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Mill Lane

Oxford



Archaeological Watching Brief and Excavation Report

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Osney Mill, Mill Lane, Oxford

Archaeological Watching Brief Report

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Summary

Between January 2011 and January 2012 Oxford Archaeology undertook a watching brief during the construction of new flats, refurbishment of existing buildings and the installation of a low head water turbine at Osney Mill, Mill Lane, Oxford (centred at SP 5039 0588).

Evidence for the 13th-century reclamation of the river bank and details of the construction of the medieval and later watermills was observed showing an evolution from stone to brick built structures and two probable phases of mill race channel. Continuations of the abbey range walls observed during previous works and a possible precinct wall were also recorded.

Evidence for the post-dissolution use of the site was encountered, including both industrial and agricultural activity, showing that both the mills and the yard were in continuous use until the present day.

1 INTRODUCTION

1.1 Scope of work

- 1.1.1 In early 2011 Oxford Archaeology (OA), was commissioned by Tony Munsey of W H Munsey Ltd and owner of the site, to undertake a watching brief during the conversion of the former mill buildings into residential units. The proposed works included the construction of new flats, refurbishment of existing buildings and the installation of a low head water turbine.
- 1.1.2 Parts of this work had the potential to impact upon the underlying archaeology within the site. As part of the planning consent (Planning Reference 03/02502/FUL) a condition was attached requiring that a scheme of archaeological mitigation be implemented during the groundworks phase of the construction.
- 1.1.3 David Radford, the City Archaeologist for Oxford City Council, produced a brief specifying the level of archaeological investigation to be undertaken during these works. A Written Scheme of Investigation or WSI (OA, Feb. 2011) was produced outlining how OA would implement those requirements, and approved by David Radford.
- 1.1.4 The intrusive works that were monitored under a Watching Brief consisted of the cleaning out and refurbishment of the existing millrace, ground reduction prior to the construction of a piling mat, excavation of pile probe or proof pits and for the installation of a silt separator and the excavation of trenches for services and ground beams.
- 1.1.5 In addition, work was required as a condition of Scheduled Monument Consent (SMC) (English Heritage reference: S00011148), in relation to the reduction of the floor level in the existing Scheduled Abbey building, henceforth 'the Abbey Building', that required archaeological excavation, recording with a subsequent watching brief, which was subject to an addendum to the original WSI (OA, Sept. 2011).

1.2 Location, geology and topography

- 1.2.1 The site lies on the western edge of the city of Oxford straddling a mill race leading off the River Thames (Fig. 1). The development area, centred at SP 5039 0588, is sited on level ground at approximately 58 m above OD and is bounded to the south-west by the

River Thames and by residential and industrial buildings on the other sides. A former flour mill and ancillary buildings together with a surviving part of the Osney Abbey range currently occupy the site.

- 1.2.2 The underlying geology is alluvium over terrace gravels (Geological Survey of Great Britain, sheet no. 236).

1.3 Archaeological and historical background

- 1.3.1 The archaeological background to the watching brief was prepared for this document using abridged public sources.
- 1.3.2 The development site lies on the site of the western range of the complex of buildings associated with the important Augustinian Abbey of Osney. This was founded in 1129 on the Island of Osney which lay between two branches of the Thames, with the city to the east and the water-meadows of Botley to the west.
- 1.3.3 By 1154, Prior Wigod had assumed the title and status of Abbot. The abbey grew rapidly in temporal power and enjoyed the patronage of several English kings and gained substantial banking and financial business. By the 13th century the original buildings had been greatly enlarged, and as a centre of learning and influence Osney had become “one of the first ornaments of this place and nation”. Dugdale described the Abbey church as “a most beautiful and large fabric, second to none in the kingdom, not only the envy of other religious houses, but of most beyond the sea”. Aspects of the medieval layout of the Abbey relating to the present site are summarised in Figure 3.
- 1.3.4 After the Dissolution Osney Abbey church became the cathedral of the new diocese of Oxford, but this final florescence lasted only a few years. Superseded as the cathedral by St Frideswide’s priory church, Osney fell into decline and saw the decay, systematic destruction and final ruin of its buildings during the English Civil War. Only fragments of a gate, parts of two ranges and some ruined stone mouldings survive on the site. Most of the former precinct, including the church, lies under modern buildings, a cemetery and the railway line. The surviving structures include part of the range that formed the west side of the abbey precinct, one element of which lies just to the west of the mill building and is a Scheduled Ancient Monument (see also 1.3.9 below).
- 1.3.5 Between 1182 and 1189 Bernard of St Valery granted the canons of Osney a weir on the River Thames with the watercourse running to their mill. By 1225 there was more than one wheel, and by 1249 there was a fulling mill in addition to the earlier corn mills.
- 1.3.6 At the Dissolution the Osney mills, described as fulling mills, gig mills (for raising the nap on cloth) and corn mills passed, together with the abbey site, to Christ Church, which in 1547 leased the site, with the mills, to William Stumpe, a clothier. He assigned his lease to another clothier James Atwood whose sons held the site until the 1580s.
- 1.3.7 A grist mill was recorded on the site in 1611 and during the Civil War the mills were used as powdermills. In 1659 the tenant of Castle Mill planned to build new fulling mills at Osney. In 1775 part of the buildings were used as a china factory, but the mill continued in use. Before 1829 the tenant had built saw mills, while a bone mill was added in 1844 and another in 1848. By 1876 the mill was described as a flour mill. The present owner’s family purchased the site in 1895 and the flour mill continued in use until its destruction by fire in 1945.
- 1.3.8 Previous archaeological work on the site and its environs between the years 1975 to 1983 has produced evidence for a sequence of waterfront and building lines together with the location of domestic and industrial areas within the abbey precinct and shifts in

the precinct boundary (Sharpe 1985). An evaluation by the Oxford Archaeological Unit (now Oxford Archaeology - OA) in 1994 on an adjoining residential development immediately to the south recorded a robber trench on the projected line of the west wall of the west range of the abbey buildings at a point 7m from the surviving structure, being the third phase of stone construction in that location. At this point the stone structure had been robbed from a level of 56.3m aOD. No internal deposits were identified within the building, and the deposit sealing the robbing event contained a 17th-18th-century pottery assemblage (OAU 1994).

- 1.3.9 An existing desk-based assessment provides a map regression and a gazetteer of sites within a 500m radius of the present site (OA 2003). This demonstrates that the scheduled building and doorway are fragmentary survivals of a late medieval monastic range parallel to the mill stream.
- 1.3.10 More recently a watching brief on geophysical test pitting for the present scheme showed multiple Victorian or later brick walls in Pit 2 on the line of the northward projection of the same range wall (OA 2008). The trench was too restricted to show internal or external deposits related to the historic range, assuming they had survived at a level higher than demonstrated by the 1994 work (above).
- 1.3.11 In June 2009 OA carried out an archaeological evaluation within the Abbey Building (OA, 2009b). The work consisted of two small trenches designed to investigate whether any significant archaeological deposits existed within 0.4m of the present floor level, for the purpose of providing information prior to new floor and under floor heating within the building.
- 1.3.12 The evaluation encountered possible medieval dry mortar floor deposits at 56.71m aOD and trample layers above them containing one piece of 14th or 15th century ceramic within 0.4m below the existing floor. These were cut by some late post-medieval features of unknown purpose and all overlain by a thick but loose organic silty layer containing some animal bones with butchery marks. This might relate to processing of carcasses for use in the adjacent bone mill in the early to mid 19th century. The deposit was cut by construction of the brick plinth for the present floor later in the 19th century.

2 PROJECT AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The watching brief and excavation aims were to:

- (i) Preserve by record any archaeological deposits encountered during the course of ground intrusions;
- (ii) Seek to establish the extent, nature and date of any archaeological deposits encountered;
- (iii) Secure the analysis, conservation and long-term storage of any artefactual/ecofactual material recovered from the site;
- (iv) Disseminate the results of both the watching brief and excavation through the production of a grey literature report.

2.2 Methodology

Watching Brief

- 2.2.1 The watching brief involved observation of all groundworks that had the potential to affect or reveal archaeological deposits. These works included the demolition of existing structures, ground reduction, construction of the piling mats, piling proof or probe holes, foundation and service trenching and any other associated activity.
- 2.2.2 Excavation of archaeological features was undertaken to fulfill the basic objective of retrieval of archaeological data in those areas affected by the works. Additionally any articulated burials that would have been disturbed or destroyed during these works were recorded and exhumed prior to storage and eventual reburial. General standards were consistent with IFA (2008) guidelines.
- 2.2.3 All features and deposits were issued with unique context numbers, and context recording was in accordance with the established OA Field Manual (OAU 1992). Black-and-white negative and colour digital photographs were taken of all excavations and archaeological features.
- 2.2.4 Site plans were drawn at an appropriate scale (normally 1:50 or 1:100) with larger scale plans of features as necessary. Section drawings of features and sample sections of trenches were drawn at a scale of 1:20.

Excavation within the Abbey Building

- 2.2.5 In order to install the new floor at a finished floor level of 57.11m aOD, archaeological excavation was required to 56.8m aOD, prior to the laying of make up layers and the new floor structure. This included for a 90 mm buffer over the possible medieval floor of the building which was identified at 56.71m aOD during archaeological evaluation works at the site (OA, 2009).
- 2.2.6 Following removal of the existing wooden floor of the standing scheduled building, the revealed deposits were photographed and levelled. The two test pits were as they had been left in 2009. The exposed loose deposit, which had linear impression where the joists had been, was carefully cleaned by hand. This established the conditions and determined the nature of the deposits across the interior of the building.
- 2.2.7 The work was done entirely by manual means using trowels, hoes, shovels and buckets. Finds were hand collected as the work progressed and the spoil was sifted as it was stockpiled in the temporary skips, to ensure nothing was missed.
- 2.2.8 Task lighting was provided in addition to the daylight that entered through the doorway in the northern wall.
- 2.2.9 Once the initial deposit levels had been established and the position of the three E/W sill beams had been uncovered it was then possible to carefully excavate the material between the sills. The beams, rested on dwarf walls and therefore the interior of the building was essentially divided into four areas. Excavation was conducted in horizontal spits with levels being taken at regular intervals throughout the process. The work continued until either the impact depth of 56.8m aOD was reached or a different context was encountered. Any variation in contexts was photographed, planned, levelled and recorded, then excavated.
- 2.2.10 Below the E/W sill beams the underlying dwarf walls, which support the floor, were revealed. These were photographed, planned and recorded. The parts that need to be removed to 56.8m aOD this process was archaeologically monitored.

3 RESULTS

3.1 Description of deposits

- 3.1.1 The new construction can be divided into three ranges of new buildings, A, B and D. The work conducted upon each individual building will be described separately followed by an overall discussion.
- 3.1.2 In addition limited excavation followed by a watching brief was undertaken during remedial work within the standing abbey building. This will also be described separately.
- 3.1.3 As part of the new construction the works undertaken included the demolition of the standing buildings included the reduction of an area in the south-east corner of the site prior to the laying of a piling mat, the diversion of existing services, the excavation of proof or probe holes over the location of the proposed piles, the excavation of trenches for ground beams linking the piles and the excavation of new service trenches.

Buildings A and B

- 3.1.4 Building A occupies the site of the former single storey mill office which was demolished prior to construction. Building B spanned the mill race and partly occupies the footprint of an existing building whose frontage was retained but whose rear (southern) wall was demolished to allow for the construction of a wider new build. Following the demolition of the original buildings the ground within the footprint of the new buildings was reduced to allow for the construction of a piling mat.
- 3.1.5 Following the construction of the piling mat 25 test or probe holes were excavated over the proposed sites of 37 piles (where piles were grouped closely together the test pit encompassed several at once).
- 3.1.6 These works can be broadly divided into three main groups:
- Building A (Piles 1A – 10A)
 - Building B, east of the mill race (Piles 11A – 29A)
 - Building B, west of the mill race (Piles 30A - 37A)

Building A

- 3.1.7 Within the footprint of Building A eight test pits were dug, together with a pit to house a silt separator connected to the storm drains. All these pits were monitored and sample sections recorded in order to allow the local stratigraphy to be understood. The stratigraphy observed within these pits was broadly similar (Fig. 11 sections 1110 and 1111, Fig. 14 section 1168).
- 3.1.8 The underlying natural subsoil, a greenish grey clay (1246 and 1239), was encountered at a depth of between 2.7m and 3m below the current ground level. Within the northern half of the footprint of Building A this was overlaid by a 1.2m deep layer of very dark grey/black clay silts (1245) containing quantities of blocky limestone rubble, probably as-quarried material. Within the separator pit a 0.9 m deep layer of similar black organic material was observed, (1238), but this contained no stone inclusions suggesting that the deposition of the stone was localised.
- 3.1.9 Above 1238 was a layer of greenish-grey clay silt (1237) measuring 0.8m in depth. Deposited above the stoney material 1245 and above 1237 was a 0.5m deep layer of dark yellowish-brown clay silt (1236 and 1244) which produced chalk (or possibly lime mortar) flecking and which is probably a layer of made ground. A second layer of made

ground up to 0.4m in depth had been deposited above this (1243 and 1235). This material consisted of a mix of dark yellow-brown and grey-brown clayey silts and gravels.

- 3.1.10 Overlying 1235 was a compacted layer of pebbles and gravel (1234) 0.28 m deep. This formed the hardcore base for the tarmac yard surface (1233). Covering 1243 was a sequence of compacted demolition debris and crushed stone deposits (1241, 1242 and 1247) which formed the hardcore base for the tarmac surface (1240).

Building B

- 3.1.11 Prior to the start of the ground works within the area of Building B, the southern frontage, floors and the roof of the existing SW-NE aligned building on both sides of the mill race were removed. Within the main building, east of the millrace, 10 proof holes covering 17 pile locations were excavated. In the old grain bin and elevator building west of the millrace, four proof holes were dug covering eight pile locations (Fig. 4). Two proof holes (11A and 12A) were not dug because of the instability of the standing wall. As before, sample sections were recorded in order to document the stratigraphic sequence.
- 3.1.12 In the proof hole for pile 13A (Fig. 12, section 1154) the underlying natural clay (1139) was reached at a depth of 1.65m below existing ground level. Overlying this was a 0.8m deep layer of light brown clay silt (1138), a probable layer of alluvium. Cutting this deposit was a straight edged NW-SE aligned vertical sided flat bottomed trench (1135) 1.25m deep, and in excess of 0.8m wide, which ran the full width of the proof hole.
- 3.1.13 Built within this trench was a stepped foundation consisting of dressed limestone blocks measuring between 0.3m x 0.2m x 0.15m and 0.25m x 0.18m x 0.1m bonded with a light brown lime mortar (1137). Four courses of stonework 0.6m in height remained in situ, the remainder presumably having been robbed out. The projected line of this foundation aligns with the eastern wall of the standing abbey building, suggesting that the range extended northwards across the area of the new buildings. The trench had been backfilled with a dark yellow-brown clay silt containing gravel and sand flecking, possibly originating from the mortar (1136).
- 3.1.14 The backfilled trench and the alluvium (1138) were sealed below a 0.45m deep layer of dark grey clay silt containing numerous brick and angular stone fragments (1134). This had been cut by the foundation trench for wall (1132). This was a SW-NE aligned wall laid on concrete foundations and built of plain red bricks 0.225m x 0.105m x 0.072m in size laid using English stretcher bond with a lime mortar. Only five courses of this wall remained; it had been reduced down to ground level during the working life of the mill. Butting up to the wall was a deposit of demolition debris (1133) 0.4m deep. The original yard surface of crushed brick had been laid over this.
- 3.1.15 Within the proof hole for pile 17A (Fig. 13, section 1163) a light brown silty clay (1221) was observed at a depth of 1m, this is probably a continuation of layer 1138. Cut into this layer was the construction cut for wall 1220, a SW-NE aligned brick wall built on stepped foundations and of the same construction as wall 1132 recorded in section 1153; it is almost certainly a continuation of the same wall. It had been truncated to ground level during previous work on the site and was covered by the piling mat (1219).
- 3.1.16 Pile 21A (Fig. 14, section 2002) was dug over the projected line of the western wall of the abbey range. The continuation of the natural clay (2023) was observed at a depth of 1.9m below the original ground level. This was covered by a 1m deep layer of light brown clay silt (2022) similar to, and a probable continuation of, the alluvium layer

