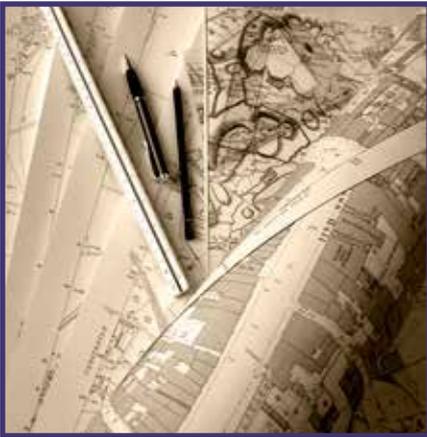


Tinbergen Building, South Parks Road, Oxford



Desk-based Assessment



July 2015

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Tinbergen Building, Oxford
Archaeological desk-based assessment for Oxford University

Summary

Oxford Archaeology (OA) has been commissioned by RB Development Management Ltd on behalf of Oxford University, to carry out an archaeological desk-based assessment at the Tinbergen Building, adjacent to South Parks Road, hereafter 'the Site'. The Site is centred on NGR SP 5182 0692, and lies within the administrative area of Oxford City Council.

Historical and archaeological evidence suggests the possibility of archaeological remains dating to the prehistoric, Roman and post medieval periods being identified within the area of the Site. In particular it is possible that a bastion from the Civil War defences may be present in the southern part of the Site.

The Site can be broken into two distinct parts, roughly a northern and southern section. The northern portion lies beneath the Tinbergen Building (which was completed in 1970) and will be subject to a thorough refurbishment involving no new construction work. The southern portion of the Site, presently covered by lightweight structures will be subject to re-development; the lightweight structures are to be demolished and a two storey building with pile foundations erected in their place.

Previous construction on the Site in the 19th and 20th centuries means there is little chance of archaeological remains surviving within the footprint of the Tinbergen Building, which occupies the northern part of the Site. The portion of the Site beneath lightweight structures has high potential for remains to have been preserved despite previous activities in this area.

Development plans include the demolition of the lightweight structures at the southern end of the Site and the refurbishment of the Tinbergen Building. After the demolition of the lightweight, single storey, structures it is proposed that a two storey brick built structure will be erected. It is planned to use pile foundations. The use of pilings for the foundations will minimise the impact of the development on any underlying archaeological remains and deposits.

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**TINBERGEN BUILDING,
UNIVERSITY OF OXFORD**
ARCHAEOLOGICAL DESK BASED ASSESSMENT
FOR
UNIVERSITY OF OXFORD

1 INTRODUCTION

- 1.1.1 Oxford Archaeology (OA) has been commissioned by RB Development Management Ltd on behalf of Oxford University, to carry out an archaeological desk-based assessment at the Tinbergen Building, adjacent to South Parks Road, henceforth known as 'the Site'. The Site is centred on NGR SP 5182 0692, and its location is shown on Figure 1.
- 1.1.2 The aim of this project is to:
- Provide an assessment of the archaeological potential of the Site;
 - Assess the likely impacts of previous development on the survival of any archaeological remains; and
 - Assess the potential for impacts from the proposed development on the surviving archaeological resource.
- 1.1.3 For the purposes of this report a variety of archaeological sources, including the results of previous archaeological investigations, were consulted for an area with a 250m radius from the boundary of the Site (the Study Area). The sources consulted are discussed in Section 3, and a detailed list can be found in Appendix 2.

