

**JOHN MOORE HERITAGE SERVICES**

**AN ARCHAEOLOGICAL DESK-BASED ASSESSMENT**

**AT**

**SAID BUSSINESS SCHOOL  
OXFORD**

**SP 5054 0638**

*On behalf of*

*Soil Mechanics*

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## **1 INTRODUCTION**

### **1.1 Origins of the report**

This archaeological desk-based assessment was commissioned by Alan Baxter and Associates LLP on behalf of Oxford University Estates Department acting for Saïd Business School. It has been prepared at the request of the English Heritage in advance of a planning application for works which will impact upon the Scheduled Monument of Rewley Abbey (Mon. No Oxon 80) in the current gardens to the rear of the Saïd Business School, Frideswide's Place, Oxford. The proposed development comprises a new-build, with basement on the western side of the property. The east side of the new-build will extend into the area of the Scheduled Monument, in close proximity to a barn identified in the 1990s, impacting on its western side. Recent work carried out by John Moore Heritage Services confirmed the location of an undated palaeochannel to the immediate west of the putative barn, also within the footprint of the new-build. This Desk-Based Assessment is intended to tie together the results of all previous work in the area of the proposed development.

### **1.2 Planning Guidelines and Policies**

This report has been prepared in accordance with an advice note issued by the Oxford City Archaeologist and Notifications under Circular 01/2001 & GDPO 1995 in a letter dated 6 September by Chris Welch of English Heritage. In format and contents this report conforms to the standards outlined in the Institute of Field Archaeologists' guidance paper for desk-based assessments (IFA September 2001).

#### **1.2.1 Government Planning Policy Guidance**

PPG 16 (DOE 1990) provides Government guidance for the investigation, protection and preservation of archaeological remains affected by development. The document emphasises the importance of archaeology (Section A, Paragraph 6) and states that:

“Archaeological remains should be seen as a finite, and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. Appropriate management is therefore essential to ensure that they survive in good condition. In particular, care must be taken to ensure that archaeological remains are not needlessly or thoughtlessly destroyed. They can contain irreplaceable information about our past and the potential for an increase in future knowledge. They are part of our sense of national identity and are valuable both for their own sake and for their role in education, leisure and tourism.”

PPG 16 additionally stresses the importance of addressing archaeological issues at an early stage in the planning process (Paragraph 12):

“The key to informed and reasonable planning decisions, as emphasized in paragraphs 19 and 20, is for consideration to be given early, before formal planning applications are made, to the question of whether archaeological

Figure 1 site location

remains exist on a site where development is planned and the implications for the development proposal.”

The advice given recommends early consultation between developers and the planning authority to determine “whether the site is known or likely to contain archaeological remains” (Paragraph 19). As an initial stage, such consultations may lead to the developer commissioning an archaeological assessment, defined in the following manner in PPG 16 (Paragraph 20):

“Assessment normally involves desk-based evaluation of existing information: it can make effective use of records of previous discoveries, including any historic maps held by the County archive and local museums and record offices, or of geophysical survey techniques.”

If the desk-based assessment should indicate a high probability of the existence of important archaeological remains within the development area, then further stages of archaeological work are likely to be required. PPG 16 states that in such cases (Paragraph 21):

“...it is reasonable for the planning authority to request the prospective developer to arrange for an archaeological field evaluation to be carried out before any decision on the planning application is taken. This sort of evaluation is quite distinct from full archaeological excavation. It is normally a rapid and inexpensive operation, involving ground survey and small-scale trial trenching, but it should be carried out by a professionally qualified archaeological organisation or archaeologist.”

Additional guidance is provided if the results of an evaluation indicate that significant archaeological deposits survive within a development area. PPG 16 stresses the importance of preservation (Paragraphs 8 and 18):

“Where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation.”

And that:

“The desirability of preserving an ancient monument and its setting is a material consideration in determining planning applications whether that monument is scheduled or unscheduled.”

But acknowledges that (Paragraphs 24 and 25):

“the extent to which remains can or should be preserved will depend upon a number of factors, including the intrinsic importance of the remains. Where it is not feasible to preserve remains, an acceptable alternative may be to arrange prior excavation, during which the archaeological evidence is recorded.”

“Where planning authorities decide that the physical preservation in situ of archaeological remains is not justified in the circumstances of the case and that development resulting in the destruction of the archaeological remains should proceed, it would be entirely reasonable for the planning authority to satisfy itself before granting planning permission, that the developer has made appropriate and satisfactory provision for the excavation and recording of the remains. Such agreements should also provide for the subsequent publication of the results of the excavation.”

This level of work would involve the total excavation and recording of archaeological remains within the development area by a competent archaeological contractor prior to their destruction or damage.