1138. Overlying 2022 was a 0.26m deep layer of dark reddish-brown sandy silt containing gravel inclusions (2020), also a possible alluvial layer. Above 2020 was a layer of dark grey sandy silt (2019), 0.3m in depth. This deposit contained quantities of large angular stone rubble together with lenses of coal dust and is a probable post-medieval layer of made ground.
- 3.1.17 Laid directly upon 2019 was a 0.12m deep layer of compacted crushed stone (2015), a possible yard surface. A 0.4m deep deposit of dark brown sandy silt containing many brick fragments and gravel inclusions (2014) had been built up over 2015. This in turn was covered by a 0.28m deep layer of light brown sandy silt (2013) containing much 19th-century demolition material. A similar tipline of material (2012) was recorded in the SW corner of the pit.
- 3.1.18 Cut into layer 2013 was a 1m deep steep sided SE-NW aligned trench (2021). The base of this trench was covered in concrete upon which a brick wall (2017) had been constructed using plain reddish orange bricks, 0.240m x 0.1m x 0.08m (similar to those used for 2204) bonded with cement mortar. The wall ran across the pit and may form the return to wall 1132/1220. The foundation trench had been backfilled with layers of redeposited material (2016 and 2018).
- 3.1.19 In the central area of the building a large proof hole was dug for piles 15A and 16A (Fig. 14, section 2003). The natural clay (2011) was recorded at a depth of 2m below the original ground level. Overlying this was a 0.66 m deep layer of dark grey fine silty clay (2010) containing quantities of medium to large angular limestone rubble. This material is very similar to, and a probable continuation of, deposit 1245 observed in Building A.
- 3.1.20 Cast upon layer 2010 was a 0.6 m thick concrete floor. Directly upon this surface was a rectangular brick built machine or engine mounting (2009) in the form of a rectangular block 1m x 0.65m and 0.5m high. The remains of two hold down bolts were visible in its upper face. Overlying this and the concrete floor was a 0.8m deep layer of yellow-brown gravel.
- 3.1.21 A second large proof hole was also excavated in the central area of the building for piles 19A, 20A and 23A (Fig. 14, section 2000). At the base of this excavation was a layer of grey-brown sandy silt mixed with many small to medium sized stone fragments together with small fragments of brick (2002). This deposit could be seen to be in excess of 0.7m deep within the section. Above 2002 was a 0.22m deep layer of black mixed sandy silts and coal dust (2001). A SW-NE aligned wall (2003), built using a similar brick to 2004 and 2009, was set in a shallow cut into 2001. The wall was 0.9m wide and 0.4m high and ran across the pit. A layer of loose demolition debris 0.44m deep (2000) had been laid over the concrete floor and butting up to 2003.
- 3.1.22 In the western corner of Building B east of the millrace channel a large rectangular proof hole was dug over piles 22A, 24A and 25A (Fig. 4, Fig. 11, section 1150). At the base of the proof hole a layer of dark grey fine silty clay containing quantities of medium to large angular limestone rubble was observed (1123). This deposit is very similar to, and a probable continuation of, deposits 1245 and 2010.
- 3.1.23 Built upon this layer was a solidly constructed masonry mass (1103) of medium to large sized limestone blocks bound in a lime mortar. Although not visible in plan this butts up to the eastern millrace wall (1109) forming a buttress to stop it splaying out under the pressure of water.
- 3.1.24 Overlying 1123 and butting up to 1103 was a 0.2m deep layer of dark grey clay silts (1113). Built upon these silts was a rectangular structure of large well dressed limestone blocks measuring 1m x 0.3m x 0.3m laid using a orange brown lime mortar

(1111). These blocks formed a wall two blocks wide, 1m high and at least 3m in length, with a course of slates laid between the bottom and second courses. This wall ran parallel to and approximately 1.1m east of the millrace channel. It is probable that these stones formed a support for the gearing and waterwheel shaft. Overlapping the end of 1111 and also butting up to 1103 was a 0.8m deep layer of mixed grey-brown clay silts and stone rubble (1112). Built on 1112 and butting up to the top of 1103 was a stone built structure consisting of a line of sloping or curved stone slabs (1102) laid above a rough masonry base. This appears to have originally enclosed the northern end of the gap between 1111 and the millrace wall 1109, possibly forming a gearwheel pit.

- 3.1.25 A later brick built gearwheel pit (1110) (Fig. 7, Plate 7) appears to have been inserted between 1111 and 1102, truncating the junction of those two structures. This new gearwheel pit measured 0.9m wide, 1.3m deep and 3.1m in length and was built using a plain pinkish yellow brick bonded with a cement mortar. A brick infill using the same bricks was laid over 1102. The pit had been backfilled with a loose grey-brown clayey silt mixed with demolition rubble.
- 3.1.26 Immediately to the south of this pit two further proof hole was dug over the sites of piles 26A (Fig. 12, section 1151) and 27A (Fig. 12, section 1152). The natural clay (1124) was only encountered in section 1152 at a depth of 2.15m below ground level. In both sections a layer of dark grey-brown fine silty clay containing numerous medium to large angular limestone rubble (1123) measuring up to 0.8m in depth was observed at the base of the section. In section 1152 this was overlaid by a 0.15m deep layer of very dark grey organic silty clay (1113), as observed in section 1150. Within section 1151 layer 1123 was covered by a 0.5m deep layer of grey-brown clay silt containing lesser quantities of angular limestone rubble (1122).
- 3.1.27 Both layers 1113 and 1122 were below a layer of grey-brown clay silt between 0.4m and 0.8m in depth (1121). This produced some small limestone fragments. Cut from the top of layer 1121 was a steep sided linear trench (1126) This ran parallel to, and approximately 1.5m east of the millrace channel. In section it could be seen to be greater than 2m in depth. Built within this trench was a masonry mass (1125) butting up to the millrace channel wall (1109). This had been constructed using roughly laid as-quarried limestone bonded with a reddish-yellow lime mortar. The base of the trench was completely filled with masonry while in the upper part the masonry tapered off towards the millrace wall. The top of the trench had been backfilled with a series of tips of redeposited material (1114, 1115, 1116 and 1117).
- 3.1.28 Within section 1151, layer 1121 and the upper layers of backfill had been cut by the foundation trench for the demolished southern frontage of the original mill building (1120). This had been constructed using a rough stone inner, faced externally with red brick.
- 3.1.29 In section 1152, a brick engine mounting or machine base (1118) had been constructed over 1121. Both the base and the backfill of 1126 had been overlaid by a leveling layer of grey brown clay silt and demolition debris (1100).
- 3.1.30 In the south-west corner of the new building a proof hole was dug over the site of Pile 28A (Fig. 14, section 2001), this also encountered the natural clay (2007) at a depth of 1.8m below the original ground level. Overlying this was a 0.75m deep layer of mixed yellow-brown sandy clay and blue-grey clay together with quantities of angular stone rubble (2005). This was covered by made ground consisting of a mixture of grey-brown clay silts and demolition debris (1100). Cut into this deposit was the construction trench for a hollow brick built rectangular structure measuring 1.8m x 1.7m by 1.1m high

- (2204). This had been built using plain reddish orange bricks, 0.24m x 0.1m x 0.08m bonded with cement mortar. The sides were three bricks wide and the internal void had been filled with a light brown sandy silt.
- 3.1.31 On the western side of the millrace four proof holes were dug for the eight piles on the site of the old grain storage bins and grain elevator. All four of these proof holes were recorded in detail.
- 3.1.32 In the proof hole for Piles 31A and 32A (Fig. 12, section 1153) the natural clay (1131) was observed at a depth of 1.6m below ground level. Overlying this was a 0.4m deep layer of orange brown silty clay (1129) containing organic material and gravel inclusions. Cut into this deposit was the foundation trench for the northern wall of the 19th-century mill building (1130). Built up over 1129 and butting up to wall 1130 was a 0.55m deep layer of made ground (1128) composed of a gingery yellow-brown clay silt containing construction debris such as brick and slate fragments and mortar flecks. A second layer of made ground 0.6m in depth (1127) had been built up over 1128. This was composed of a light yellow-brown sandy silt clay also containing construction debris.
- 3.1.33 On the site of Piles 33A, 34a and 35A (Fig. 12, section 1155) the natural clay (1149) was observed at a depth of 2.9m below ground level. Laid upon this deposit were the remnants of timber baulks 0.28m wide by 0.1m thick. These supported a 1m deep mass of loose medium to large angular limestone rubble laid within a dark grey silty clay matrix (1148). This structure supported a substantial stone plinth or wall 1m high, 0.5m wide and approximately 3m long (1144) which had been constructed using dressed limestone blocks measuring between 0.55m x 0.25m x 0.25m and 0.5m x 0.25m x 0.15m set in a reddish yellow lime mortar. This structure is very similar to 1111 observed on the eastern side of the millrace and is probably contemporary with it. It probably supported the shaft for a waterwheel on the western side of the millrace.
- 3.1.34 Also built upon layer 1149 was a stepped masonry structure (1147). This had been constructed using dressed limestone blocks which appear to have been reused from an earlier structure (possibly the abbey?) and a light yellow lime mortar. It was unclear if structure 1147 formed part of the foundations for the north wall of the 19th-century mill building or related to an earlier building. Overlying 1144, 1147 and 1148 was a dark grey silty clay 2m deep containing many angular stone fragments (1146).
- 3.1.35 Layer 1146 was cut by a foundation trench for wall (1145). This wall formed a return of wall 1144 running SW-NE, bridging the gap between 1144 and the inside of the western millrace channel wall. At the base of the trench a timber baulk (SF 1100) had been laid. This was a reused piece of oak with a semi-circular channel carved into one face. In its new position this channel was face down. Wall 1145 had been constructed on this timber using roughly dressed limestone blocks bonded with a reddish-yellow lime mortar.
- 3.1.36 Built directly upon 1144 was a brick plinth or wall measuring 0.7m high, 0.2m wide and with a length of over 1m (1143). This had been constructed using a plain red brick 0.225m x 0.105m x 0.072m in size, laid using English stretcher bond and lime mortar. This may have acted as a support for a later waterwheel shaft or associated machinery.
- 3.1.37 Overlying 1145 and butting up to wall 1143 was a 0.35m deep layer of made ground composed of yellow-brown sandy silt clay containing 19th-century construction debris (1142). A second layer of made ground of light yellow-brown sandy silt clay 0.22m in depth overlaid this. A 0.15m deep layer of dark brown silty loam and leaf mould (1140) had accumulated over the area since the disastrous mill fire in 1945.

- 3.1.38 In the north-west corner of the area a proof hole was dug up against the standing wall for Pile 30A (Section 1156). The natural blue-grey clay (1153) was recorded at a depth of 1.5m below the current ground level. Overlying this was a 0.6m deep layer of dark yellowish-grey clayey silt containing lenses of dark organic material. Above 1152 was a 0.4m deep layer of light brown clayey silt containing construction debris including small stone fragments and mortar flecks (1151). This was covered by a second layer of made ground, 0.45m deep, composed of light yellow-brown clay silt and construction debris such as brick fragments, mortar flecks and broken glass.
- 3.1.39 Both these layers butted up to the northern standing wall of the grain storage area (1154).
- 3.1.40 A proof hole covering Piles 36A and 37A was dug approximately 1m out from the mill race channel (Fig. 12, section 1157). This pit encountered the natural clay (1159) at a depth of 2.5 m below ground level. The clay was overlaid by a 1.1m deep layer of loose medium to large angular limestone rubble laid within a dark grey silty clay matrix (1158). This is similar to, and a probable continuation of, deposit 1148. Constructed upon this layer was the end of a well built stone plinth or wall (1156), probably the northern end of 1144.
- 3.1.41 Butting up to 1156 and lying over 1158 was a 1 m deep layer of roughly dressed and course stonework (1157). This ran the full width of the pit and presumably butted up to the inside face of the millrace channel wall. It had been constructed using quarried material up to 0.3m x 0.25m x 0.15m in size bonded with an orange-yellow lime mortar. The foundation trench for the standing north wall of the grain store (1154) had been cut into this deposit, which could be seen to run under the line of the wall.
- 3.1.42 Overlying 1156 and 1157 and and butting up to wall 1154 was a 0.4m deep layer of made ground (1155), a probable continuation of deposits 1127, 1141 and 1150.

Building D

- 3.1.43 Prior to the start of the work for this building, a number of existing sheds and their bases were demolished. Subsequently the work included the overall ground reduction of the area within the footprint of the building prior to the construction of a piling mat, then the excavation of proof or probe holes over the location of the proposed piles and finally the excavation of trenches for the ground beams.
- 3.1.44 Following demolition of the sheds the area of the new build was reduced by approximately 0.5m. This work was carried out within a deposit of mixed grey-brown silty loam (1195) containing numerous modern finds, frogged bricks and small to medium sub-angular stone fragments.
- 3.1.45 The removal of the top part of deposit 1195 exposed the remains of a stone built foundation (1199). (Fig. 13, section 1160). The exposed structure formed an L shape measuring 4m by 2m. The foundations were formed of roughly dressed limestone blocks bonded with a lime mortar. The width of the foundation varied between 0.5m and 0.65m. The position of the foundations matched that of three cottages known to have constructed on the site in 1822 and demolished circa 1970. The foundations were preserved in situ under the piling mat.
- 3.1.46 After the piling mat was constructed a series of test or probe pits each measuring approximately 1.2m square were excavated by machine in order to uncover and remove any potential obstructions prior to piling. The excavation of all twenty pits was monitored and a number of sample sections recorded, allowing a cross section of the stratigraphy across the area to be compiled.

- 3.1.47 Along the southern edge of the area three sections were recorded (Fig. 11, sections 1107, 1108 and 1109). The deepest of these, 1109, was dug to a depth of 1.7m below the piling mat. A layer of dark grey-brown silty peat/organic rich loam (1193) was encountered at the base of the hole and could be seen to be in excess of 0.4m deep within the section. This was overlaid by a 0.2m deep layer of light grey-brown clay silt (1192) containing numerous sub-angular limestone fragments. Covering this deposit was a 0.15m deep layer of grey-brown silty clay loam (1191); similar deposits (1183 and 1188) could be observed in the bases of sections 1107 and 1108 respectively.
- 3.1.48 Within sections 1107 and 1108 this layer was below a 0.15m deep layer of small to medium sized limestone rubble contained within a yellowish-grey silt clay matrix (1182 and 1187). Above 1182, 1187 and 1191 was a layer of light grey-brown silty clay measuring between 0.15m and 0.5m in depth (1181, 1186 and 1190). All these deposits contained quantities of small to medium sized limestone fragments.
- 3.1.49 Within the region of section 1108 this layer was covered by a 0.25m deep lens of reddish-grey silts mixed with gravel and containing many brick fragments (1185). Above layer 1181 and 1190 in sections 1107 and 1109 and deposit 1185 in section 1108 was a 0.4m deep layer of silty loam (1180, 1184 and 1189 respectively). This deposit contained numerous modern artefacts and demolition debris and is a probable continuation of layer 1195.
- 3.1.50 The stratigraphy recorded within the northern arm of the new building differed from that recorded along the southern edge.
- 3.1.51 These test pits were all excavated to a depth of approximately 1.3m below the level of the piling mat. At the base of the pits (Fig. 10, sections 1103, 1104 and 1105) the top of the underlying natural dark grey silty peat/organic deposits was exposed (1163, 1170 and 1177 respectively). In all the pits this was overlaid by a layer of blocky limestone rubble/as-quarried material up to 0.25m in depth (1162, 1169 and 1176). In sections 1104 and 1105 this rubble was overlaid by grey-brown silty clay loam containing smaller limestone fragments, 0.2m in depth (1168 and 1175).
- 3.1.52 Layers 1162, 1168 and 1175 were covered by a layer of dark grey-brown clay silt again containing many small limestone fragments (1161, 1167 and 1174).
- 3.1.53 In the north-west corner of the plot this layer was overlaid by a layer of reddish-grey silt clay (1160 and 1173) measuring between 0.25m and 0.5m in depth, while approximately in the centre of the building (section 1104) layer 1167 was overlain by 1166, a 0.35 m deep layer of light yellowish brown clay silt mixed with stone and brick fragments. Overlying 1160 and 1173 and 1166 was a layer of dark grey-brown clay silt containing demolition debris (1165 and 1172). This was below a layer of light grey-brown clay silt mixed with crushed stone (1164) (section 1104) and a concrete slab (1171) (section 1105).

The Abbey Building

Results (Figs 6 and 9)

- 3.1.54 The initial levels of the exposed remains ranged from 56.88m to 56.99m aOD. Therefore a maximum of 0.19m of material was removed from the interior of the building. The arbitrary nature of the level that was required meant that for the most part only one deposit was present, 3000, and even that was not completely removed over an extensive area. The interior of the building was divided into four areas, separated by three east-west dwarf walls. This allowed some degree of spatial control over the works. Area 1 was at the northern end of the building, and the western area was where

Test Pit 2 was positioned. Areas 2 and 3 were in the central part of the building and Area 4 was at the southern end, where Test Pit 1 was located. The incomplete nature of the woks meant that full interpretation was not always possible, nor was the stratigraphic sequence secure. Where possible the results have been related to the 2009 evaluation results.