2 LOCATION, GEOLOGY AND TOPOGRAPHY

- 2.1.1 The Site is bordered to the north by South Parks Road and to the east by St Cross Road. The Site is wholly covered by the Tinbergen Building and light ancillary buildings that are immediately adjacent to it, to the south. The Site covers an area of around 0.7ha and is located outside the medieval city and immediately outside the Central Oxford Conservation Area. The Site lies within the administrative area of Oxford City Council.
- 2.1.2 The Site is located on the second river gravel terrace and the underlying geology is Oxford Clay. The Site is mostly level, and lies at c.60m OD. There is a basement within the Tinbergen Building which extends down to c.58m OD.
- 2.1.3 The Site can be broken into two distinct parts, roughly a northern and southern section. The northern portion is within the footprint of the concrete Tinbergen Building, which was completed in 1970, and ranges in height from two storeys at the periphery to five storeys at the centre. This area will be subject to a thorough refurbishment involving no new construction work. The southern portion of the Site, presently covered by lightweight structures with concrete foundations will be subject to re-development. The lightweight structures will be demolished and a two storey building with pile foundations erected in their place (Figure 6).

3 SOURCES CONSULTED

- 3.1.1 The Oxford Urban Archaeological Database (UAD, held by Oxford City Council) is the main repository of archaeological data for the Site. It was contacted and supplied data of known sites, events and designated sites within the Site and the surrounding Study Area. This is limited to a 250m radius around the Site due to the large amount of archaeological work that has been undertaken within the surrounding area. OA hold a number of historic maps for Oxford which were consulted as were a range of secondary sources. These sources have been drawn upon for the production of this report. A full list of sources consulted can be found in Appendix 2.
- 3.1.2 Appendix 1 is a gazetteer of archaeological sites and finds within the Study Area. Each entry has been allocated an OA number, added to the gazetteer, and referred to in the text where relevant and marked on Figure 2.

4 PLANNING BACKGROUND

- 4.1.1 The National Planning Policy Framework (NPPF: issued March 2012) sets out the Government's planning policies on the conservation of the historic environment.
- 4.1.2 Policies 12.128 and 12.129 state;
- “128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the asset’s importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.*
- 129. Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset’s conservation and any aspect of the proposal”*
- 4.1.3 The Adopted Oxford Local Plan (November 2005) recognises the importance of archaeological and historical remains (Policies HE2-4).
- 4.1.4 Policies HE2-4 state:
- POLICY HE.2 - ARCHAEOLOGY***
- Where archaeological deposits that are potentially significant to the historic environment of Oxford are known or suspected to exist anywhere in Oxford but in particular the City centre Archaeological Area, planning applications should incorporate sufficient information to define the character and extent of such deposits as far as reasonably practicable, including, where appropriate:*
- a. the results of an evaluation by fieldwork; and*
- b. an assessment of the effect of the proposals on the deposits or their setting*
- If the existence and significance of deposits is confirmed, planning permission will only be granted where the proposal includes:*

- c. provision to preserve the archaeological remains in situ, so far as reasonably practicable, by sensitive layout and design (particularly foundations, drainage and hard landscaping); and*
- d. provision for the investigation and recording of any archaeological remains that cannot be preserved, including the publication of results, in accordance with a detailed scheme approved before the start of the development.*

POLICY HE.3 - LISTED BUILDINGS AND THEIR SETTING

Planning permission will be granted for the re-use of redundant or unused listed buildings for new purposes compatible with their character, architectural integrity and setting.

Planning permission will not be granted for proposals involving demolition of a statutory listed building.

Planning permission will only be granted for works involving an alteration or extension to a listed building that is sympathetic to and respects its history, character and setting.

Planning permission will only be granted for development which is appropriate in terms of its scale and location and which uses materials and colours that respect the character of the surroundings, and have due regard to the setting of any listed building.

POLICY HE.4 - ARCHAEOLOGICAL REMAINS WITHIN LISTED BUILDINGS

Where the structure of a listed building is considered to conceal important archaeological evidence or remains, planning permission will not be granted for works that would have a significant effect on the structure, or offer an opportunity to better understand the building, unless the applicant has agreed a programme of investigation, recording of the structure and publication of the results, which will be secured by conditions.