### **1.3 Desk-Based Assessment Aims and Objectives**

The primary aim of the desk-based assessment is to provide a professional appraisal of the archaeological potential of the site. This follows the Government guidance in PPG 16 by presenting a synthetic account of the available archaeological and historic data and its significance at an early stage in the planning process. The report will provide the evidence necessary for informed and reasonable planning decisions concerning the need for further archaeological work. The information will allow for the development of an appropriate strategy to mitigate the effects of development on the archaeology, if this is warranted.

In accordance with PPG 16, the report presents a desk-based evaluation of existing information. It additionally follows the Institute of Field Archaeologists (IFA) *Standard* definition of a desk-based assessment (IFA 2001). In brief, it seeks to identify and assess the known and potential archaeological resource within a specified area (‘the site’), collating existing written and graphic information and taking full account of the likely character, extent, quantity and worth of that resource in a local, regional and national context. It also aims to define and comment on the likely impact of the proposed development scheme on the surviving archaeological resource.

The IFA *Standard* states that the purpose of a desk-based assessment is to inform appropriate responses, which may consist of one or more of the following:

- The formulation of a strategy for further investigation, whether or not intrusive, where the character and value of the resource is not sufficiently defined to permit a mitigation strategy or other response to be devised.
- The formulation of a strategy to ensure the recording, preservation or management of the resource
- The formulation of a project design for further archaeological investigation within a programme of research

In accordance with PPG 16, the desk-based assessment forms the first stage in the planning process as regards archaeology as a material consideration. It is intended to contribute to the formulation of an informed and appropriate mitigation strategy.

## 1.4 Desk-Based Assessment Methodology

The format and contents of this section of the report are an adaptation of the standards outlined in the Institute of Field Archaeologists' guidance paper for desk-based assessments (IFA 2001).

The work has involved the consultation of the available documentary evidence, including records of previous discoveries and historic maps, and has been supplemented with a site walkover. The format of the report is adapted from an Institute of Field Archaeologists *Standard Guidance* paper (IFA 2001).

In summary, the work has involved:

- Identifying the client's objectives
- Identifying the cartographic and documentary sources available for consultation
- Assembling, consulting and examining those sources
- Identifying and collating the results of recent fieldwork

The principal sources consulted in assessing this site were:

- The Oxfordshire County Sites and Monuments Record
- Oxfordshire Studies in the Westgate Centre
- A recent publication on previous investigations carried out at Rewley Abbey (Munby *et al* 2007)

The Oxfordshire Sites and Monuments Record holds details of all known archaeological and historic sites in the vicinity of the site, a collection of aerial photographs and the English Heritage registers and lists. References to published and unpublished sources are also available in the County Sites and Monuments Record. Oxfordshire Studies keep copies of the historic maps, antiquarian sources and documentary records.

The assessment of the likely condition of any potential archaeological remains has relied upon a study of the available historic maps and archaeological reports, which provide evidence for the impact of previous land-use on the site.

## 2 THE SITE

### 2.1 Location (Figure 1)

The site is located on the western side of Oxford and on the north side of Frideswide's Place. To the west is located the current railway station. To the north and east run Rewley Abbey Stream which feeds Castle Mill Stream with the Oxford Canal located just to the east of the Castle Mill Stream. The site is situated in the city and parish of Oxford, centred on National Grid Reference SP 5054 0638. The site comprises the 'wild garden' of Saïd Business School and extends into Scheduled Monument Oxon 80 of Rewley Abbey.

## **2.2 Description (Figure 1)**

The site is currently in use as a garden. The western part of the site, which is largely outside of the area of the Scheduled Monument, is a 'wild garden'; the eastern part of the site, which extends into western edge of the Scheduled Monument is more formal. Some landscaping has been undertaken, primarily to raise the beds for planting.

## **2.3 Topography**

The site of Rewley Abbey is located on the western side of Oxford on Osney Island, about two kilometres upstream of the junction of the rivers Cherwell and Thames. The Thames at this point has a meandering and braided river course between the outcrop of Oxford Clay to the west at Wytham Hill, and, to the east, the spine of Oxford Clay, on which are First, Second and Third Terrace deposits beneath the city of Oxford, itself.

Here the river cuts through alluvial deposits, which had formed around the outcrops of First Terrace gravel of the flood plain. A number of small streams, which historically were less static than they are today, intersect the flood plain. To the immediate north of the site the Rewley Abbey Stream gives into the Castle Mill Stream from the west. The west side of Osney Island is defined by the River Thames, which is fed by the two courses of the Bulstake Stream, itself fed by the Botley Stream, the Hinksey Stream and the Seacourt or Wytham Stream.

The various drains and unnamed streams visible on the 1:25,000 testify to an extremely wet and fluid geography. The historic maps only reinforce this impression; many of those watercourses shown in the past have been buried under made ground. There are no records as to whether these have been canalised as underground drains.