- 3.1.55 The earliest visible deposit was possibly 3004, seen at the northern end of the building, in Area 1 (Fig. 6). It appeared initially as intermittent patches, and further cleaning indicated that it was part of a more continuous layer equivalent to context 2011 seen in the 2009 evaluation. The deposit was a pale yellowish-brown silty sand that sloped downward slightly from north to south, as seen in the original section, and consequently only the extreme northern part, and several slightly higher patches to the east, were just visible at 56.8m aOD; the majority remaining below that level. The finds from this deposit were seen to be of 19th-century date.
- 3.1.56 Overlying this deposit on the eastern side, was a north-south linear band of grey sandy silt, 3002, which was in a very shallow depression of 0.09m maximum depth. It was unclear if this deposit related to the construction of 3001 immediately to the north or whether it was a result of being beneath particular floorboards where a specific activity occurred above. The deposit physically both overlay and was sealed by 3000, suggesting that it may have been a peculiar deposit formed while layer 3000 was continuously accumulating.
- 3.1.57 In the south-western part of the building, in Area 4, was deposit 3005, this was a highly discontinuous deposit that was almost identical to 3003 above. Deposit 3003 was a pale greyish-brown silty sand layer that was firmer than 3005. The firmness might have been a result of compaction through trample and areas of paler buff mortar inclusions might have been either dumped material or remnants of a floor. However, layer 3003 did not extend as far as Test Pit 1 nor to the north into Area 2 and it may have been deposited as part of the construction activity related to the insertion of the new Victorian frontage and timber floor.
- 3.1.58 These deposits lay within the areas defined by the east-west sill beams and no cuts for the beams and underlying dwarf walls were visible. This indicates that the deposits post-date the east-west structures.
- 3.1.59 The dwarf walls, 3009, 3010 and 3011, were constructed of two courses of mid orange bricks laid in header courses (Fig. 6). The bricks were mass produced, unfrogged and measured 0.23m x 0.11m x 0.08m thick. The long axes of the bricks were perpendicular to the overlying wooden beams, 3006, 3007, 3008. The dwarf walls abutted the north-south plinth walls along the east and west internal sides of the building (seen as 2002 in the earlier evaluation). The beams were each of one piece of wood, cut and dressed and there were slight notches visible where the overlying joists had lain. In several places iron nails were protruded from the wood. The timbers were approximately 5.55m in length, by 0.1m square in cross section. The northernmost of the three beams, 3006, and the dwarf wall 3009, sagged in the middle, levels varying from 56.99m aOD at either end to 56.86m aOD in the centre. This suggests the existence of an underlying area of softer deposits, or a possible void.
- 3.1.60 Sealing all these marginally earlier layers and features was the deposit 3000. This was a loose, mid orangey brown silt with a high organic content, including timber fragments and dust. Other inclusions included occasional mortar chunks, glass pieces, rare stone tiles and brick fragments and a high frequency of worked animal bone. This deposit probably accumulated by a number of means; some material may have been

deliberately introduced as levelling or makeup material after the floor substructure was built, as indicated by the animal bone debris; some may have resulted from dust and particles percolating through the gaps between wooden floorboards; and some from other processes such as detritus from woodworm, for example.

Finds

- 3.1.61 Finds, consisting principally of pottery and some animal bone, were recovered by hand during the course of the excavation and bagged by context. The pottery and bone were assessed by OA finds specialists and their comments incorporated into this report (see Appendices B and C).

Conclusions

- 3.1.62 The archaeological mitigation of the deposits beneath the removed timber floor, in the scheduled Grade II listed Osney Mill building, revealed that there was an extensive deposit of accumulated debris which had been deliberately dumped after the construction of the brick dwarf walls which supported the timber floor. The deposit was dated to the later 19th century and contained a significant amount of bone waste. There was a post-depositional aspect to the deposit in that dust and other material had obviously percolated through the floor itself.

Other groundworks

- 3.1.63 In addition to the monitoring of the pile proof holes the excavation of a number of service trenches was also monitored. These features included a new mains drainage trench across the northern end of the yard and an electric cable trench from the new turbine to the mains supply in Mill Lane.

The drainage trench

- 3.1.64 This ran from the boatyard offices across the open yard at the northern end of the site into Mill Lane and was 0.6m wide, 1m in depth, and approximately 25m long (Fig. 2). Two sample sections showing the stratigraphy were recorded (Fig. 10, sections 1100 and 1101). Within the area of section 1100 the trench cut across the truncated remains of a SW-NE aligned wall (1209), measuring 0.7 m wide and with a height of 0.3 m visible in the section. This had been built using roughly dressed limestone blocks up to 0.5m x 0.25m x 0.2m in size bonded with a reddish-yellow lime mortar. Several displaced stones (possibly from robbing) were visible to the sides and the upper surface of the wall. The displaced stones to the west of the wall displayed evidence of burning leaving the stone discoloured red. Elsewhere within the trench the base of the excavation came down onto a fine grey-brown clay silt (1210 and 1213) which also ran up to and over the wall.
- 3.1.65 Overlying this was a yellowish grey-brown clayey silt with gravel inclusions (1208 and 1212) between 0.25 m and 0.3 m in depth. At the western end of the trench (Fig. 10, section 1100) this was covered with a compacted layer of mixed clay and gravel 0.18m deep (1208) forming a base for the tarmac surfaces. Towards the eastern end this was replaced with a crushed concrete and brick hardcore (1211) supporting a concrete and tarmac yard surface.

The electric cable trench

- 3.1.66 This ran from the eastern side of the millrace channel by the bridge along the southern boundary of the site around the standing abbey building before running across the corner of the new building and around the edges of the yard into Mill Lane (Fig. 2). The

trench measured 0.5m in width and was excavated to a depth of between 0.7m and 1.4m.

- 3.1.67 The deepest part of the trench was the length along the southern boundary of the site until it turned to run parallel with the west wall of the standing abbey building (Fig. 14, sections 1166 and 1167). At the base of the trench a layer of probable alluvium composed of dark yellow-brown silty clay and gravel was exposed (1229). Above this was a layer of dark grey-brown silty loam 0.3m deep (1228). This had been overlaid by a layer of made ground up to 0.7m in depth (1227). Cut into 1227 was a NE-SW aligned construction cut (1231), 0.4m wide and 1m deep which ran across the trench (Fig. 14, section 1167). Built within this cut was structure (1232), a probable foundation constructed of plain red bricks, 0.225m x 0.11m x 0.072m in size, laid using a lime mortar. This was in line with the north wall of the standing abbey building. The top courses of this feature had been demolished and the trench backfilled. Sealing the backfill and overlying 1227 elsewhere was a compacted layer of crushed and broken brick (1230) forming a yard or roadway surface.
- 3.1.68 As the trench crossed the yard the depth was reduced to 0.6m (Fig. 13, sections 1161, 1164 and 1165). In the base of the trench a layer of made ground composed of yellow-brown silty clay mixed with stone, brick and tarmac fragments (1206 and 1224) was exposed. In the centre of the yard (section 1165) this was covered by a 0.12m thick layer of weak tarmac (1226). Overlying 1226, and 1224 elsewhere, was a layer of hardcore containing clinker, ashes and broken up tarmac 0.25m deep (1223 and 1205). This layer was very compacted and may have formed a yard surface in its own right. It had been covered by a later tarmac surface (1222 and 1225).

Cleaning of the millrace

- 3.1.69 As part of the preliminary works on the site the north and south ends of the millrace were blocked off using temporary coffer dams and the bed of the mill race cleaned. A temporary sump for pumping was also dug during this work (Fig. 10, section 1102).
- 3.1.70 A small tracked machine was used to clean out the accumulated detritus from the bottom of the millrace channel exposing the stone bed. This material was composed of a fine dark grey silt and contained numerous late 19th- and 20th-century artefacts (1248). This deposit was homogeneous throughout its length suggesting only a single phase of deposition. It is probable that prior to the 20th century, when a constriction of the channel was built using concrete filled sandbags, the channel was periodically flushed out by water released into it.
- 3.1.71 At the southern end of the channel a drainage sump approximately 1.5m square by 1.1m deep was dug. At the base of the sump a layer of grey-brown silts and fine gravel was exposed (1218). Above this was a 0.2m deep layer of very dark grey silts and coarse gravel (1217). This in turn was overlaid by a 0.18m deep layer of silts and small gravels (1216). All these three layers appear to be alluvial or fluvial in origin.
- 3.1.72 Built up upon 1216 was a layer of compact angular limestone rubble bound in a reddish grey clay silt (1215), 0.35 m thick. Above this deposit was a stone surface built of limestone blocks measuring 0.3m x 0.28m x 0.15m bonded with a lime mortar. Only the top faces of the stones had been dressed and the surface butted up to the millrace channel wall on either side.

3.2 Finds

- 3.2.1 The vast majority of the dating evidence recovered during the course of the watching brief consisted of post-medieval pottery, bottle glass, tile and brick. Little evidence for medieval activity was recovered. The post-medieval brick and tile was evaluated on site, but was not retained. The remaining artefacts were cataloged by OA internal specialists and their findings are shown in appendices B and C.

3.3 Environmental remains

- 3.3.1 Because of the nature of the machine excavation it was considered that the excavated material was too contaminated for sampling, while the instability of the deep excavations precluded sampling in situ.

4 DISCUSSION AND CONCLUSIONS

- 4.1.1 The archaeological features and deposits encountered can be divided into three main groups relating to the following periods and types of activity:
- The abbey prior to the dissolution.
 - Early post-medieval use of the site (16th to 18th century).
 - Later post-medieval use of the site (19th and 20th century).

The Abbey

- 4.1.2 Structural evidence for the extent of the abbey ranges was recorded during the construction of Building B and D, together with evidence for a possible boundary wall associated with the abbey exposed during the excavation of the drainage trench across the northern end of the yard.
- 4.1.3 The insertion of a new floor within the Abbey Building only impacted on 19th and 20th century deposits. No evidence for the use of the building during the monastic period of its life was observed. The fabric of the standing building has previously been reported upon (OA 2009) and discussion of this will not be repeated here.

Building D

- 4.1.4 During the preliminary work for this structure the area of its footprint was reduced in level by approximately 0.25-0.3m. No evidence for any of the abbey structures was exposed at this level. During the subsequent excavation of the pile proof/probe hole P2, a line of medium sized roughly dressed limestone blocks was exposed in the northern edge of the proof hole (1249). The projected alignment of this feature continues the line of the south wall of the standing abbey building (Figs 3 and 5). The wall had obviously been heavily robbed with only the smaller stones, possibly the rubble core of the wall, left in situ. The top of this feature was further encountered during the excavation of drainage runs within the interior of Building D, confirming its alignment. The excavations for the ground beams for the building were insufficiently deep to expose either a possible return of the wall or of any parallel wall which might have shown the width and alignment of the range.
- 4.1.5 Layers of compacted stone were exposed within a number of the proof holes (layers 1162, 1169, 1176, 1182, 1187 and 1192), all at roughly the same depth. If it is assumed that wall 1249 represents a range continuing the alignment of the standing building then it is probable that these layers are external to the building and may represent a

courtyard surface, No dating evidence was recovered from these deposits to confirm this.

Buildings A and B

- 4.1.6 Evidence for the abbey buildings was sparse within this area despite the density of the excavations. Definitive evidence for abbey buildings was only exposed within pile proof hole 13A (Fig. 5, Fig. 12, section 1154) when stepped foundations for a well built NW-SE aligned wall (1137) were exposed within the east face of the hole. The wall had been heavily truncated or robbed down to a depth of 1.5m below the current ground level. The alignment of this wall matched that of the eastern wall of the standing building and the watergate, suggesting that a range ran NW-SE across the site, parallel to the river. The north-westerly projection of the alignment of this wall (Fig. 4) would have continued into piles 11A and 12A but these were not excavated due to the instability of the standing wall, meaning that the projected alignment could not be confirmed.
- 4.1.7 If it is assumed that the width of this north-south range is the same as that of the standing building its western wall would have been exposed within the proof holes for piles 18A, 19A, 20A and 21A. No evidence for this wall was observed. It is possible either that the projected alignment was slightly out and it was missed by the proof holes, or the wall may have been completely robbed out, or that wall 1137 together with the remnants of the watergate may represent a curtain or boundary wall rather than a building, although drawings held by the Bodleian Library dated 1815 clearly show the roof profile of the standing building running over the watergate and a tumble down wall continuing westwards (Plate 4), while a 1840 engraving by William Delamott and Orlando Jewett shows a lower roof line running down to the watergate (Plate 5).
- 4.1.8 The deep deposits of blocky rubble observed within the northern proof holes (layers 1122, 1123, 1148, 1158, 1123, 1245, 2010 and 2019) all occur at approximately 1.5m below the current ground level. The position of these deposits within the stratigraphic sequence suggests that they are associated with the abbey and may represent material tipped into the river's edge, or more likely considering their location, into a small inlet or scowl, in order to stabilise or level the site, possibly to form a platform upon which to build the abbey and its mill. Again no dating evidence was recovered from within these deposits to confirm this, however they appear to have been deposited within the 12th century river channel as shown by Sharpe (1985), suggesting a 13th century or later origin.
- 4.1.9 Two structures of well dressed stone were exposed on either side of the current mill channel, 1111 on the eastern side and 1144 and 1156 (the two ends of the same structure) on the western side of the channel (Fig. 11 section 1150 and Fig. 12 sections 1155 and 1157 respectively). Both these features were constructed on top of the layers of blocky rubble and exhibit similarities in both materials and construction probably indicating that they are contemporary. The quality of their build probably indicates that they were associated with the abbey but no definitive dating evidence was recovered.
- 4.1.10 Their alignment and location suggest that they might be supports for the axle of a waterwheel. The distance between their inside faces (c 6m) is nearly twice the width of the present millrace, although it is unclear if the present channel was constructed on the line of the earlier one. The roughly built stone wall 1145 (section 1155) together with wall 1157 (section 1157) appear to be later additions, possibly forming a gear wheel pit. The reuse of the worked wooden beam (SF 1100) to support wall 1145 indicates that these structures belong to a later phase of mill construction, but it is unclear if the latter

was undertaken whilst the mill was under the abbey's control or was of later (16th/17th century) date.

- 4.1.11 Other evidence for the abbey was exposed within the drainage trench dug across the northern side of the yard (Fig. 2). In the base of this trench was the top of a 0.6m wide wall (1209) showing evidence of having originally been constructed using dressed blocks of stone on its outside faces and with a rubble core. Many of the dressed blocks had been robbed out leaving the rubble core and scattered blocks. The upper surface of the rubble core and some of the scattered blocks displayed evidence of burning which must have taken place subsequent to the robbing.
- 4.1.12 The alignment of the wall (roughly SW-NE) is consistent with the alignment of the abbey buildings rather than with the Great Court to the north of the mill and it is possible that it may have formed a northern boundary or precinct wall to the site.
- 4.1.13 No artefacts dating to this period were recovered during the course of the watching brief.

Early post-medieval period (16th to 18th century)

- 4.1.14 Little evidence for the use of the site following the Dissolution was observed during the course of the work, although documentary evidence shows that the site at various times housed fulling and gig-mills together with a corn-mill between 1547 and the 1580s. These may have reused existing structures and mills leaving little fresh evidence. Agas' map of Oxford in 1587 (Fig. 15) shows the site to consist of a line of buildings running parallel to the river with a second range of buildings forming an L shape spanning the millrace. No detail is shown, but the latter buildings are labelled 'Osney Myll'.
- 4.1.15 A grist mill (used for cleaning ground grain or for cracking malt) recorded on the site in 1611 would probably also have made use of existing structures, including the waterwheel and machinery, leaving no below ground evidence. Likewise the conversion of the mills to powdermills during the English Civil War was relatively simple and would have left little or no direct below-ground evidence.
- 4.1.16 The proposed construction of new fulling mills in 1659 by the tenant of Castle Mill may have just involved limited modification of the powder mills.
- 4.1.17 An engraving by Michael Burghers dated 1720 (Plate 1) shows the site consisting of a single SE-NW range of buildings running parallel to the river with an extension running SW-NE at the northern end spanning the millrace(s), similar to that shown on Agas' map. Details of this building are unclear but the engraving clearly shows two arches spanning the main channel, possibly indicating the presence of two wheels, while a smaller millrace appears to run around the western end of the extension, possibly driving a third wheel. The old abbey range has the appearance of having been converted to a dwelling. The assertion in the engraving caption that 'these seem to have been nothing but outhouses' is remarkable in view of the presence of a very substantial chimney towards the south end of the illustrated buildings). A 'modern dwelling house' has been built on the western bank of mill race by this date, presumably the 'Millhouse' shown in later plans. The engraving also shows the area to the south and east of the surviving range as being cleared and under cultivation. The buried soil horizons (1161, 1166, 1167, 1168, 1172, 1173, 1174, 1175, 1181, 1186, 1190 and 1191) observed during the construction of Building D may be evidence for this use.
- 4.1.18 The documented use of part of the buildings in 1775 as part of a china factory may have involved the conversion of one of the fulling mills to a water driven bone and flint mill, but no evidence for the throwing or firing of pottery was observed.

- 4.1.19 By 1777 it appears that half of the range shown in the 1720 engraving had been demolished leaving the now standing abbey building as the southern end of the range (Plate 2). The surrounding area now appears to have been used as a farmyard (Plate 3).
- 4.1.20 In addition to these new uses on the site the grinding of corn continued throughout, suggesting that at least two or possibly three waterwheels were in use.

