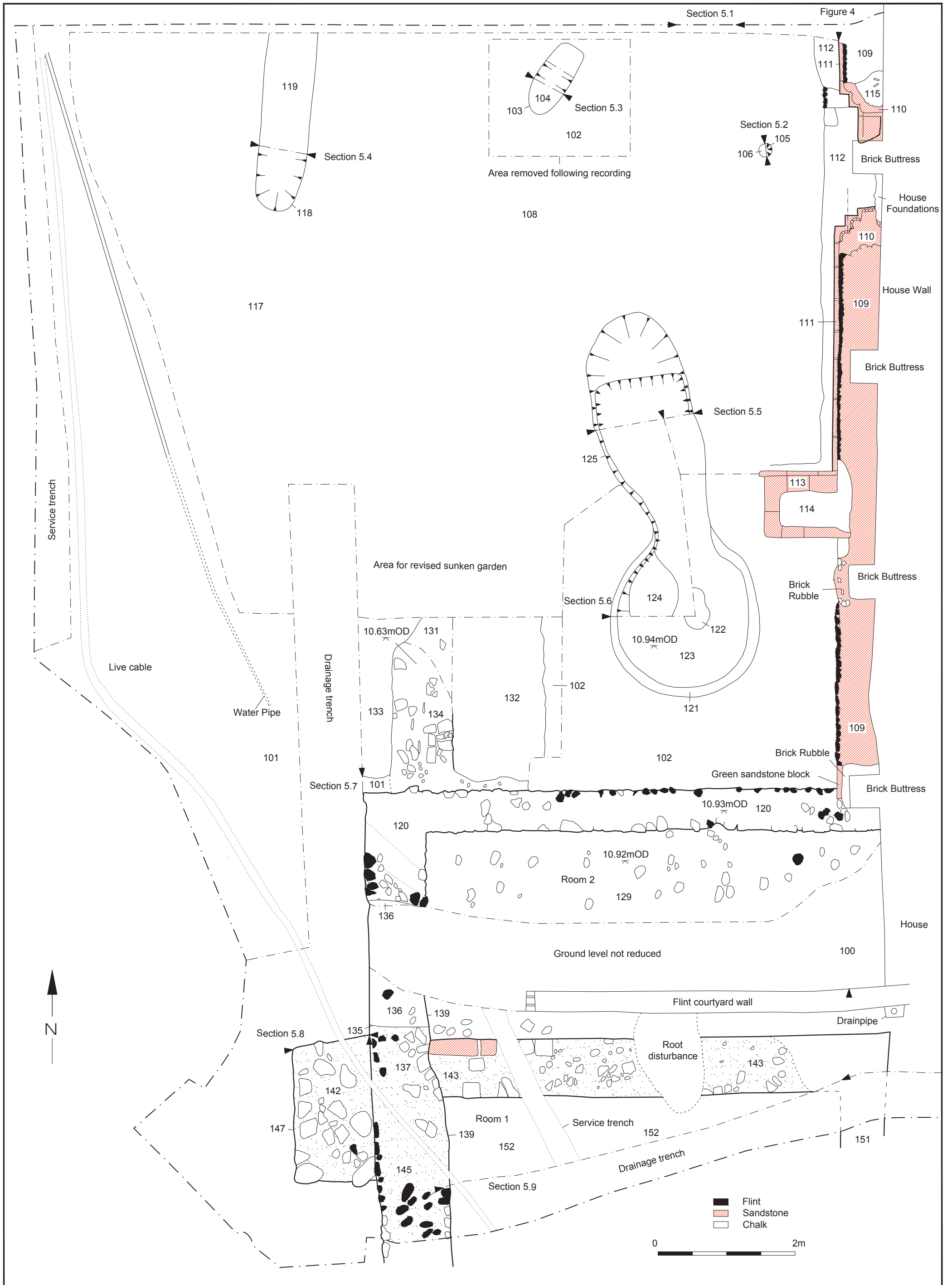


© Archaeology South-East		Tortington Priory Barn		Fig. 1
Ref: 2447	Feb 2007	Site Location Plan		

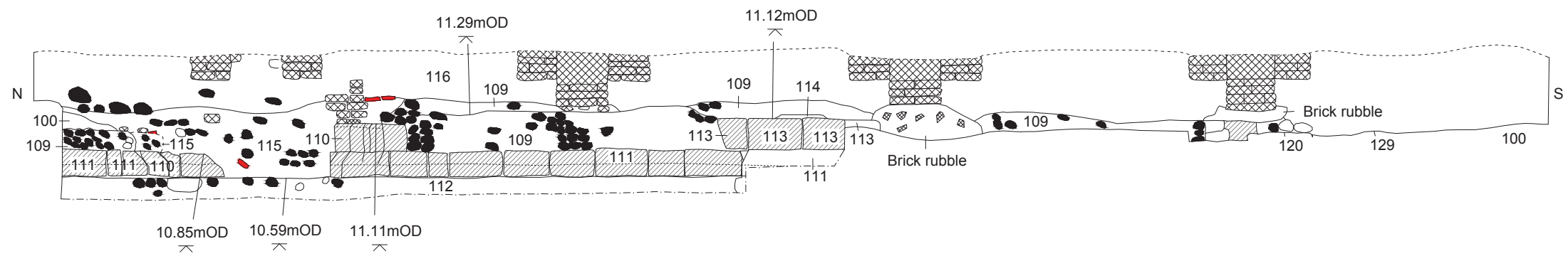
Reproduced from the Ordnance Survey's 1:25000 map of 1997 with permission of the Controller of Her Majesty's Stationary Office. Crown Copyright. Licence No. AL 503 10 A