## **2.4 Geology**

The 1:50,000 geological map for Witney (Sheet 236, Geological Survey of Great Britain (England and Wales)) indicates that the site is located on made ground overlying alluvium and First Terrace or Flood Plain gravel Deposits. These drift deposits overlie the Oxford Clay, an argillaceous and marine sedimentary rock of the Jurassic period, c. 161–156 million years ago.

## **3 PROPOSED DEVELOPMENT (Figure 1)**

The Saïd Business School wishes to extend its facilities and construct a Centre for Executive Education in the former garden to the rear of the present building. Currently this land is in use as a 'wild garden'. The proposed development comprises a four-storey extension; one storey of which is anticipated to be a basement. The footprint of the proposed development extends into the area of the scheduled monument; the basement, which does not comprise the whole of the footprint, only extends into the western edge of the scheduled monument area.

## 4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

### 4.1 Known Archaeology on the Proposed Development Site

The area under investigation has been extensively trial-trenched since the 1980s. This work has enabled a moderately detailed picture of the foundation of the abbey and its use until the dissolution to be sketched out.

The site lies to the north of the medieval suburb of St Thomas', the parish church of which is located *c.* 200m to the south of the site. Osney Abbey was also situated on Osney Island to the southwest of Rewley Abbey. Rewley Abbey was connected to the city by 'Highe bridge street' (now Hythe Bridge Street) and High Street St Thomas' (now St Thomas' Street).

The abbey was founded in the early 1280s by the nephew of Henry III, Edmund son of Richard and Earl of Cornwall at the north end of Osney Island. 'Rewley' is a corruption derived from the Latin *regalis loco* ('at the royal place'), which is drawn from Edmund's rank as a royal earl.

Edmund, following his father's death in 1272 petitioned the Cistercians to man a foundation to pray for his father's soul. By 1280, he had augmented his original offer to include a college (*studium*). This was accepted and the monks of Thame provided the first six months for the saying of chantry masses (Munby, 2007:6), although Munby (*ibid.*) suggests that a distinction was set in place from the beginning between the monk scholars and those offering up mass for the soul of the benefactor's father.

Prior to the construction of the abbey the low-lying land – evidenced by flood-deposits in evaluations trenches 1994/19, 1994/27 and 1994/28 – was drained, by the excavation of a number of drains (Simmonds, 2007:11). The western branch of the moat, nearest to the proposed development, is one such drain. These drains are visible on the historic maps. The island on which the abbey was built was then raised; the other islands – do not appear to have been so, and were possibly used as water meadow or as cultivated fields (OAU, 1994:12-13). The proposed development is situated over this area, to the west and on the periphery of the abbey complex.

The degree of land-use predating this drainage and re-organisation of the land-holding is unclear. Certainly, the evaluations carried out over the years have revealed 12<sup>th</sup> and 13<sup>th</sup> century pottery within layers apparently sealed by the made-ground on which the abbey lies; moreover, negative features containing pottery dated from the 11<sup>th</sup>-13<sup>th</sup> century were cut into undated layers outside and west of the abbey precinct (OAU, 1994:12), in the area of the eastern side of the proposed development. The date range may not extend back so early, as some of the material may be residual from manuring material drawn from the city, itself. However, access to the underlying deposits has always been constrained by the trenches and the need to leave standing walls and positive archaeology of the abbey *in situ*. It may well be that several phases of dumping were carried out: the central area of the abbey being earliest, and subsequent infill occurring around the perimeter (Simmonds, 2007:11), although the potentially early date for the occupation layers or cultivation soils in the area of the proposed development may indicate a more complex building up of the land on the site. As

stated above, the dumped material is believed to have its origins as rubbish from the city.

The moat measured between 6m and 8m in breadth; on the north and west sides of the abbey complex the moat was revetted with limestone blocks standing clear of the channel cut – the backfill between wall and cut being 13<sup>th</sup> to 14<sup>th</sup> century – which was revealed in trenches 1994/17, 1994/19 and 1994/21 (Simmonds, 2007:28, pl 9). The upper fill of the moat was largely 19<sup>th</sup> century, and relates to the levelling of the site for the construction of the LMS railway station; although, it is clear that it had been maintained as an open ditch until this final phase levelling-up of the abbey-site, as a recut of the moat was observed through an 18<sup>th</sup> or 19<sup>th</sup> century layer (Simmonds, 2007:14).