Later post-medieval period (19th to 20th century)

- 4.1.21 By 1815 drawings in the Bodleian Library (Plate 4) show that the northern end of the range connecting to the SW-NE extension spanning the millrace had been removed leaving the standing abbey building isolated from the SW-NE building spanning the mill race.
- 4.1.22 This demolition may have occurred when the SW-NE range was rebuilt. Later building recording showed that the range was rebuilt probably reusing the earlier foundations in the late 18th century. The stone used was most likely robbed from the remains of the abbey buildings. This may have replaced a structure which appeared to be principally wooden in the Burghers engraving. It is possible that the present mill channel was constructed during this phase of work. No evidence for the two stone arches shown in the Burghers engraving or from the remains of "an old bridge" also shown thereon were encountered during the cleaning out of the current mill race channel.
- 4.1.23 The site continued to be leased out in the 19th century with the records showing that by 1829 the tenant had constructed a number of saw mills. Several tree trunks are visible in the foreground of the 1815 drawing suggesting that the sawmill may have already been in operation then. At this date the saw would most likely consisted of a "Gangmill" of reciprocating blades imitating the earlier hand powered pit saws.
- 4.1.24 In 1829 when the site was surveyed on behalf of Christ Church College by Badcock, (Fig. 16) the building footprint appears to match that shown in the 1815 drawing.
- 4.1.25 The records show that a bone mill was added in 1844. In 1845 Christ Church sold the lease. The particulars for the sale included a plan showing the layout of the buildings (Fig. 17). The northern range of building which spanned the mill race contained a corn mill with four sets of stones while the western part of the range contained the bone mill which shared a waterwheel with the sawmill. Both these industries appear to have shared the yard and old abbey building. The Delamonte and Jewett engraving of 1840 clearly show tree trunks and sawn timber leaning against the standing abbey building (Plate 5). In 1848 a second bone mill was added. Evidence from the floor reduction within the standing abbey building contained evidence for this activity suggesting that possibly it was being used for storage.
- 4.1.26 Between the 1829 Badcock plan and the 1845 sale plan the cottage (1200) to the east of the standing abbey building has appeared.
- 4.1.27 Between 1845 and the OS map of 1876 (Fig. 18) the site was redeveloped into its final form, etchings of which appear on the W.H. Munsey Ltd letterhead of the period (Plate 6). A third floor (in brick) was added to the SW-NE range. The brick-built gear pit (1110) was probably constructed to replace the earlier stone-built gear pit (1102) and the brick-built piers which probably supported the new hurst frames were constructed during this phase of work. The sawmill and the yard between the standing abbey building and the range was rebuilt using brick. This took the form of two new buildings; a larger gabled three storey building with its western half spanning the millrace had a tall square brick built chimney at its eastern end (Plate 6). A second lower brick built building butted up



to the chimney end and ran up to the north end of the watergate. The truncated brick walls observed within the pile proof holes (1118, 1202, 1200, 1220, 2004 and 2017) together with the possible engine mountings (2003 and 2009) and wall (1232) observed within the electricity cable trench all probably relate to these buildings. The presence of the chimney suggests that the sawmill may have switched from water power to steam power between these dates.

- 4.1.28 The imposing three storey brick mill built on the western side of the millrace was also constructed during this period. It occupies the site of the 1848 bone mill. Evidence of its construction can be seen within section 1155 where its foundation cut truncates the made ground associated with the abbey. The flour mill continued in use until its destruction by fire in 1945.



APPENDIX A. ARCHAEOLOGICAL CONTEXT INVENTORY

Context	Type	Depth	Width	Length	Comments	Finds	Date
1100	Layer	0.15 m	-	-	Modern made ground	Brick	C20th
1101	Surface	0.07 m	1 m	1m	Brick floor	Brick	C19th
1102	Wall	0.38 m	0.2 m	1.4 m	Brick wall blocking drain	Brick	C20th
1103	Structure	1 m	1 m	> 1 m	Stone buttress to millrace channel	-	C19th
1104	Structure	0.45 m	1 m	1.4 m	Brick built channel or drain	Brick	C19th
1105	Fill	0.38 m	0.6 m	> 1.4 m	Upper layer of backfill/ silting within Drain 1104	-	C19th
1106	Fill	0.4 m – 0.6 m	0.6 m	> 1.4 m	Lower layer of backfill/ silting within Drain 1104	-	C19th
1107	Layer	0.4 m	-	-	Made ground	Brick	C19th
1108	Fill	1 m	0.5 m	2.6 m	Backfill of gearwheel pit 1110	Brick	C19th/ C20th
1109	Structure	2.5 m	0.6 m	> 15 m	Eastern mill race channel wall	Brick	C19th
1110	Structure	1 m	3.2 m	0.8 m	Brick built rectangular gearwheel pit	Brick	C19th
1111	Wall	1 m	0.9 m	3 m	Earlier stone support for waterwheel axle	Stone	C14th - C17th
1112	Layer	0.8 m	-	-	Made ground/ levelling layer	Brick	C19th
1113	Layer	0.2 m	-	-	Possible flood deposits	-	-
1114	Fill	0.3 m	-	-	Tipline of backfill within cut 1126	-	C19th
1115	Fill	0.25 m	-	-	Tipline of backfill within cut 1126	Brick	C19th
1116	Fill	0.5 m	-	-	Tipline of backfill within cut 1126	-	C19th
1117	Fill	0.75 m	-	-	Tipline of backfill within cut 1126	-	C19th
1118	Structure	0.4 m	0.9 m	0.6 m	Brick built machine mount	Brick	C19th
1119	Cut	0.4 m	0.9 m	0.6 m	Construction cut for machine mount	Brick	C19th
1120	Structure	0.65 m	0.6 m	> 12 m	Foundation courses for south frontage of demolished building	Brick	C19th
1121	Layer	0.9 m	-	-	Made ground	Brick	C19th
1122	Layer	0.5 m	-	-	Ground reclamation	-	-
1123	Layer	0.8 m	-	-	Ground reclamation	-	-
1124	Layer	> 0.3 m	-	-	Natural clay	-	-
1125	Structure	> 2 m	1.1 m	>10 m	Masonry mass butting up to millrace channel wall 1109	-	C19th



1126	Cut	> 2 m	6 m	> 14 m	Cut for millrace channel	-	C18th/ C19th
1127	Layer	0.6 m	-	-	Made ground	Brick	C19th
1128	Layer	0.55 m	-	-	Made ground	Brick, slate	C19th
1129	Layer	0.35 m	-	-	Alluvial deposits	-	-
1130	Structure	> 4 m	0.7 m	7 m	West wall of grain storage bin and elevator building	Brick	C19th
1131	Layer	> 0.2 m	-	-	Natural clay	-	-
1132	Structure	0.4 m	-	> 2 m	Truncated base of a brick wall running SW-NE parallel to 1120	Brick	C19th
1133	Layer	0.4 m	-	-	Made ground/ demolition debris	Brick	C19th/ C20th
1134	Layer	0.45 m	-	-	Leveling layer/ made ground	Brick	C19th/ C20th
1135	Cut	1.4 m	> 0.6 m	> 2 m	Construction cut for continuation of NW-SE wall of standing abbey building	-	C14th
1136	Fill	0.9 m	> 0.6 m	> 2 m	Backfill of robbed out construction cut	-	C16th ?
1137	Structure	0.6 m	> 0.6 m	> 2 m	Continuation of NW-SE wall of standing abbey building	-	C14th
1138	Layer	0.8 m	-	-	Alluvium	-	-
1139	Layer	> 0.5 m	-	-	Natural clay	-	-
1140	Layer	0.15 m	-	-	Windblown soil/ leaf litter	Brick	C20th
1141	Layer	0.22 m	-	-	Made ground/ leveling layer	-	C19th
1142	Layer	0.35 m	-	-	Made ground/ leveling layer	-	C19th
1143	Structure	0.7 m	0.22 m	> 1 m	Brick built machine base, possible support for waterwheel shaft	Brick	C19th
1144	Structure	1 m	0.5 m	3 m	Stone built wall/plinth. Possible side of gear wheel pit/ support for waterwheel shaft	-	-
1145	Wall	0.62 m	0.62 m	2.5 m	Later return of wall 1144. Possible end wall of gear wheel pit	Wood	-
1146	Fill	2 m	1.5 m	4 m	Backfill of construction cut for 1147 and north wall of main mill building	Stone	C19th
1147	Structure	> 1.1 m	1.5 m	4 m	Masonry mass built up against north wall of main mill building	Stone	-
1148	Structure	1 m	0.7 m	3 m	Masonry mass, foundations for plinth 1144.	Wood	-
1149	Layer	> 0.25 m	-	-	Natural clay	-	-



1150	Layer	0.45 m	-	-	Made ground/ leveling layer	Brick, coal	C19th
1151	Layer	0.4 m	-	-	Made ground/ construction layer	-	C19th
1152	Layer	0.6 m	-	-	Organic silts, old river deposits ?	-	-
1153	Layer	> 0.2 m	-	-	Natural clay	-	-
1154	Wall	> 4 m	0.6 m	4.5 m	North wall of grain storage bin and elevator building	Brick	C19th
1155	Layer	0.4 m	-	-	Made ground/ leveling layer	Brick, coal	C19th
1156	Structure	1 m	0.5 m	> 0.5 m	Stone built wall/plinth. End of plinth 1144	-	-
1157	Structure	1 m	1.5 m	2 m	Masonry mass built against 1144/1156	Stone	-
1158	Layer	1 m	> 0.6 m	> 2.5 m	Blocky stone rubble in clay matrix	Stone	-
1159	Layer	> 0.2 m	-	-	Natural clay	-	-
1160	Layer	0.5 m	> 1 m	> 1m	Made ground	Stone	C19th
1161	Layer	0.35 m	> 1 m	> 1 m	Buried soil horizon, old ploughsoil ?	Stone	C18th/ C19th
1162	Layer	0.2 m	> 1 m	> 1 m	Made ground stone rubble dump	Stone	-
1163	Layer	>0.18 m	> 1 m	> 1 m	Organic river silts	-	-
1164	Layer	0.12 m	> 1 m	> 1m	Made ground	Stone	C19th
1165	Layer	0.15 m	> 1 m	> 1m	Made ground	Stone, brick	C19th
1166	Layer	0.35 m	> 1 m	> 1m	Made ground	Stone, brick	C19th
1167	Layer	0.12 m	> 1 m	> 1 m	Buried soil horizon, old ploughsoil ?	Stone	C18th/ C19th
1168	Layer	0.23 m	> 1 m	> 1 m	Buried soil horizon	Stone	C19th
1169	Layer	0.18 m	> 1 m	> 1 m	Made ground stone rubble dump	Stone	-
1170	Layer	> 0.1m	> 1 m	> 1 m	Organic river silts	-	-
1171	Surface	0.18 m	> 1 m	> 1 m	Modern concrete surface	-	C20th
1172	Layer	0.35 m	> 1 m	> 1 m	Buried soil horizon, old ploughsoil ?	Stone	C18th/ C19th
1173	Layer	0.22 m	> 1 m	> 1m	Made ground	Stone	C19th
1174	Layer	0.1 m	> 1 m	> 1m	Buried soil horizon, old ploughsoil ?	Stone	C18th/ C19th
1175	Layer	0.18 m	> 1 m	> 1m	Made ground	Stone	C19th
1176	Layer	0.18 m	> 1 m	> 1 m	Made ground stone rubble	Stone	-



					dump		
1177	Layer	0.28 m	> 1 m	> 1m	Buried soil horizon	Stone	C18th/ C19th
1178	Layer	0.22 m	> 1 m	> 1m	Made ground	Stone	C19th
1179	Layer	> 0.2 m	> 1 m	> 1m	Made ground	Stone	C19th
1180	Layer	0.4 m	> 1 m	> 1 m	Made ground	Brick, stone	C19th
1181	Layer	0.28 m	> 1 m	> 1m	Buried soil horizon	Stone, brick	C18th/ C19th
1182	Layer	0.12 m	> 1 m	> 1m	Made ground	Stone	C19th
1183	Layer	> 0.25 m	> 1 m	> 1 m	Buried soil horizon	Stone	C18th/ C19th
1184	Layer	0.4 m	> 1 m	> 1 m	Made ground	Brick, stone	C19th
1185	Layer	0.28 m	> 1 m	> 1m	Buried soil horizon	Stone	C18th/ C19th
1186	Layer	0.12 m	> 1 m	> 1m	Buried soil horizon	Stone	C18th/ C19th
1187	Layer	0.22 m	> 1 m	> 1m	Made ground	Stone	C19th
1188	Layer	> 0.1 m	> 1 m	> 1m	Buried soil horizon	Stone	C18th/ C19th
1189	Layer	0.4 m	> 1 m	> 1 m	Made ground	Brick, stone	C19th
1190	Layer	0.48 m	> 1 m	> 1m	Buried soil horizon	Stone	C18th/ C19th
1191	Layer	0.14 m	> 1 m	> 1m	Made ground	Stone	C19th
1192	Layer	0.2 m	-	-	Made ground	Brick	C19th
1193	Layer	> 0.4 m	-	-	Organic river deposits	-	-
1194	Layer	0.3 m	-	-	Piling platform	Brick, plastic	C21st
1195	Layer	0.3 m	-	-	Buried soil horizon	Brick, glass	C19th/ C20th
1196	Layer	0.25 m	-	-	Possible flood deposits	-	-
1197	Layer	0.2 m	-	-	Continuation of layer 1192	Brick	C19th
1198	Layer	0.45 m	-	-	Continuation of layer 1193	-	-
1199	Cut	0.35 m	0.5 m	> 8 m	Construction cut for foundations of 1830s cottages	-	C19th
1200	Structure	0.35 m	0.5 m	> 8 m	Foundations/footings for 1830s cottages	-	C19th
1201	Layer	0.15 m	-	-	Modern leveling layer	Brick	C20th
1202	Cut	0.7 m	0.8 m	> 6 m	Construction cut for demolished south frontage of main building	-	C19th



1203	Layer	0.3 m	-	-	Made ground	Brick	C19th
1204	Structure	0.7 m	0.7 m	> 6 m	Continuation of structure 1132	Brick	C19th
1205	Layer	0.3 m	-	-	Original yard surface	Brick	C20th
1206	Layer	> 0.3 m	-	-	Probable flood deposits	-	-
1207	Layer	0.18 m	-	-	Mixed soil and alluvium	-	-
1208	Layer	0.25 m	-	-	Made ground	-	-
1209	Structure	> 0.35 m	0.6 m	. 1 m	Probable robbed out base of abbey boundary wall	-	-
1210	Layer	> 0.35 m	-	-	Flood deposits	-	-
1211	Layer	0.25 m	-	-	Modern hardcore base for concrete surface	Brick	C20th
1212	Layer	0.3 m	-	-	Continuation of layer 1207	-	-
1213	Layer	> 0.2 m	-	-	Flood deposits	-	-
1214	Surface	0.25 m	4 m	> 4 m	Stone floor of mill race channel	-	-
1215	Layer	0.35 m	4 m	> 4 m	Hardcore base, leveling layer for surface 1214	-	-
1216	Layer	0.18 m	-	-	Probable flood deposits	-	-
1217	Layer	0.2 m	-	-	Probable flood deposits	-	-
1218	Layer	> 0.3 m	-	-	Probable flood deposits	-	-
1219	Layer	0.15 m	-	-	Piling mat	Brick	C21st
1220	Structure	1.5 m	0.6 m	> 3 m	Continuation of structures 1120 and 1204	Brick	C19th
1221	Layer	> 0.2 m	-	-	Probable flood deposits	-	-
1222	Surface	0.12 m	-	-	Weak tarmac surface	-	C20th
1223	Layer	0.25 m	-	-	Hardcore base for 1223	Brick	C20th
1224	Layer	> 0.3 m	-	-	Made ground	Brick, tarmac	C20th
1225	Surface	0.1 m	-	-	Thin tarmac surface	-	C20th
1226	Surface	0.1 m	-	-	Weak tarmac surface	-	C20th
1227	Layer	0.7 m	-	-	Made ground/ dumping	Brick	C20th
1228	Layer	0.3 m	-	-	Buried soil horizon	-	-
1229	Layer	> 0.3 m	-	-	Probable flood deposits	-	-
1230	Surface	0.25 m	-	-	Roadway/ yard surface associated with old flour mill	Brick	C19th/ C20th
1231	Cut	1 m	0.4 m	> 2 m	Foundation trench	-	C19th
1232	Structure	1 m	0.4 m	> 2 m	Post-med extension of north face of standing abbey building	Brick	C19th
1233	Surface	0.1 m	-	-	Tarmac yard surface	-	C20th
1234	Layer	0.25 m	-	-	Hardcore base for 1233	Brick	C20th
1235	Layer	0.4 m	-	-	Made ground	Stone	-