5 WALKOVER SURVEY

- 5.1.1 The Site was visited on the 1st of July 2015 in bright, clear conditions. All internal and external areas of the Site were accessible. No new archaeological features were definitively identified during the visit.
- 5.1.2 The Site contains the Tinbergen Building which is a large concrete structure that was completed by 1970. Immediately to the south of the Tinbergen Building is an area of lightweight single storey structures that were formerly used as aviaries, and similar, by the Zoology Department. South of the Site is an open playing field.
- 5.1.3 The Tinbergen Building has a large basement, currently used as subterranean car parking. The basement is approximately 2m deep. The floor of the basement is laid with concrete.
- 5.1.4 Service man holes can be seen along the edge of the playing field that borders the Site to the south. Service cables were visible throughout the area of the lightweight structures.
- 5.1.5 There were areas of disturbance along the northern edge of the playing field. These were very slight (nowhere greater than 0.1m in height) undulations that might represent the heavily flattened remains of the Civil War defences that are shown in this area on Loggan's map of 1675 or may be the result of more recent landscaping and construction relating to the levelling of the playing field or the construction of the Tinbergen Building.

6 ARCHAEOLOGICAL BASELINE

6.1 *Introduction*

- 6.1.1 The Site lies outside, but immediately adjacent to, the Central Oxford Conservation Area, and is outside the line of the Medieval City Wall.
- 6.1.2 There are no designated heritage assets within the Site although there are two Registered Park and Gardens (RPG) within the 250m Study Area, Wadham College (OA 11) and the University Park (OA 12). Within the 250m Study Area there are also ten Listed Buildings, these are mapped on Figure 2 (OA 1-10). Of the Listed Buildings there are two that are Grade II* and eight that are Grade II.

6.2 *Previous Archaeological Work*

- 6.2.1 Oxford has been subject to numerous archaeological investigations as a consequence of the major redevelopment of Oxford since the middle of the 20th century. Within the 250m Study Area there have been 43 archaeological investigations carried out (OA 49 – 91). The previous archaeological investigations carried out within the Study Area have recorded Neolithic/Bronze Age ritual and funerary landscapes, with isolated artefacts of the Palaeolithic and Mesolithic periods also having been recovered. There is also evidence for agriculture at the transition between the Iron Age and Roman Periods, some evidence of Saxon farming and also for remains associated with the Post Medieval Civil War defences.
- 6.2.2 There have been no previous Archaeological Interventions within the bounds of the Site. However, the UAD records four Archaeological Interventions as having been previously undertaken immediately adjacent to the western edge of the Site (OA 74, 75, 77, 79). These previous works have identified remains of Late Iron Age and Romano-British Farming, some Mesolithic and Neolithic flints, and the remains of 19th century garden landscaping.
- 6.2.3 Two previous interventions (OA 82, 83) on the opposite side of St Cross Road to the eastern edge of the Site have both identified undated ditches.

6.3 *Prehistoric Period (500,000 BP - 43 AD)*

- 6.3.1 Prehistoric activity has long been recognised within the Study Area. In excavations on the south side of South Parks Road, within the Science area and northward in the University Parks, remains of Neolithic occupation and ritual, Bronze Age burial and Iron Age occupation have been identified (Dodd 2003).
- 6.3.2 During an excavation on South Parks Road, in 1998, 250m south-west of the Site, a single, isolated, pit was identified that contained Neolithic flint tools (OA 13, 56).
- 6.3.3 Mid-Late Neolithic and Early Bronze Age activity were identified during the construction of a new Chemistry research laboratory at 2-4 South Parks Road, c.150m west of the Site (OA 21). The activity consisted of two pits that contained late Neolithic flints and a large boundary ditch which contained a small amount of pottery that dated to either the Late Neolithic or Early Bronze Age. The nature of the ditch fills seems to indicate that it was deliberately backfilled rather than natural silting (Bradley et.al 2006).
- 6.3.4 A pit containing Neolithic flint was excavated during work at Mansfield College, c.160m west of the Site, and a small amount of Neolithic and Bronze Age lithic implements were also recovered (OA 25).