A barn was located in the meadow west of the moat, accessed by a bridge or causeway, visible on historic maps. This bridge has not been investigated archaeologically, although a gravel surface, which may be a path, has been observed east of the moat within the abbey precinct (Simmonds, 2007:14). The barn is only recorded on Agas' map of 1578. Three trenches 1994/19, 1994/27 and 1994/28 were excavated to locate the structure. These trenches located some early negative features – a pit (1970) and two ditches (1979 and 1985) containing pottery from the 13<sup>th</sup> century onwards – cut into 13<sup>th</sup> century or earlier loamy deposits at approximately 56m OD. The features were located to the west of the barn wall, and within the footprint of the proposed building. Additionally, the west wall of the barn, parallel to the moat, and a possible internal floor surface were recovered, dating from the 13<sup>th</sup> century onwards (OAU, 1994:12). The west wall of the barn cut the pit (1970), referred to above. The ditches (1979 and 1985) were cut from the same level and sealed by a layer, which was cut by the west wall of the barn at c. 56.8m OD. These deposits and features are just below the proposed pilecaps. The east wall was not located. The building measured at least 17.5m long, although was heavily robbed out; it was sealed by demolition dating from the late 16<sup>th</sup> century onwards (Simmonds, 2007:28-29). The demolition may be due to the erection of Civil War defences around the west of Oxford (Simmonds, 2007:31).

West of the barn, OAU located a short trench 1994/5 outside of the scheduled area which revealed a sequence of alluvium over gravel; although, two loamy layers were observed over the gravel at 56.12m OD (OAU, 1994:18), presumably at the west end of the trench, though this is not explicitly stated. Their location in relation to the alluvium is not recorded. The palaeochannel, indicated by the alluvium, is that observed on maps from Agas until the mid 19<sup>th</sup> century. These two loamy layers are undated (OAU, 1994), although the context summary does note that the two layers, one humic, the other clay silt, contained pottery from the late 18<sup>th</sup>-20<sup>th</sup> centuries and late 11<sup>th</sup>-20<sup>th</sup> centuries, respectively. The date-range of the recovered pottery sherds may be misleading. The evaluation trenches 1994/1-1994/5 were narrow (OAU, 1994:18), and seemed to comprise cultivation soils, which had been reworked, until the area was levelled up in the mid-19<sup>th</sup> century. Much of the interpretation of this area of putative cultivated fields and/or water-meadow derives from a limited examination of potentially complex deposits. The depth of the significant archaeology is 56.12m OD, although it is not clear whether this is the alluvium of the palaeochannel or one of the cultivation soils. The evaluation report notes the potential for good quality environmental remains from here (OAU, 1994:29).

Figure 2 16<sup>th</sup> and 17<sup>th</sup> C maps

To the east of the trench 1994/5, John Moore Heritage Services (JMHS) carried out an evaluation in June 2007. This work revealed the palaeochannel observed in the 1994/5 trench. The base of the nineteenth century backfill (a dense blue clay matrix) of the palaeochannel – associated with the construction of the railway station – was at a depth of between 55.83m and 56.47m OD. Possibly nineteenth century peat was observed to underlie this clay; although, the limited access afforded the trenches (due to depth and services) means that dating evidence was obtained from the excavator's bucket, rather than sealed contexts. Below this peat deposit test-pits 2-4 evidenced an undated grey clay deposit, which may be post-medieval or medieval silting within the channel. The underlying gravel – forming the base of the channel was only observed in the southernmost test-pit, 2007/1, at 55.82m OD, although 2007/4 evidenced palaeochannel deposits between 55.75m and 55.41m OD; they were not bottomed. The borehole evidence from the same works appears to corroborate such a conclusion, adding only that the trenches were just to the west of the edge of the palaeochannel. The apparent steepness of the edge is strongly indicative of an artificial cut.

Subsequently the area appears to have been turned over to cultivation, and then sealed by the dumps associated with the LMS railway station.

## **4.2 The Cartographic Evidence (Figures 2 to 6)**

The cartographic evidence comprises a number of maps from the late 16<sup>th</sup> century onwards. These are not always easy to interpret, as some of the information is occasionally contradictory – even within the maps. Additionally, the 'bird's-eye' perspective adopted by the earliest of map makers tends to foreshorten features, creating a misleading idea of the layout of the land, as does an occasional tendency to represent the land according to the commissioner of the map. A result of this is the great difficulty in accurately locating the proposal area.

### **4.2.1 The Sixteenth Century (Figure 2)**

Agas' map of 1578 depicts the bridge, 'Highe bridge', crossing the Castle Mill and Back Streams to join the suburb of St Thomas with the open area north of the city wall, known as Gloucester Green or Broken Hays. He shows the site of Rewley Abbey on a partially manmade island. Streams and ditches or moats bisect the northern part of Osney Island, surrounding the abbey-site with water; two bridges are visible; one connecting the site of the abbey with the suburb of St Thomas and Botley Causeway, the other with the land to the west, where a north-south oriented building and enclosure are situated. Agas makes a distinction between the waters of the Castle Mill and Back Streams (a grainy line) and those which appear to be standing (a hatched line).