1236	Layer	0.5 m	-	-	Probable flood deposits	-	-
1237	Layer	0.8 m	-	-	Probable flood deposits	-	-
1238	Layer	0.85 m	-	-	Organic peat-like deposit	Shell	-
1239	Layer	> 0.8 m	-	-	Natural clay	-	-
1240	Surface	0.2 m	-	-	Tarmac yard surface	-	C20th
1241	Layer	0.25 m	-	-	Crushed stone hardcore base under 1240	Brick	C20th
1242	Layer	0.15 m	-	-	Tipline of made ground	Brick	C20th
1243	Layer	0.35 m	-	-	Made ground	-	-
1244	Layer	0.5 m	-	-	Made ground	-	-
1245	Layer	0.85 m	-	-	Organic peat-like deposit mixed with large quantities of blocky stone rubble	Shell	-
1246	Layer	> 0.2 m	-	-	Natural clay	-	-
1247	Layer	0.15 m	-	-	Tipline of made ground	Brick	C20th
1248	Layer	0.25 m	-	-	Modern silting within the millrace channel	Brick, glass, iron	C19th/ C20th
1249	Structure	> 0.4 m	0.5 m	> 5m	Robbed out remains of south wall of abbey range	Stone	C14th
2000	Layer	0.44 m	> 1 m	> 1 m	Modern made ground	Brick, stone	C20th
2001	Layer	0.22 m	> 1 m	> 1 m	Modern made ground/ leveling layer	Brick, stone, coal	C19th/ C20th
2002	Layer	0.7 m	> 1 m	> 1 m	Made ground/ leveling layer	Stone	C19th
2003	Wall	0.4 m	0.9 m	0.6 m	SE–NW running wall. Possible sleeper wall	Brick	C19th
2004	Structure	1.1 m	1.7 m	1.8 m	Hollow brick built machine mount	Brick	C19th
2005	Layer	0.74 m	> 1 m	> 1 m	Made ground, redeposited natural	Stone	-
2006	Structure	> 0.4 m	0.2 m	0.2 m	Square wooden upright/ pile	Wood	-
2007	Layer	> 0.1 m	> 1 m	> 1 m	Natural clay	-	-
2008	Layer	> 0.9 m	> 1 m	> 1 m	Made ground/ leveling layer	-	-
2009	Wall	0.4 m	1 m	0.6 m	Machine/engine mount	Brick	C19th
2010	Layer	0.66 m	> 1 m	> 1 m	Organic silt deposit mixed with large quantities of blocky stone rubble	Shell	-
2011	Layer	> 0.1 m	> 1 m	> 1 m	Natural clay	-	-
2012	Layer	0.52 m	> 1 m	> 1 m	Modern made ground	Brick	C20th
2013	Layer	0.28 m	> 1 m	> 1 m	Made ground/ leveling layer	Brick,	C19th/



						stone	C20th
2014	Layer	0.4 m	> 1 m	> 1 m	Made ground/ leveling layer	Brick	C19th/ C20th
2015	Surface	0.12 m	> 1 m	> 1 m	Crushed stone surface	-	-
2016	Fill	0.5 m	0.5 m	0.98 m	Backfill of Cut 2021	Brick	C19th/ C20th
2017	Structure	1 m	0.9 m	> 2 m	SW-NE running wall, continuation of Wall 1132, parallel to 1120	Brick	C19th
2018	Fill	0.4 m	0.4 m	0.98 m	Backfill of Cut 2021	Brick	C19th/ C20th
2019	Layer	0.3 m	> 1 m	> 1 m	Made ground/ leveling layer	Stone, coal	C19th/ C20th
2020	Layer	0.26 m	> 1 m	> 1 m	Possible alluvium ? Buried soil horizon ?	-	-
2021	Cut	1.02 m	1.14 m	> 1 m	Construction cut for wall 2017	-	C19th
2022	Layer	1 m	-	-	Probable flood deposits	-	-
2023	Layer	> 0.1 m	> 1 m	> 1 m	Natural clay	-	-
Osney Abbey Building- Watching brief							
3000	Layer	0.07- 0.16	6.2	7.2	Loose, mid orangey brown silt with organic content, timber shards and dust	-	C19th -20th
3001	Structure	0.08	0.35	0.45	Possible brick post setting		C19th - late
3002	Layer	0.06- 0.09	0.33	0.83	N-S Linear band of grey sandy silt		C19th - late
3003	Layer	>0.06	1.3	c.2	Intermittent layer, pale greyish brown, silty sand		C19th
3004	Layer	0.01- >0.06	1.4	c.3	Layer, pale yellowish brown, silty sand		C19th
3005	Layer	unexc	1.3	c.2	Intermittent layer, pale buff to mid brown, silt		C19th
3006	Structure	>0.05	0.1	5.55	Wooden sill beam, E-W, overlying wall 3009	-	C19th - late
3007	Structure	0.08	0.1	5.55	Wooden sill beam, E-W, overlying wall 3010	-	C19th - late
3008	Structure	0.09	0.1	5.55	Wooden sill beam, E-W, overlying wall 3011	-	C19th - late
3009	Structure	>0.1	0.23	5.4	E-W brick dwarf wall supporting beam 3006	-	C19th - late
3010	Structure	>0.1	0.23	5.4	E-W brick dwarf wall supporting beam 3007	-	C19th - late
3011	Structure	>0.1	0.23	5.4	E-W brick dwarf wall supporting beam 3008	-	C19th - late

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APPENDIX C. ASSESSMENT OF THE CLAY TOBACCO PIPES

by John Cotter

Introduction and methodology

- C.1.1 Eight pieces of clay pipe weighing 23g were recovered from four contexts. These have been catalogued and spot-dated in a similar way to the pottery (see below) although in slightly more detail (see spreadsheet). Bowl shapes have been compared to those published from St Ebbe's, Oxford (Oswald 1984). The assemblage is in a fragmentary but fairly fresh condition. There is a single residual 17th-century stem fragment from context 3004. The rest of the assemblage is of broadly 19th-century date including three damaged bowl fragments from context 3000. One of the latter has an illegible maker's mark on the spur and another has a small moulded rosette on the spur. Further details are recorded in the spot-dates catalogue. No further work on the assemblage is recommended.

Table of Clay Pipe Assessment

Context	Spot-date	Stem	Bowl	Mouth	Total sherds	Total weight	Comments
3000	C19th	1	3	0	4	12g	" 1st Area, 2nd Spit" 2-3 separate pipes - all 19C - incl 1x spurred type with illeg maker's mark: 'A' forename & 'J or T or I' for surname. 1 other damaged bowl with damaged spur with small rosette or star stamp. Incl 2 rim frags/near-profiles. All slightly weathered
3000	C19th	2	0	0	2	5g	" 3rd Area, 2nd Spit" Fresh stems with stem bores (SBs) c 1mm
3003	C19th	1	0	0	1	2g	Fresh stem. Stem bore c 1.5mm
3004	C17th	1	0	0	1	4g	Stem bore c 3mm. Fairly fresh
Total		5	3	0	8	23g	

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APPENDIX D. ASSESSMENT OF THE POTTERY FROM OSNEY ABBEY, OXFORD

by John Cotter

- D.1.1 A total of 29 sherds of pottery weighing 239g were recovered from seven contexts including context 3000 which the excavator had divided into five separate areas. This is all of late post-medieval or modern date. All the pottery was examined and spot-dated during the present assessment stage. For each context the total pottery sherd count and weight were recorded on an Excel spreadsheet, followed by the context spot-date which is the date-bracket during which the latest pottery types in the context are estimated to have been produced or were in general circulation. Comments on the presence of datable types were also recorded, usually with mention of vessel form (jugs, bowls etc.) and any other attributes worthy of note (eg decoration etc.).
- D.1.2 All the contexts here are dated after c 1790 by the presence of mass-produced Staffordshire-type tablewares and most are dated to the 19th century by blue transfer-printed whitewares, or early 19th-century Creamware, Pearlware and Yellow ware - all from Staffordshire or Midlands potteries. Probably the earliest piece in the assemblage is a rim sherd from an 18th-century Chinese porcelain teabowl and a couple of pieces of brown salt-glazed stoneware of similar date. A piece of a modern white plastic dish in context 3000 probably dates after c 1940 (see also CBM below). The pottery types present are domestic in character and fairly unremarkable for Oxford. No further work is recommended. Further details are recorded in the spot-dates spreadsheet.

Table of Pottery Assessment

Context	Spot-date	No.	Weight	Comments
3000	c 1940+	3	10	"1st Area, 2nd Spit" 1x piece of hard white plastic dish/bowl base c1940+? 2x 19C+ pot bss incl refined white earthenware (REFW) & Yellow ware (YELL)
3000	c 1810-1830+	3	11	"2nd Area, 2nd Spit" Base frag blue transfer-printed Pearlware dish (TPW) with Chinese dec. Bss REFW & YELL
3000	c 1810-1830+	12	109	"3rd Area, 2nd Spit" Rim blue transfer-printed Pearlware dish (TPW) with Chinese dec. Fresh joining rims Creamware cup/dish with engine-turned ovolo dec on rim & green glaze edging with polychrome slip bands on body. Rim blue feather-edged Pearlware dish. Rim 18C Chinese porcelain teabowl with famille rose dec. Bss YELL & bs L18/E19C brown salt-glazed stoneware
3000	c 1840-1900	2	27	"4th Area" Rim TPW 'Flow Blue' teacup. Bs Pearlware
3000	c 1825-1900	5	66	"Top Spit All Areas" Blue TPW teacup rim & handle, CREA, banded CREA, PMR jar rim 18/19C, Bs 18C English brown stoneware



3003	c 1790-1830	3	11	All Creamware incl dish rim & slip-banded ?cup bs with mocha decoration
3004	c 1825-1880?	1	5	Rim TPW cup/bowl prob 1st half 19C?
TOTAL		29	239	

APPENDIX E. ASSESSMENT OF THE GLASS FROM OSNEY ABBEY WATCHING BRIEF

By Ian Scott

- E.1.1 The glass comprises 8 sherds from 3 contexts.
- E.1.2 Context 3000 - produced 5 sherds of glass. Two sherds in light blue-green metal came from the thickened bases of two large vessels. The larger more complete sherd has a very marked thickening at its centre and an applied blob of glass on the underside with a scar from a break. This applied glass seems to be the topmost moulding of a now missing stem, and is possibly from a tazza, or more probably from a stemmed bowl. The identification is far from certain since so little of the vessel survives. The second sherd is thicker and has a slight trace of a circular scar, but the form of the vessel is uncertain. The remaining 3 sherds comprise 2 body sherds from two thick-walled 18th-century wine bottles in olive green metal. The sherds are too small to be closely dated. Finally there is a piece of very regular glass tube (D: 16mm) in colourless glass with a green tint. The latter looks suspiciously regular and modern.
- E.1.3 Context 3003 – there is a single large sherd comprising the base of a tall cylindrical free blown wine bottle with a low domed kick or push-up. The metal is dark olive in colour. Probably mid 18th- or early 19th-century in date.
- E.1.4 Context 3004 – Two small sherds were recovered. One is a thin colourless sherd of possible window glass, somewhat weathered. The second sherd is a small thin body sherd in olive green metal possibly from a modern wine bottle. The possible window glass could be post-medieval or modern in date.

APPENDIX F. ASSESSMENT OF THE ANIMAL BONES FROM OSNEY ABBEY WATCHING BRIEF

By Lena Strid

- F.1.1 A total of 216 animal bones were recovered from 19th-20th century layers from this site. The layers may have been used as levelling prior to floor building. The bones were in good condition, and only 15 displayed gnaw marks from dogs and rats, suggesting a rapid and secure disposal. No bones were burnt.
- F.1.2 Sheep/goat forms the majority of the assemblage, followed by cattle and pig (Table 1). The epiphyseal fusion data indicate that sheep/goat bones derived mainly from sub-adult and adult animals whereas the pig bones were mostly juvenile or sub-adult. One third of the cattle bones came from calves. Judging by bone surface structure, the remaining part of the cattle assemblage were sub-adult or adult.
- F.1.3 A total of 69 bones from cattle, sheep/goat, pig, medium and large mammals showed evidence of butchery. These mainly indicated portioning of ribs, long bones and scapulae, as well as sagittal splitting of the carcass and sawing of the pelvis (ilium) to remove the hind leg.
- F.1.4 A single sheep/goat pelvis (context 3000) displayed a non-aligning fracture across the ischium and pubis.
- F.1.5 No further information can be gained from such a small sample of bones.



APPENDIX G. ASSESSMENT OF THE CERAMIC BUILDING MATERIAL

by John Cotter

- G.1.1 The retained CBM assemblage comprises three pieces weighing 233g from two contexts. These have not been separately catalogued but are described here. Context 3000 (top spit, all areas) produced a piece of red (or burnt?) corrugated asbestos roofing dating after c 1920, and a piece of orange roof tile which may also be modern (total weight 103g). Context 3004 produced a piece from the corner of a light orange brick (68mm thick) of regular appearance and probably of 19th-century date (weight 130g).
- G.1.2 No further work is recommended.

APPENDIX H. OTHER FINDS

The Coal by Geraldine Crann

Context	Description	Date
3000	A single piece of coal, 18g	

Recommendations

- H.1.1 The assemblage is generally of low potential and requires no further work, having been recorded the coal may be discarded.

The Stone, Identified by Ruth Shaffrey

Context	Description	Date
3000	A single quartz pebble, 68g	

Recommendations

- H.1.2 The assemblage is of low potential and requires no further work, having been recorded the stone may be discarded.

The Flint by Geraldine Crann

Context	Description	Date
3000	A single flint flake fragment with pronounced overshoot termination. Invasively retouched around distal end, semi-abrupt retouch around entire distal margin. Some usewear, 12g.	

Discussion

- H.1.3 The flint is an irregular debitage flake which has been retouched, illustrating pragmatic use of knapping waste. Tools such as this are common throughout the prehistoric period, but the size of the flake may indicate a date from the Neolithic or Bronze Age. The small quantity of worked flint precludes interpretation of the material, beyond illustrating human presence in the local area during the later prehistoric period.

Recommendations

- H.1.4 The assemblage requires no further work.

The Shell by Geraldine Crann

Context	Description	Date
3000	A single right valve oyster shell, 5g	

Recommendations

- H.1.5 The assemblage requires no further work.



APPENDIX I. SUMMARY OF SITE DETAILS

Site name:	Osney Mill, Mill Lane, Oxford
Site code:	OXOSAB 11
Grid reference:	Centred at NGR SP 5039 0588
Type of watching brief:	Installation of a new low head water turbine and the construction of 3 new building ranges and redevelopment of 2 existing buildings on the site of Osney Abbey and Osney Mills
Date and duration of project:	January 2011 to January 2012
Area of site:	Approximately 4200 m ²
Summary of results:	Evidence for the 13th century reclamation of the river bank and details of the construction of the medieval and later watermills was observed. Continuations of the abbey range walls and a possible precinct wall were also recorded. Evidence for the post-dissolution use of the site was encountered, including both industrial and agricultural activity, showing that both the mills and the yard were in continuous use until the present day.
Location of archive:	The archive is currently stored at Janus House and will be deposited with the Oxfordshire County Museum Service in due course under the accession number OXCMS:2008.112