© ARCHAEOLOGY SOUTH EAST			Tortington Priory Barn		Fig. 3
Ref: 2447	Feb 2007	Drawn by: JLR/FEG	Site Plan		



- Chalk
- Flint
- Sandstone
- Tile
- Brick

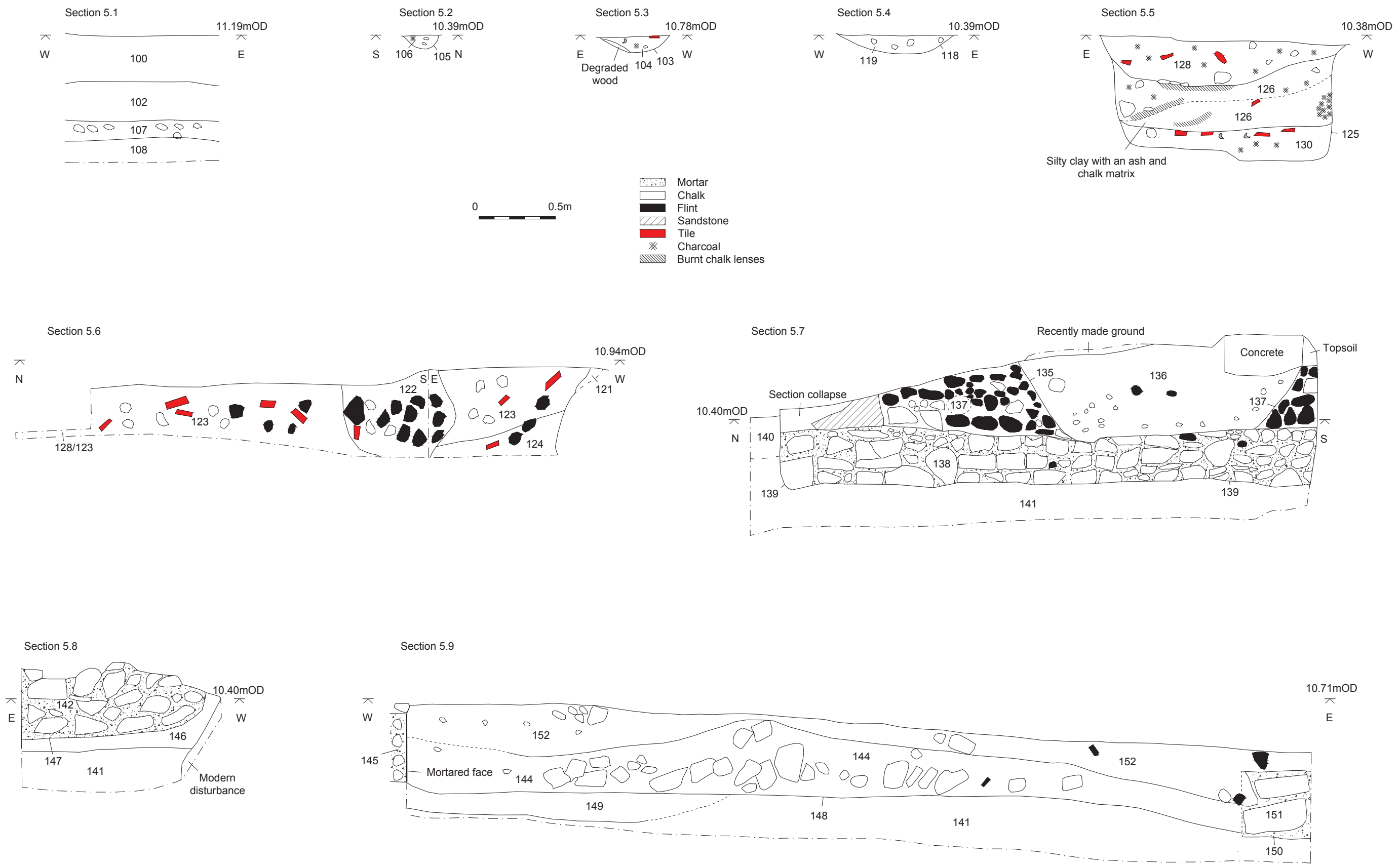






Plate 1: General site shot



Plate 2: Section of baulk





Plate 3: Western entrance to Priory Church



Plate 4: The Butress



Plate 5: Wall 120 and feature 134



Plate 6: Feature 121 and 125





Plate 7: Feature 125



Plate 8: Medieval Ridge Tile



Plate 9: Encaustic tile with griffin motif