The man-made island, where Rewley Abbey is located, is divided into four fields with square ponds in the two eastern fields and two buildings standing on it, apparently oriented east-west in the western enclosures. The abbey wall runs east-west along the north side of the island and north-south on the east side; although, beyond it can be seen an elongated pond, which may well be the partly silted northernmost branch of the Back Stream. On Agas' map, Wareham Bank appears to be still part of Osney Island and contiguous with Rewley Abbey.

Figure 3 18<sup>th</sup> century maps

The buildings visible on Agas' map comprise an east-west range along the south bank of the moat, and five north-south pitched roofs at a right-angle to the south. It is not clear whether this is schematic, or representative of the actual state of buildings in the 1570s. On the north side of the range, a structure projects over the moat, identified as a reredorter (Munby *et al.* 2007: 23). The church and the much of the cloistral range would appear to have been removed by this point. Agas names the site of Rewley Abbey, *Rois leie* (royal place); both he and later cartographers indicate standing buildings within the enceinte of the abbey, as well as the bridges, crossing the various arms of the moat.

To the west of a straight north-south ditch, the western arm of the moat, Agas illustrated a building and small enclosure immediately to the south within a larger area of field. This is believed to be the building identified during the excavations in 1994, trenches 19, 27 and 28. This putative barn is a substantial structure, which disappears within the following hundred years. It falls within the Scheduled monument although the perspective of the map is somewhat distorted.

#### **4.2.2 The Seventeenth Century (Figure 2)**

Hollar (not illustrated) in 1643 shows much of what Agas had mapped sixty-five years earlier, although he does not identify the place, rather leaving it unnamed. Moreover he does not illustrate the barn, at all. He depicts the road crossing 'Highe bridge', spanning the Castle Mill Stream and Back Stream, to the northern extension of St Thomas'. In contrast to Agas, Hollar does show Warham Bank (now Upper Fisher Row) lying between the two watercourses. The later Hoggar plan shows a cut parallel to the abbey wall, where Agas had shown standing water. Apart from depicting three pitched roofs, Hollar shows little change in the immediate environs of the site.

Slightly later, in 1675, Loggan's map of the city shows an avenue, leading to 'Ruly House', which crosses the moat at its south end and which is gated. At the north end of the avenue a north-south aligned block is at right-angles to the bridge over the western arm of the moat, which leads into the field where the barn formerly stood. There is no indication of the barn by 1675, which is believed to have been torn down over the course of the Civil War to open the field of fire and to possibly provide raw materials for the defensive works (Simmonds, 2007:31).

#### **4.2.3 The Eighteenth Century (Figure 3)**

Williams' map of 1733 is less detailed than the earlier maps, although the degree of detail apparent within the city raises the question of whether this is due to financial or other considerations. The 'barn' is not shown on the western island, and the buildings on the site of Rewley Abbey are shown much changed from those on the earlier maps. Williams shows an L-shaped building set back from the stream, which would seem to correspond with the western range first depicted by Loggan, and which also appear to agree with Burghers' prints of 1720, reproduced in 'From studium to station' (Munby *et al.* 2007: 9, 17 and 22).

Certainly these prints would be better in keeping with a more modest property as shown on Williams' map, than the finely laid out gardens and seemingly grand urban estate evidenced by Faden's map of 1789 (fig. 4). Faden, however, depicts a narrow

Figure 4 18<sup>th</sup> and 19<sup>th</sup> century maps

Figure 5 19<sup>th</sup> century maps

ditch terminating in a pool, just to the west of the old moat – this is apparently beyond the site of the barn, but certainly not so far west as to be part of the Thames or even the Botley Stream.

Taylor's slightly earlier map of 1751 already shows a heavily modified landscape around the site of the former abbey. The ditch west of the western arm of the moat appears to have partially dried up, or been closed, to form the pool, in the north-west corner of the proposed development area; at the same time a north-south ditch appears to have been cut parallel to the western arm of the moat. This pool would appear to be the same alluvial deposits observed in the 1994/5 trench and the 2007 trenches. This is not the abbey moat, rather it appears to be a new drain. It remains, as noted above, possible that perspectives do not reproduce an accurate view. Additionally, the map seems to show a number of breaks of slope running north-south up the field, as well as east-west across it. These are features which would be difficult to recover beneath c. 1m of levelling.

#### **4.2.4 The Nineteenth Century (Figures 4-5)**

Fisher's map of 1844 would seem to corroborate a late cut ditch, terminating in a pool just to the west of the historic location of the late medieval or post-medieval 'barn'. He shows the north range of the former abbey still standing; although the railway has yet to come to Oxford – the terminus is shown stopping at Western Road, south of the Thames at Grandpont in Berkshire.