Scale 1:25,000

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Figure 1: Site location



Figure 2: Overall site plan

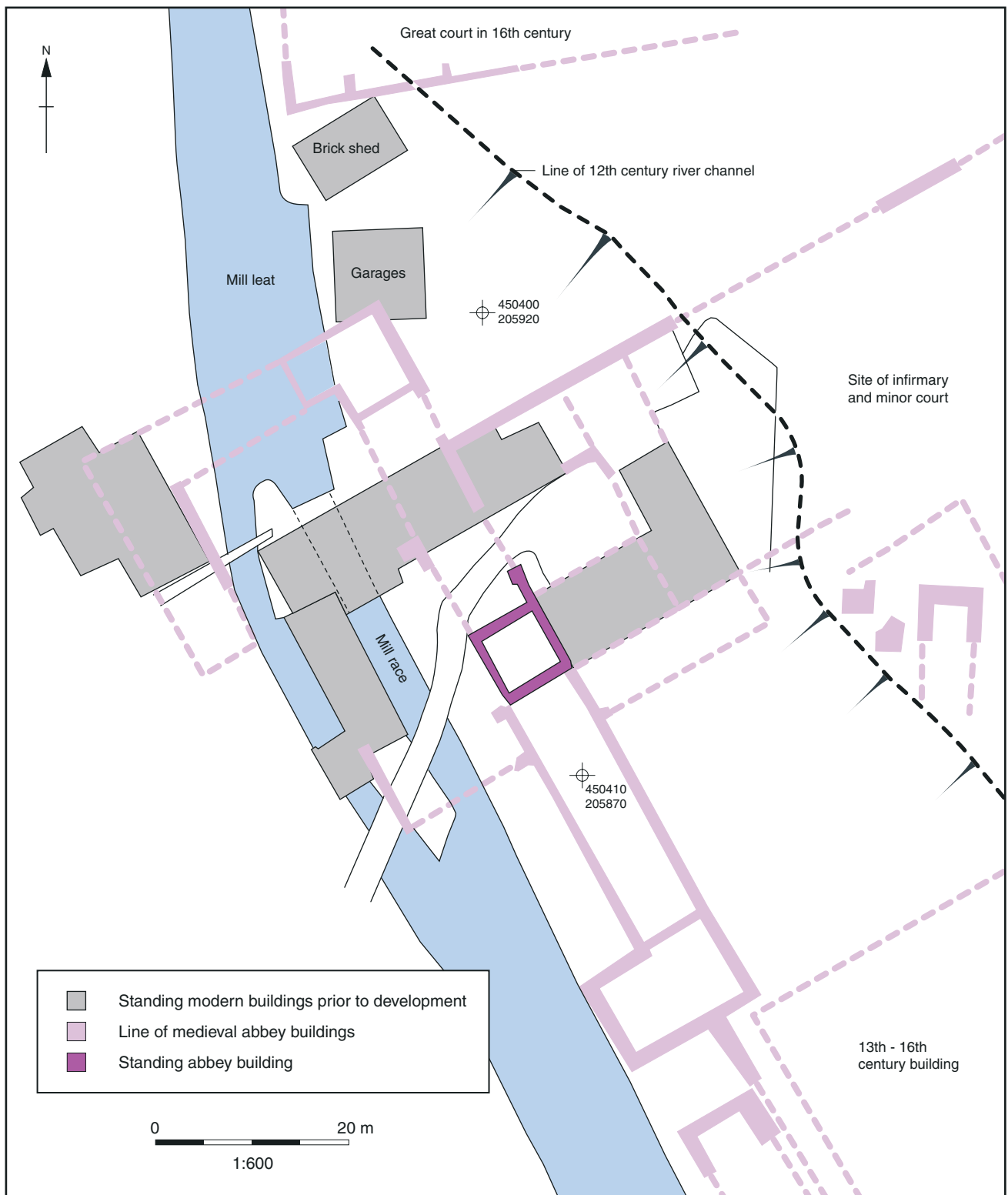


Figure 3: Archaeological features plan

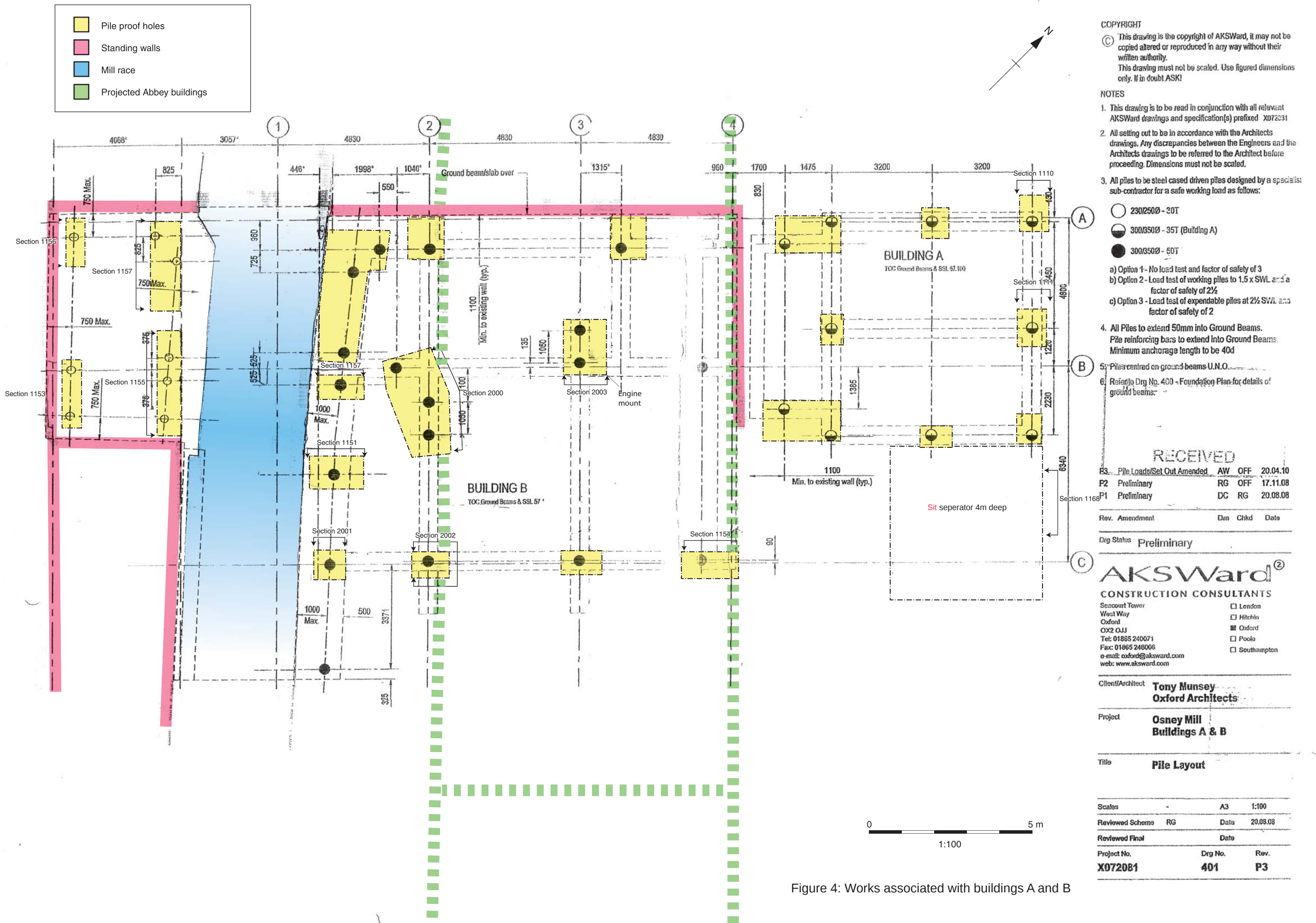
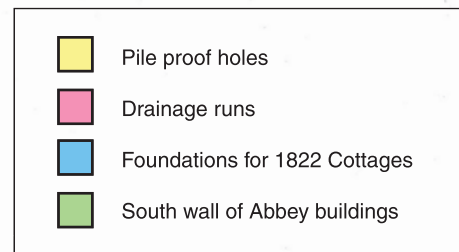
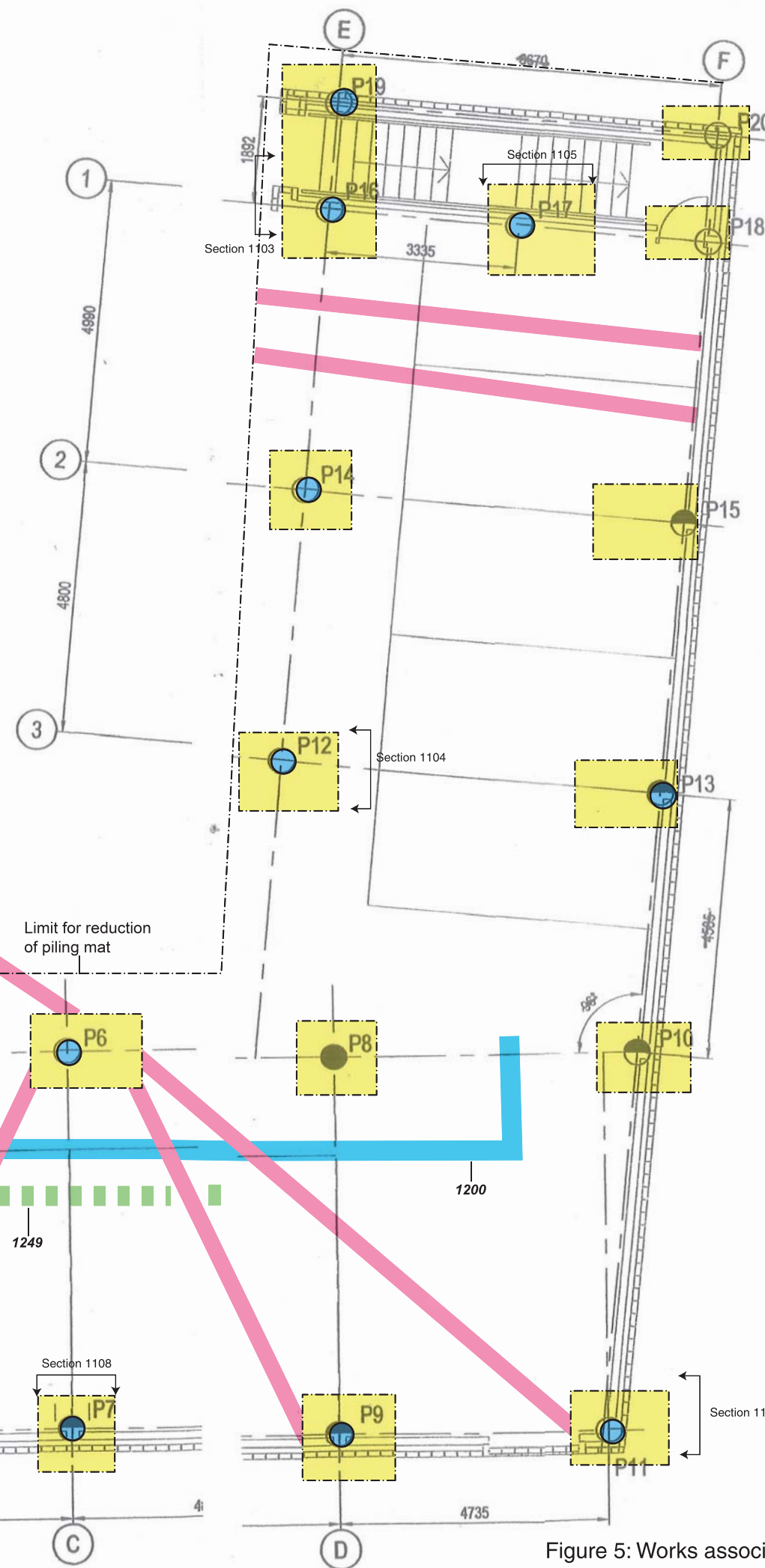
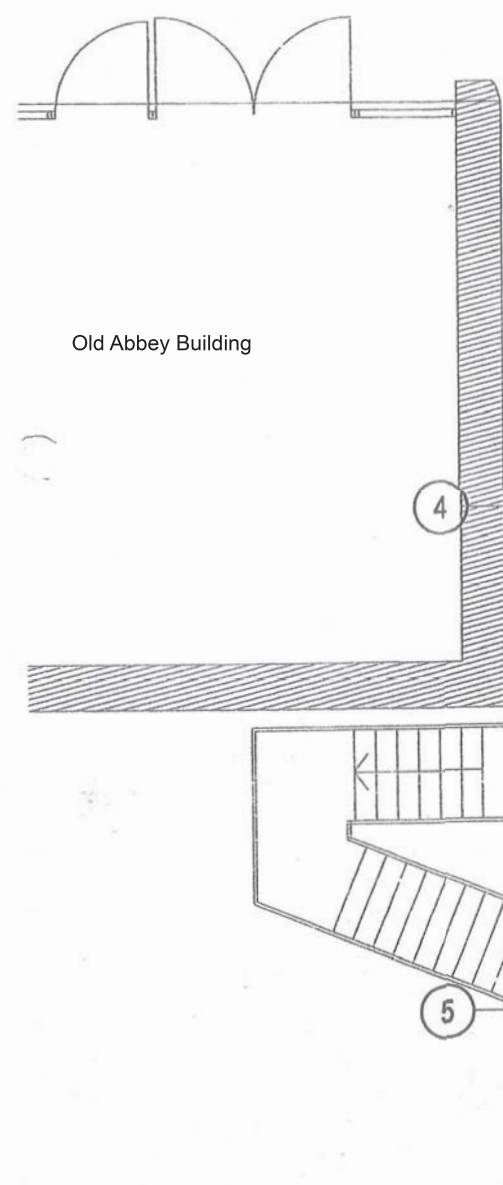


Figure 4: Works associated with buildings A and B



PILING LAYOUT Scale 1:100



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NOTES

- This drawing is to be read in conjunction with all relevant AKSWard drawings and specification(s) prefixed X072081
- All setting out to be in accordance with the Architects drawings. Any discrepancies between the Engineers and the Architects drawings to be referred to the Architect before proceeding. Dimensions must not be scaled.
- Piles to be designed by a specialist sub - contractor for a safe working load as follows:
 ○ 35T ◐ 45T ● 70T
 a) Option 1 - No load test and factor of safety of 3
 b) Option 2 - Load test of working piles to 1.5 x SWL and a factor of safety of 2½
 c) Option 3 - Load test of expendable piles at 2½ SWL and factor of safety of 2
- All Piles to extend 50mm into Ground Beams. Pile reinforcing bars to extend into Ground Beams. Minimum anchorage length to be 40d



A	Construction issue	OFF	OFF	01.07.10
P2	Pile loading amended Bays dims adjusted to suit Architects details	SH		
P1	Preliminary	DH	RG	14.05.08

Rev.	Amendment	Dm	Chkd	Date
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Drg Status Construction

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☐ Poole
☐ Southampton

Client/Architect **Tony Munsey
Oxford Architects**

Project **Osney Mill
Building 'D'**

Title **Piling Layout**

Scales	-	A3	1:100
Reviewed Scheme	CS	Date	14.05.08
Reviewed Final	OFF	Date	01.07.10
Project No.	X072081	Drg No.	101
		Rev.	A