The 1850 Hoggar map shows the proposed location of the London & North Western Railway terminus and beyond that the line of the Oxford and Rugby Line of the Great Western Railway. The plan shows that the meadowland to the south and west of the site of the former abbey has undergone boundary changes, as well as the construction of a building to the southwest of the remains of the abbey, beyond the moat. Equally, the watercourses, drains and ditches to the north, west and south of the site of the abbey have been heavily modified.

By 1888, Bacon's map of the area depicts an entirely cleared area with only a coal siding where the former abbey stood; when Oxford Archaeological Unit, now Oxford Archaeology, maintained a watching brief on the site in 1994 it was observed that the land had been raised by up to 2m, in places, to accommodate the station.

#### **4.2.5 The Twentieth Century (Figure 6)**

Over the course of the 20<sup>th</sup> century, the mapping by the Ordnance Survey illustrated a continued use of the site by railway companies, but with little apparent significant impact upon the landholdings. Between 1900 and 1921 little change occurred; a single compound was erected where the Back Stream diverts from the Castle Mill Stream. However between 1921 and 1939, it is apparent that the goods yard and coal depot was significantly expanded with petrol tanks and other structures and compounds erected over the site of the abbey. The 1958 OS – the only modern map illustrated – shows conclusively how well the site was concealed by the railway; an event of c. 100 years.

Figure 6 20<sup>th</sup> century maps

## 5 DISCUSSION

### 5.1 The Archaeological Potential of the Site

The proposed site was examined by an evaluation in June 2007 by John Moore Heritage Services, which identified a palaeochannel. Previous work carried out by Oxford Archaeological Unit (OAU) – now Oxford Archaeology – in 1994 also revealed evidence of a buried palaeochannel (1994/5), located to the west of the most recent evaluation trenches; possible cultivation soils were also located here.

To the east of the proposed development, OAU evaluation trenches (1994/19, 1994/27, 1994/28) picked up the remains of a putative barn, which may well be that observed on Agas' map of 1578. The barn had been extensively robbed out, although the internal mortar floor of the barn appeared to have preserved.

Beneath the barn was an occupation layer (13<sup>th</sup> century or earlier), predating the construction of the barn – this has not been investigated to any great extent; however, several features – an early medieval pit and two ditches (dating from the 13<sup>th</sup> century onwards) – have been excavated, but these have not been put into any significant context. These were found west of the barn, and it is not unreasonable that further examples of such features may extend to the west. The palaeochannel may well have truncated them, but it is equally possible that further features might be present to the west of the palaeochannel.

### 5.2 The Impact of the Proposed Works on Potential Archaeological Remains (Figure 7)

The floor of the basement of the proposed development is at 55.08m OD and can be anticipated to be excavated to a depth of c. 54.48m. The pile caps in this area can be anticipated to a depth of c. 53.88m. This would be greatly in excess of the observed depths of archaeological remains within the study area. The barn, which is located on the east side of the proposed new-build, is outside the basemented area of the proposed development, but within the area that will be subject to piling. The western ends of both Trenches 1994/19 and 1994/27 (Fig. 1), where the substantial stonework was evidenced, lie just within this area. The barn is situated at a height of 56.89m-56.75m OD, c. 0.5m below the anticipated base of the construction slab of the building. The pile caps will be to a depth of c. 57.2m. There is a strong possibility that piling will impact upon *in-situ* archaeological remains, even inadvertently, during works.

The palaeochannel appears to be an 18<sup>th</sup> century pond and drain; although it may equally well represent an earlier medieval drain, recut during the 18<sup>th</sup> century. The map evidence is not conclusive, but does seem to indicate strongly a later early-modern date. If, however, the channel is medieval it has the possibility of containing well-preserved medieval archaeo-botanical and environmental remains; it is located between approximately 56.57m and 55.41m OD. The reason for this variance is unclear; it may be due to the slope of the channel-edge or to localised changes in the channel morphology. The channel lies directly in the area of the proposed basement. The finished floor level for this basement is planned to be at 55.08m OD with a

Figure 7 schematic section

foundation layer and piling below this. The impact of the development would entirely remove the channel in this area.

The deposits beneath the barn, and land between the observed palaeochannel and the western arm of the abbey moat have been poorly understood; these have been characterised as pre-abbey cultivation soils by Oxford Archaeological Unit (OAU, 1994:13; Simmonds, 2007:11). Pits and ditches were excavated during 1994, which were cut into these soils. It is possible that further activity may be spread across the parcel of land, but it is equally possibly that they have been truncated by later medieval activity. These were located at c. 56.80m OD. It is certain that the excavation of the basement and associated piling would impact upon these deposits. West of the pond and palaeochannel deposits of potential archaeological significance are located at c. 55.6m, which on the southern half of the site would be preserved beneath the ramp to the underground parking, but which would be at risk of truncation on the northern side.

### **5.3 An archaeological statement: the proposed route of the construction traffic for the development at Saïd Business School by D. Gilbert**

The first proposed route entering from Rewley Road cuts through the garden area at the rear of the Business School. This garden is located within the area of the Rewley Abbey Scheduled Ancient Monument (Oxon SAM 80).

There are several trenches in this area previously excavated by Oxford Archaeology. Trenches 18, 19, 20, 25, 27 and 28 all showed a considerably thick layer of made ground associated with the old rail-yard above the archaeological horizon. This layer was seen to be at least 1m thick. These post-1850 deposits were considered to be of low archaeological importance (OAU 1994, 1).

Significant archaeological remains were uncovered during the excavations. Trench 25 on the Rewley Road side of Saïd Business School revealed medieval inhumations and part of the church at 57.35m OD (OAU 1994). Trench 1 from 1986 revealed part of the west cloister of the abbey at 57.80m OD (Simmonds, 2007). All of these trenches lie on the proposed line of the first route.

The trial pits dug in 2007 just to the west of the SAM indicate that the post 1850 deposits continue into this area but are of a shallower depth, only on average 0.6m below ground surface (JMHS 2007).

It is also uncertain how the upper deposits recorded in 1994 have been affected by landscaping for the gardens and if this has reduced their thickness. The ground level was recorded as between 57.0m and 58.5m OD, with the level of the topsoil soil in Trench 17 at 58.00m OD (Munby J *et al.* 2007). The ground level in the garden area was recorded between 58.13m and 58.01m OD at it lowest point during the 2007 evaluation. It could indicate only 0.2m of deposits between ground level and known archaeological remains.

If the ground has not been reduced, the 2007 evaluation at least proves that the nature of the made ground is not uniform across the area. Any impact of the associated

temporary access-way for construction traffic would have to be kept to a minimum, considering that archaeological remains were recorded at 57.80m OD in Trench 1 in 1993. A topsoil strip should not be carried out. The only alternative solution would be to lay a membrane across the site and raise the ground level in the area of the access, reducing the impact completely.

There are no archaeological concerns with the use of the second route through the station forecourt.

The above-mentioned depths of archaeological deposits would also affect any proposed use of this garden area as a site compound. A standard soil strip before commencement of work could potential affect known archaeological remains recorded at 57.80m OD. The proposed layout of the abbey complex covers the entire area (Munby J *et al.* 2007). The potential for disturbing archaeological remains would be considered high, and alternative methods should be considered.

## **6 CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 Buried Archaeological Remains**

The proposed development lies to the west of the bulk of the buried archaeological remains at the Scheduled Monument of Rewley Abbey. These represent some of the potentially finest monastic archaeology in Oxford – notwithstanding subsequent robbing out of the up-standing structures. The layout of the abbey is quite unique, and still only poorly understood. Cistercian sites are ill-recorded as they failed to be included in Subsidy Rolls and other tax records, because they were alien houses, answerable only to their mother-house at Citeaux.

Any works that encroach upon the Scheduled Monument will require the implementation of a full mitigation strategy agreed by both English Heritage and Oxford City Council in order to best preserve *in situ* or by record the remains which are known to exist within the footprint of the proposed development. It is clear that any works that are undertaken on the periphery of the Scheduled Monument will be subject to comment by English Heritage, in order that the monument is not adversely impacted upon by either groundworks, traffic, de-watering during construction or direct impact such as piling.

The issue of access to the site has been addressed above but will be summed up within the section dealing with recommendations.

In respect of the present site there are three aspects of the archaeological heritage which are liable to a negative impact. These are

- the barn
- the pre-abbey cultivation levels and possible associated manorial activity
- and the palaeochannel

The remains of these archaeological resources have been evidenced in the various archaeological interventions over the years, and “an area of significant archaeology has been identified to the west of the main Abbey complex, in the ‘barn’ area” (OAU, 1994, 29).

The outbuildings such as the barn have been examined only partially. Too little is known about the structure and its period of use to fully assess the building’s significance. This is believed to have been razed at around the time of the Civil War; when it was first built is unclear, as is its relationship to the abbey. The presence of earlier agricultural activity may be related to the barn’s location and construction. The proposed development will impact upon the barn and the earlier archaeology in its vicinity, which has been identified by OAU (1994:27) as being in an area – comprising Trenches 19, 27 and 28 – of significant archaeology, despite ground reduction by BR bunding.