Figure 5: Works associated with Building D

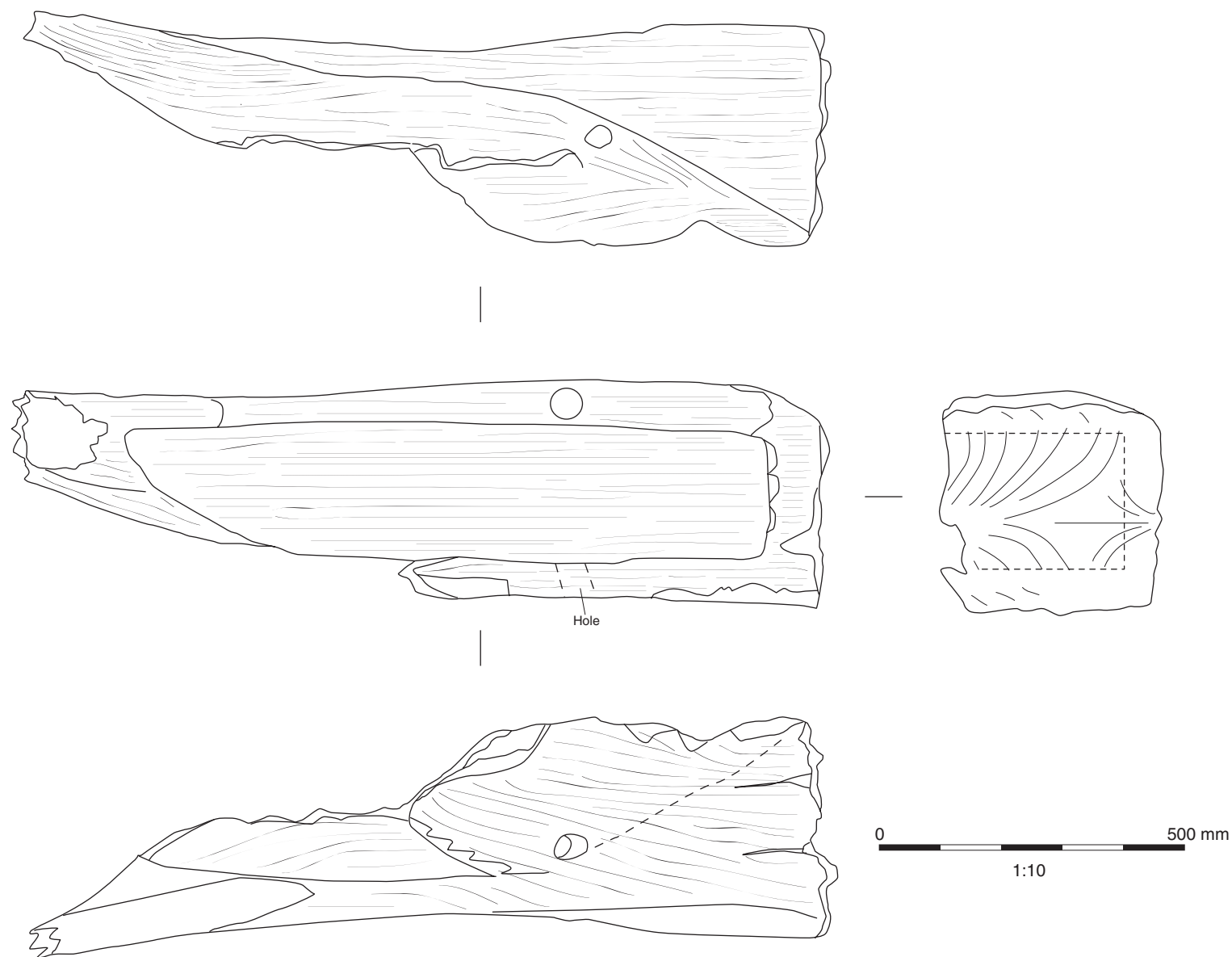


Figure 8: Timber 1100

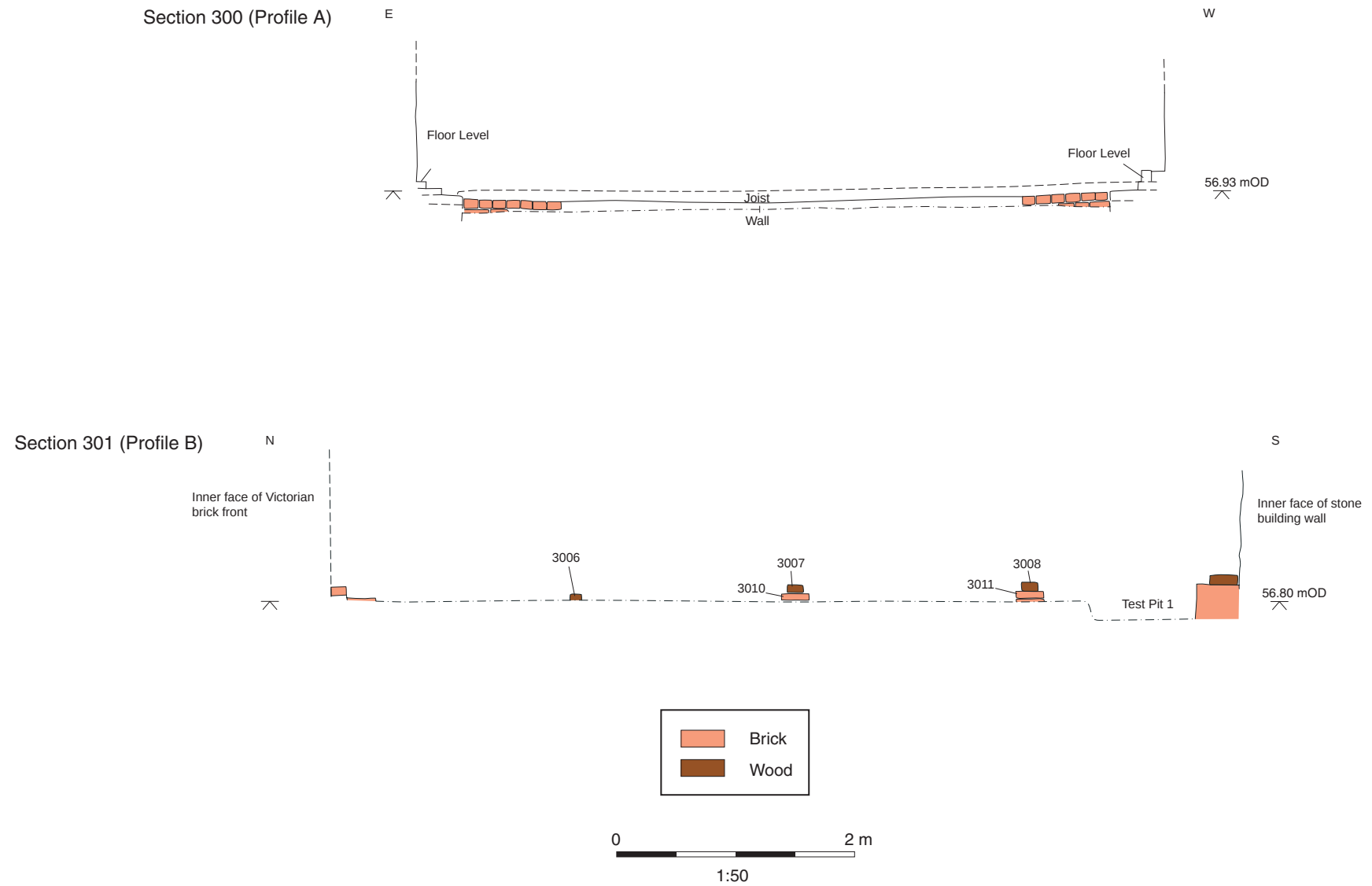
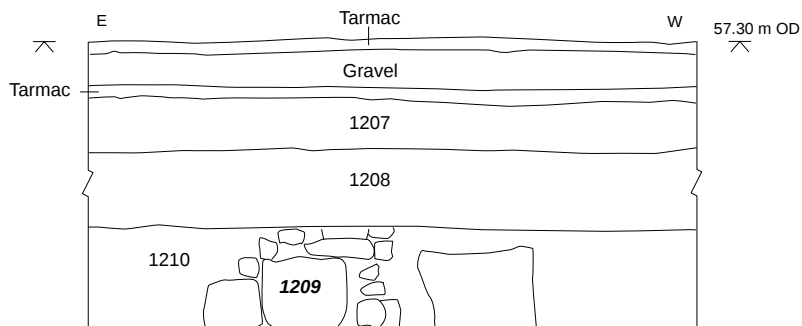
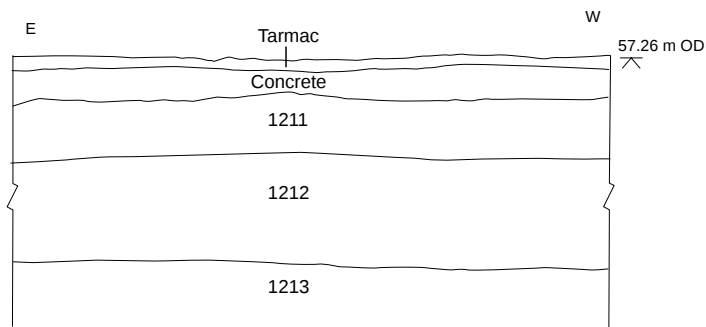


Figure 9: Sections 300 and 301

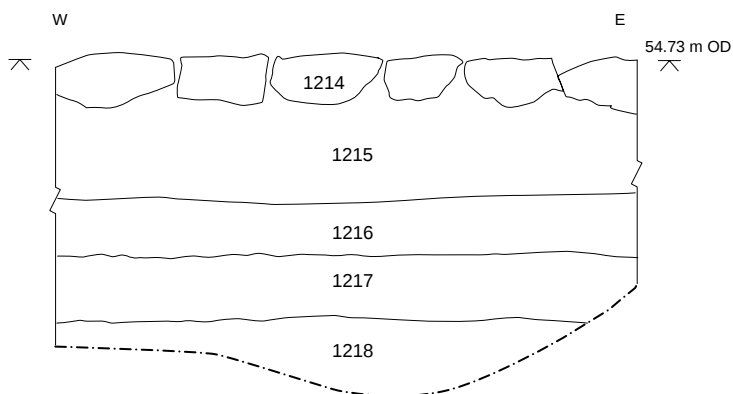
Section 1100



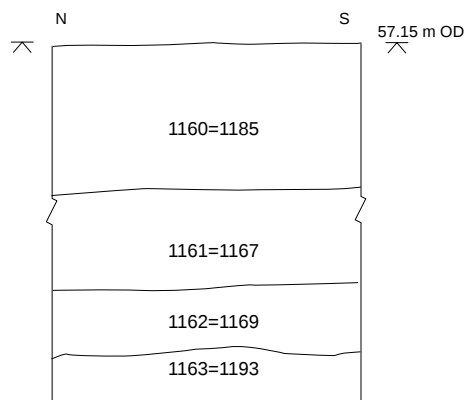
Section 1101



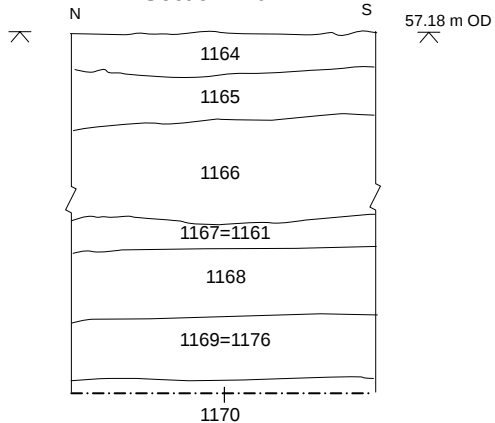
Section 1102



Section 1103



Section 1104



Section 1105

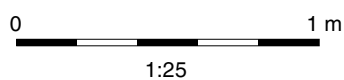
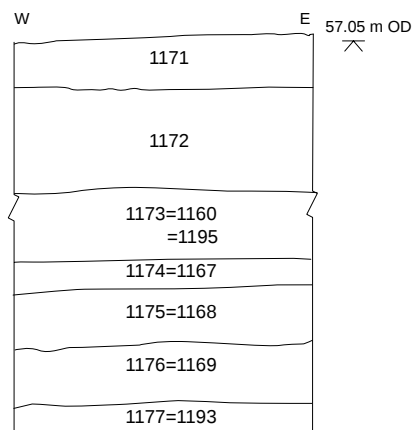


Figure 10: Sections 1100 to 1105

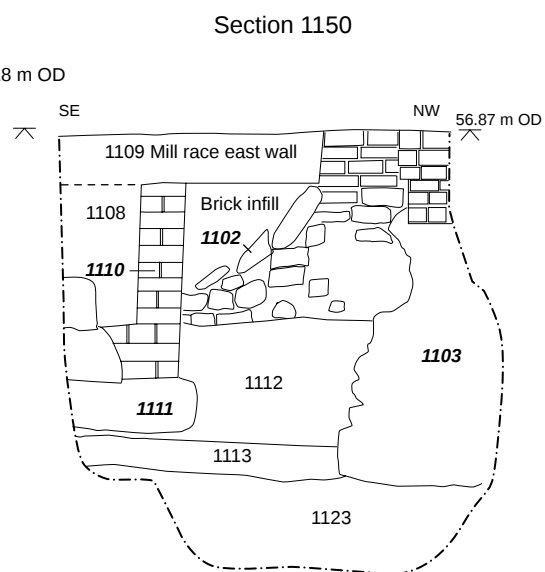
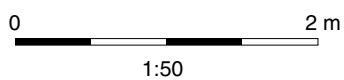
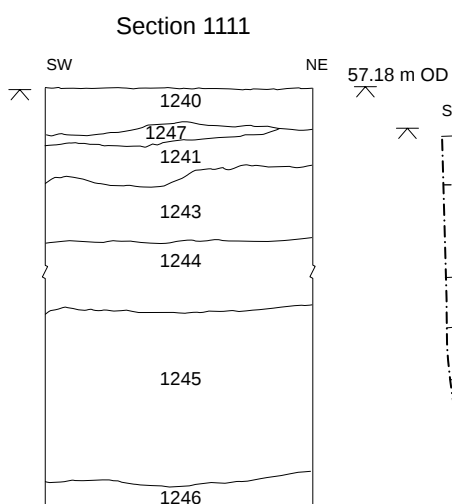
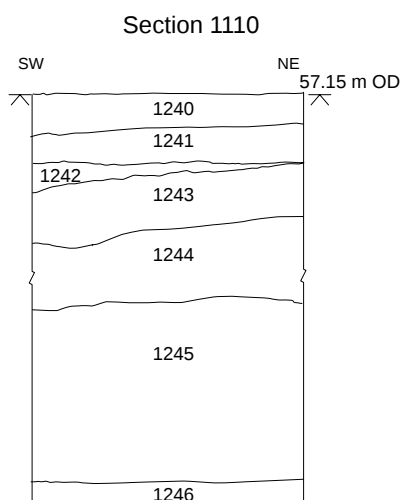
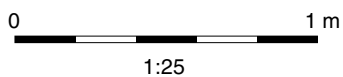
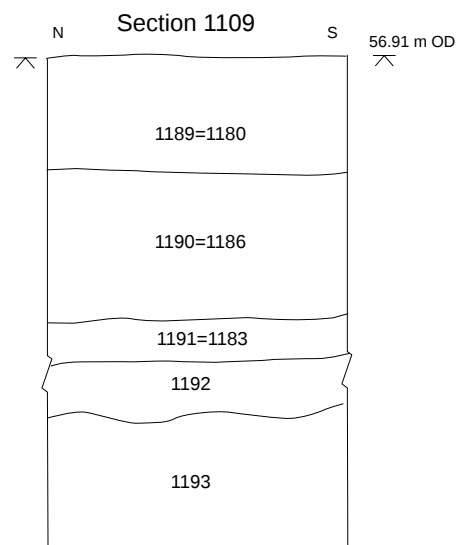
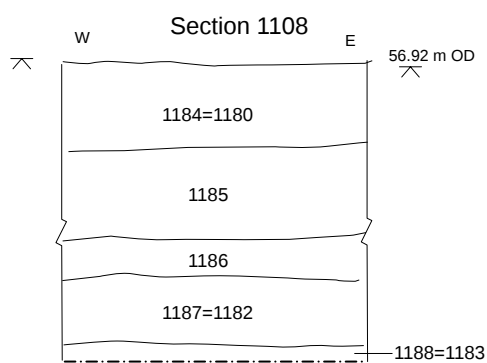
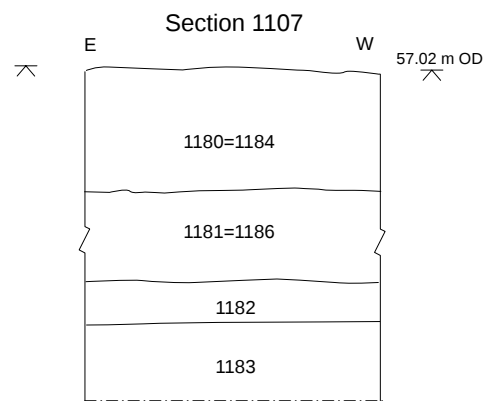
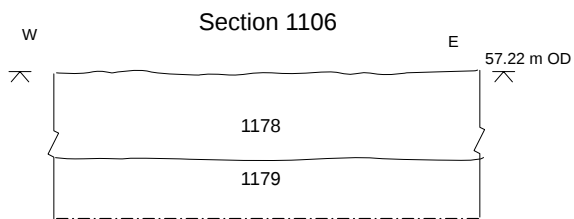