Within the area of the development, the palaeochannel appears to comprise physically the most significant archaeological resource. It is located largely within the area of the proposed development’s basement area. Where the basement area is likely to extend beyond edge of the palaeochannel consideration will have to be given to the pre-abbey deposits. The agricultural activity, which predates the construction of the monastic complex, is even more poorly understood than that which occurred on the monastic site. It is clear that some earlier land-use is evidenced by the archaeology; the nature of this remains opaque. Munby (2007, 6) posits the possibility of a manorial holding in north Osney. The few observed traces of earlier activities may be indicative of such a land-holding. The loamy deposits identified in Trench 5 (OAU, 1994:18) may be the same as those identified to the east, below the wall of the barn. The area of Trenches 19, 27 and 28 have been identified by OAU (1994:27) as being in an area of significant archaeology, despite ground reduction by BR bunding.

The palaeochannels which have been observed over the years of work at Rewley Abbey are an important part of the abbey complex, and the dynamics of the water-management system and its effects elsewhere in Oxford was a perennial concern. The drainage works to dry out and raise the level of the land were undertaken in such a way as to also function as a moat, emphasising the position of the abbey. The moat and associated channels do appear to have been cured regularly, although some silting and closing of channels and opening of new channels are apparent between some of the historic maps. The palaeochannel observed during the recent evaluation, and that observed during the 1994 evaluation appears to be in part the pond observed on the various cartographic sources from the mid 18<sup>th</sup> century onwards; whether it dates from the 18<sup>th</sup> century or is only then first depicted is unclear, although a later date does seem most likely.

## **6.2 Recommendations** by G. Williams & D. Gilbert

Should the proposed development proceed then a mitigation strategy which English Heritage in conjunction with Oxford City Council might require to be implemented would certainly include a strip and sample strategy across the palaeochannel, comprising targeted sections across the body of the palaeochannel to achieve an understanding of its use during the medieval and post-medieval periods.

It is clear that such a strip and record would probably be recommended to be undertaken under direct archaeological control, in order that any archaeological deposits encountered be identified at the time of machining, rather than subsequently. Such a course of action would, moreover, quickly establish a date for the palaeo-channel. This is perhaps particularly relevant in respect of the manorial agricultural activity, which is believed to predate the abbey. If the palaeochannel is demonstrated to date from the 18<sup>th</sup> century then the medieval remains excavated by OAU in 1994 can be expected to have extended west of the palaeochannel, up to and perhaps beyond Trench 5 (Fig. 1), where loamy deposits were also identified. If this is the case, the basement of the proposed development will impact upon such remains, and a mitigation strategy involving excavation should be anticipated.

The evidence suggests that there are significant archaeological remains predating the barn, which is located on the east side of the proposed development. How far west these remains extend is unknown, although they are certainly within the footprint of the proposed building. The early medieval period activity is particularly sensitive and it should be anticipated that these remains would probably be subject to a more detailed programme of investigation. Indeed, in such a case there remains the possibility of earlier activity below the early medieval land surface. Therefore, the appropriate authorities may conceivably recommend area-excavation. The mitigation strategy in this case should involve a strip and excavate for the medieval remains, followed by a second-phase of stripping prior to excavation for pre-medieval remains.

The mitigation strategy in respect of the barn would need to be particularly sensitive to the potential damage to the structure that might occur were it to be left *in situ*. Although the evidence suggests that the barn is below the level of the pilecaps, the piling of the area could impact directly or indirectly upon the remains. It should be noted that 0.2m of soil exists between the base of the caps and the top of the cut for the wall of the barn. Archaeological remains are present above the top of the wall, cut by the construction trench of the wall. It is considered that designing the piles in this area to be the least required number and that excavation for the forming of such be reduced to a minimum is the only option if excavation is not considered. At the same time, appropriate protection for the sections of the holes for the pile caps would need to be implemented. It might be considered prudent to ensure sections should be shored to prevent collapse and further impact upon any remains. Battened sections would not be an option as this risks increasing the impact.

Rutting due to site traffic would be an issue if the garden area was used for access or if it was used as a site compound. In this case, rather than stripping the area, as would be standard procedure, mitigation might be better achieved by building up the level of the ground in the vicinity of the works. Such a methodology would be appropriate for the muck-wagons, were the Rewley Road access to be used in preference to the station forecourt access.

As the access ramp and tower crane-base will be within the basement area this should not be significant as all archaeological work should have been carried out prior to any invasive works.

Additionally all dig-perimeters should be known and adhered to by construction-site staff during the invasive phase of works.

In order to satisfy English Heritage and Oxford City Council that an appropriate mitigation strategy is in place and being adhered to, all earth-moving works should be carried out with the presence of an appropriately qualified archaeological monitor on site.

## **7 BIBLIOGRAPHY AND SOURCES CONSULTED**

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