Figure 11 Sections 1106 to 1111 and 1150

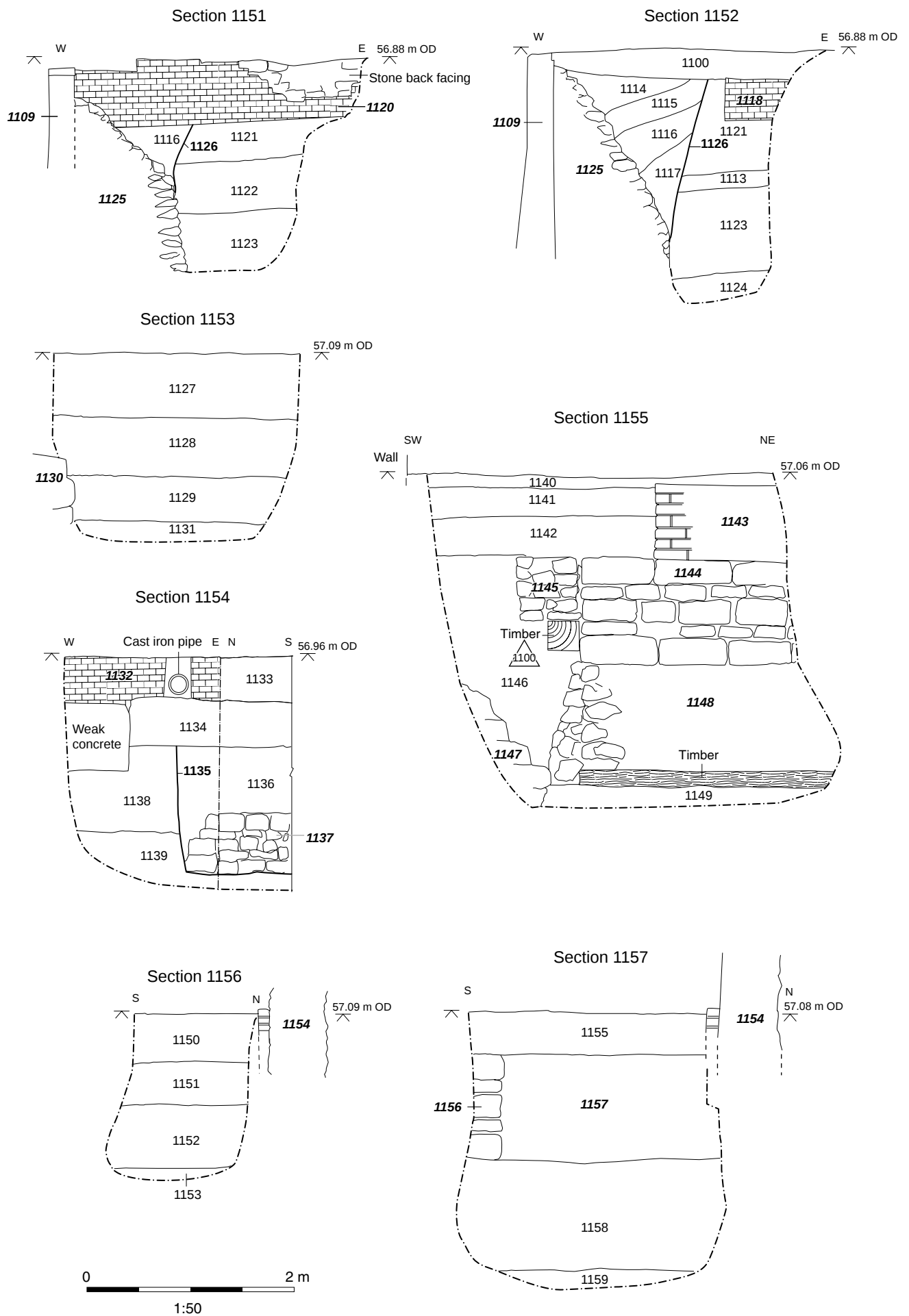


Figure 12: Sections 1151 to 1157

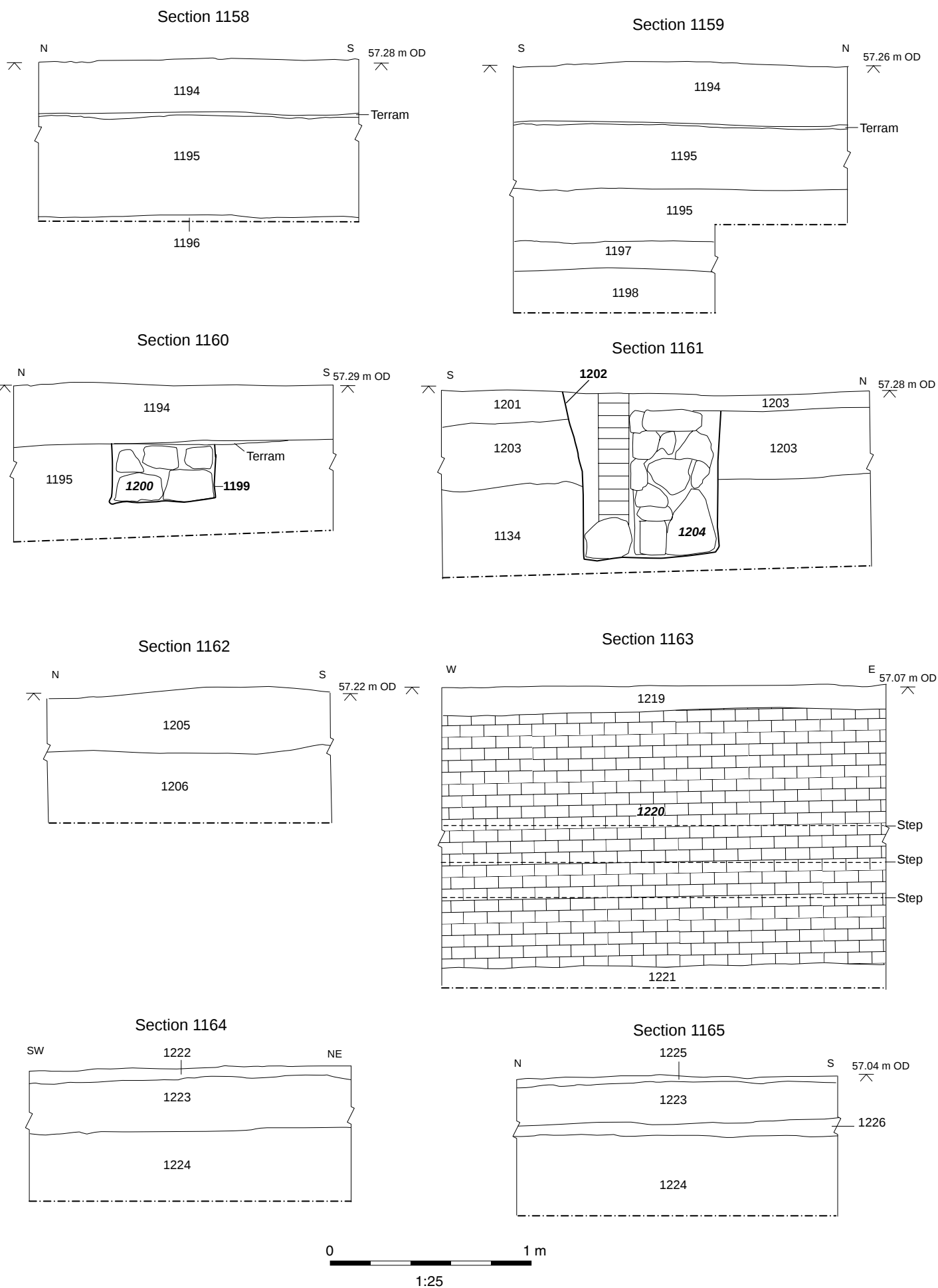


Figure 13: Sections 1158 to 1165

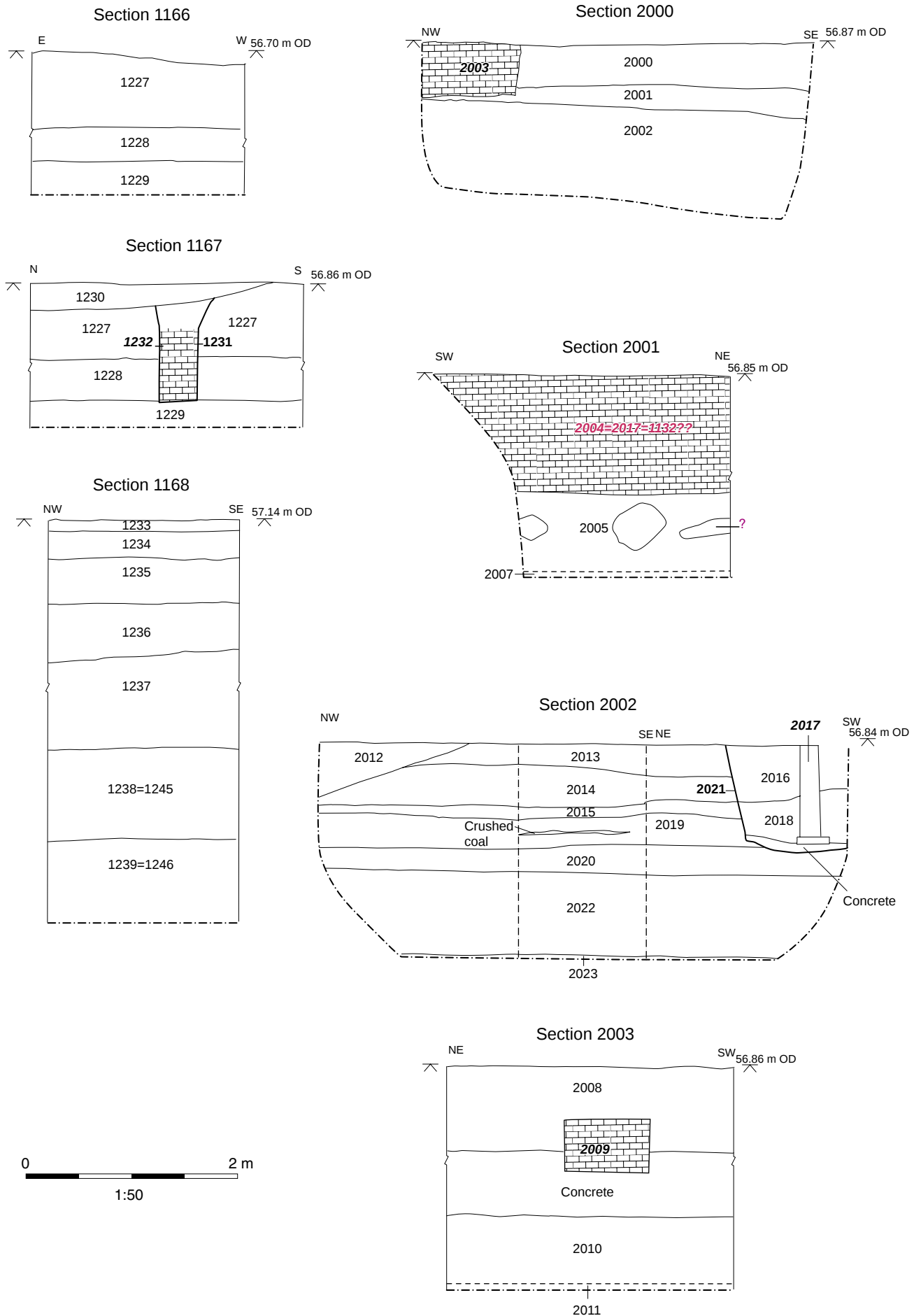


Figure 14: Sections 1166 to 1168 and section 2000 to 2003

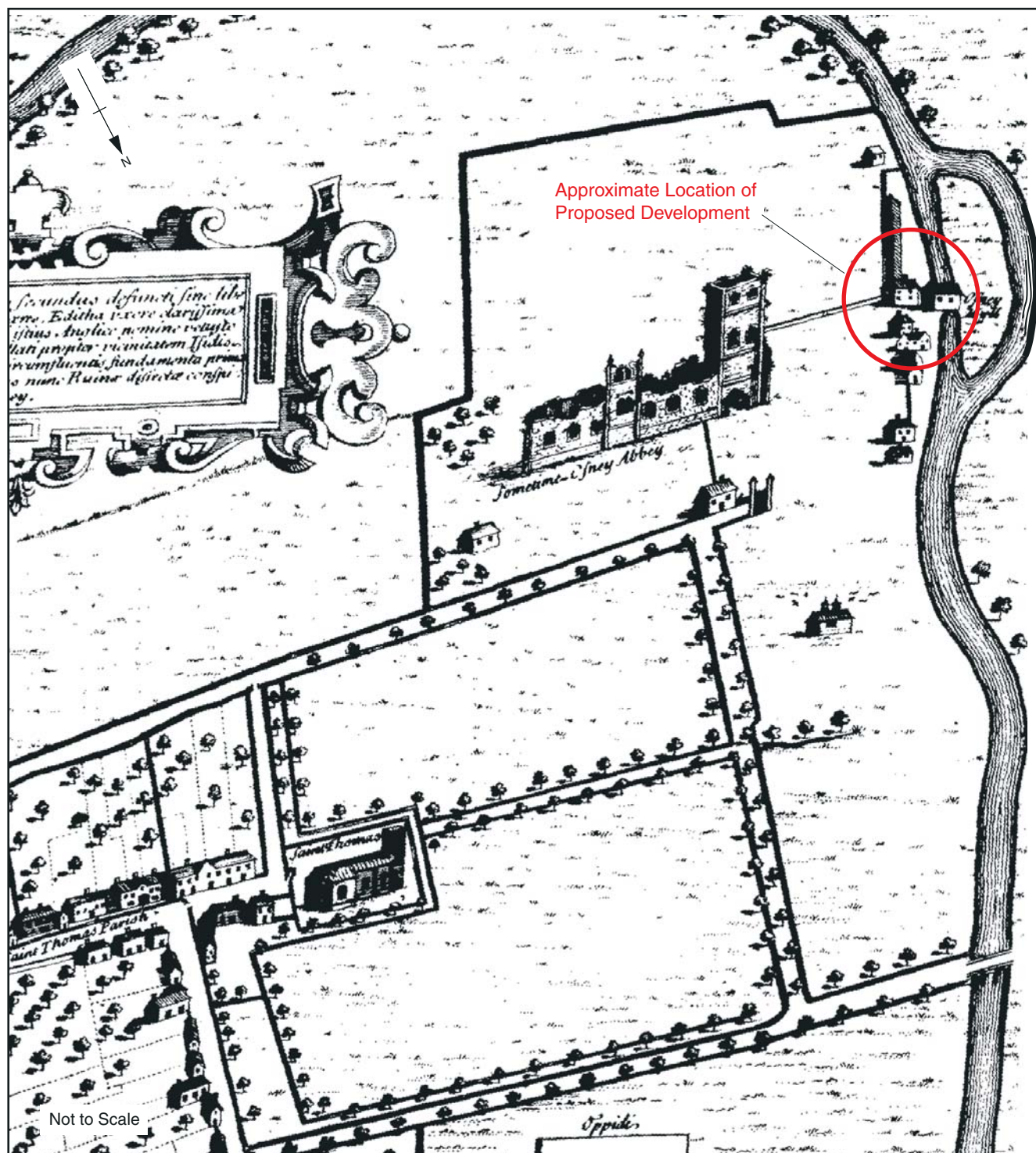


Figure 15: Extract from Agas' Map of Oxford, 1587

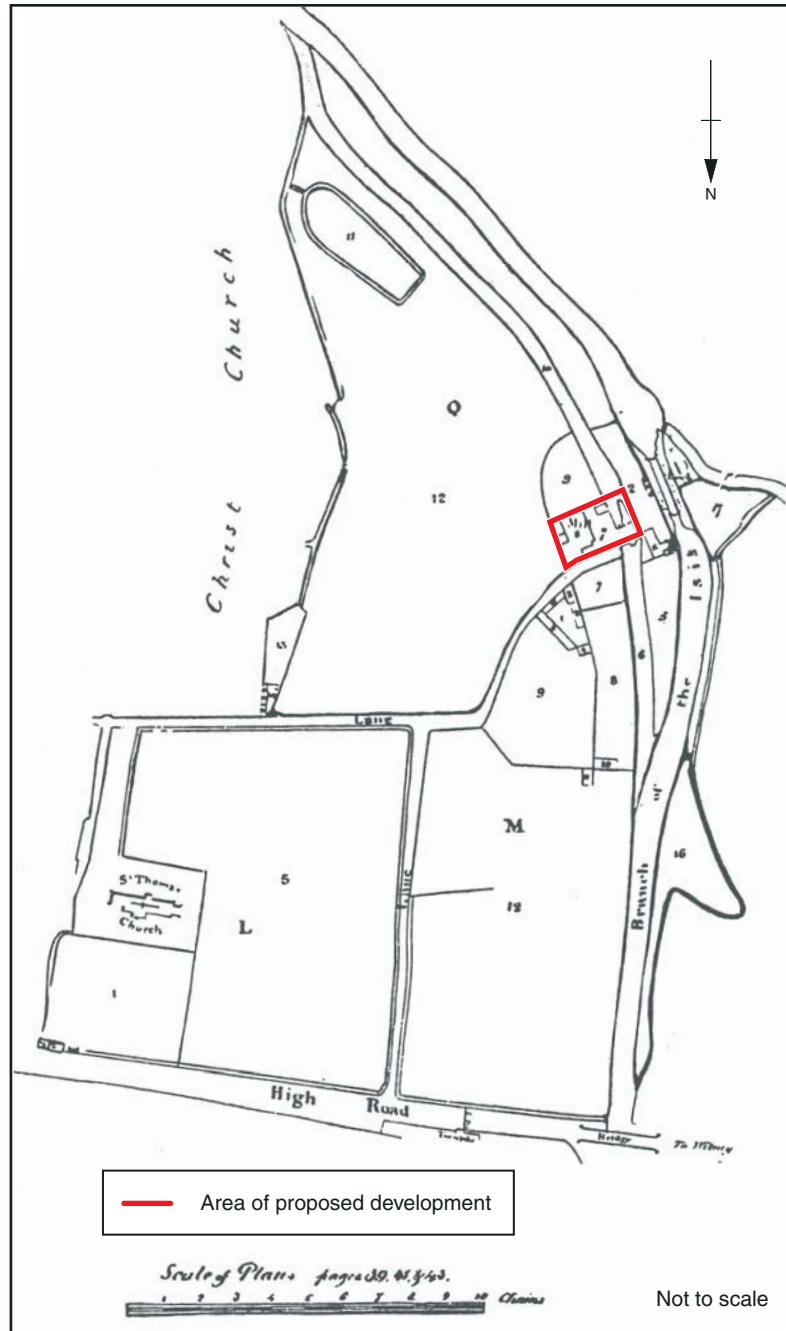


Figure 16: Badcock's survey of Christ Church properties, 1829



Figure 17: Sale plan, 1845 (Courtesy of Christ Church)

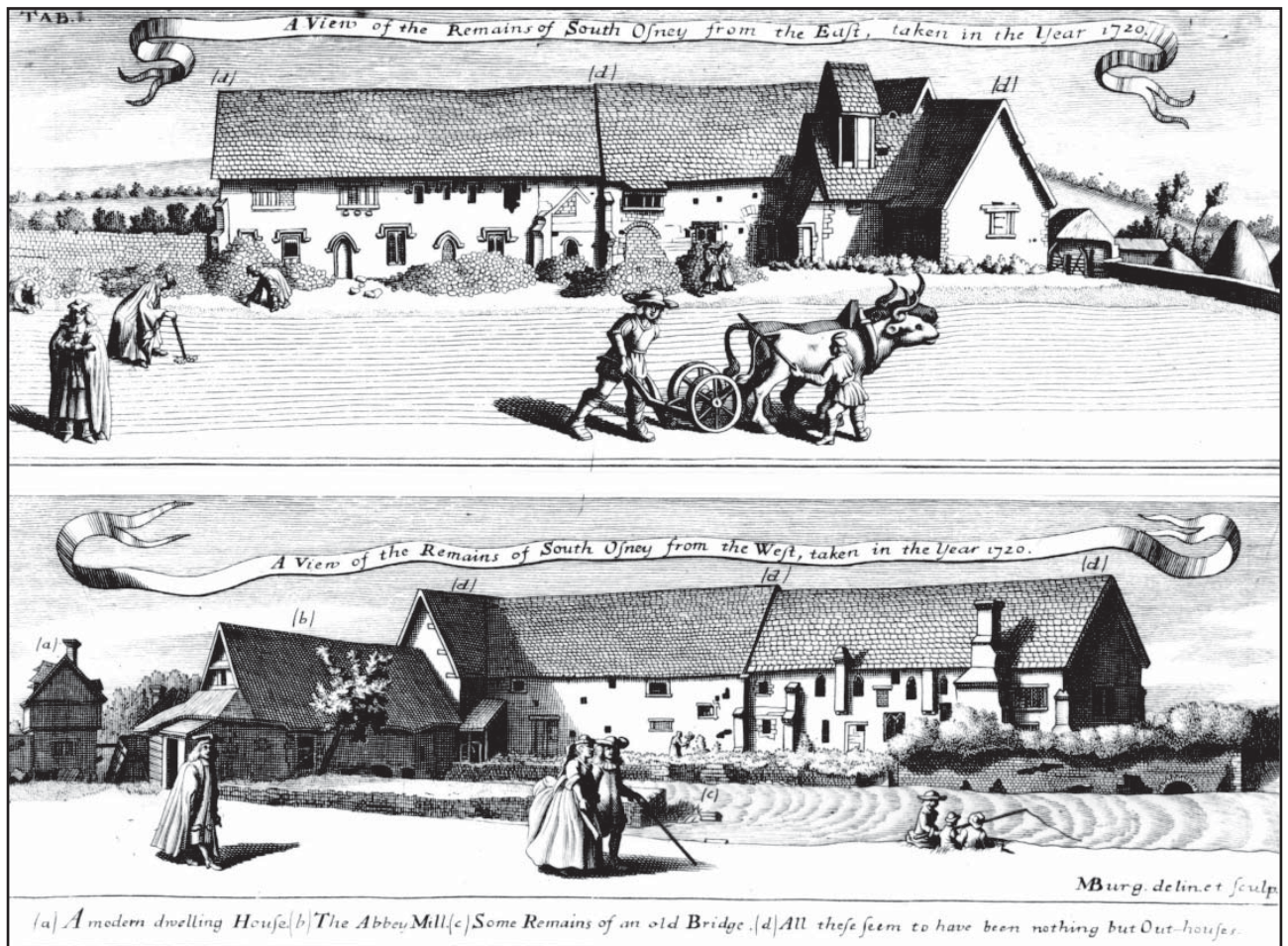


Plate 1: Remains of South Osney; Michael Burghers from Thomas Hearne, *Textus Roffense* (1720)



Plate 2: Osney in c.1780, from Pridden Collection, Bodleian MS Top, Oxon d.281, f.107



Plate 3: Osney in 1777 (later copy drawing), Bodleian Vet. A.5.d.1127, f.302



Plate 4: Osney in 1815, Bodleian MS Top. Oxon c.313, f82



Plate 5: Osney Abbey remains c.1840: Engraving by Delamotte and Orlando Jewett



Plate 6: Osney flour mills letterhead



Plate 7: Gear pit **1110**



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