- 6.3.5 A single Neolithic pit was identified during excavations at Mansfield College, c.190m south-west of the Site, and the feature was dated by the recovery of thirteen flint implements from its fill (**OA 30**), (Booth & Hayden 2001).
- 6.3.6 A Bronze Age barrow was identified during three separate excavations during work at the University Observatory, the Rex Richards Building and the Rodney Porter Building, c.180m north-west of the Site. The barrow was identified by two concentric ring ditches, which had been constructed in two phases and an in situ cremation that was a later insertion. The excavations also identified an undated field system. Early and middle Iron Age pottery was recovered from the excavations. A pit containing Iron Age pottery was identified which had been cut into one of the concentric ring ditches (**OA 15, 16, 22**), (Parkinson et.al 1997).
- 6.3.7 An Iron Age field system was identified during construction work at Halifax House, c.50m west of the Site. A single Mesolithic and eight Neolithic or Bronze Age flint implements were recovered, but these had been re-deposited in later features on the site. A ditch and a pit have both been dated to the middle Bronze Age. The Iron Age features appear to support the interpretation of this site as a small rural settlement dating to the middle and late Iron Age (**OA 35**), (Anthony 2006).
- 6.3.8 A single prehistoric flint flake was recovered during a Watching Brief at the Rex Richards Building, c.150m north-west of the Site (**OA 20**).
- 6.3.9 A small amount of prehistoric pottery was recovered during excavations at Mansfield College, c. 200m south-west of the Site; however, this material was not from a secure context (**OA 28**).
- 6.3.10 A single sherd of Iron Age pottery was recovered during an Evaluation at the Sir William Dunn Laboratory, c.125m north of the Site (**OA 32**).
- 6.3.11 A prehistoric implement made of antler was found during work in Manor Road, c.250m south-east of the Site. The implement is identified as a perforated Celt (**OA 45**).
- 6.3.12 An un-dated curvilinear ditch was identified during an evaluation at the University Clubhouse on Mansfield Road, c.95m south-west of the Site. The ditch is thought to be prehistoric on morphological grounds (**OA 37**).

6.4 Romano-British Period (AD 43-410)

- 6.4.1 There is a significant amount of evidence for settlement and agriculture within the Study Area during the Romano-British period. Some of the sites identified provide evidence for continuity of use from the Iron Age through to the 4th century AD.
- 6.4.2 During works in 1998 on South Parks Road, c.250m west of the Site, Roman features dating to between the 2nd - 4th centuries were identified (**OA 13, 56**). A series of 2nd century North-South ditches and roughly parallel ditch alignments to east and west were identified. Post holes and gullies between may indicate the site of a rectilinear timber structure dating from the mid 3rd-4th century.
- 6.4.3 During an excavation at 2-4 South Parks Road, c.150m west of the Site, evidence of Roman occupation was identified and ranged from the 2nd - 4th centuries and exhibited features (such as ditches, an inhumation and a gully ditch around a haystack) that are usually located on the edge of a settlement (**OA 21**). It is possible that there was a North - South boundary between this site and the Roman settlement discovered on Mansfield Road (**OA 25**).

- 6.4.4 Two excavations have been undertaken at Mansfield College c.160m west of the Site, and much of the site was found to be occupied by Roman features (**OA 25, 30**). Most of the features identified dated from the 3rd - 4th centuries although some late 1st or early 2nd century ditches were also found. Parallel ditch alignments with flanking post holes and gullies seem to indicate the presence of rectilinear enclosures during both periods. One possible timber structure from the later Roman period was also identified. An infant burial from that period was also recovered. Artefactual and environmental evidence suggests that this was a low status, rural site.
- 6.4.5 The late Iron Age settlement and agricultural activity at Halifax House, c.50m west of the Site, continued in use into the early part of the Roman period (**OA 35**).
- 6.4.6 There have been a number of artefacts dating from the Roman period that have been discovered within the Study Area. During the construction of the University Observatory in 1876 a Roman vase was found, c.185m north-west of the Site (**OA 17**). A range of finds were made from the garden of 2 South Parks Road, c.200m west of the Site, between 1862 and 1871, these included a piece of a Roman quern and part of a mortarium (**OA 18**). When the foundations for Mansfield College, c.160m west of the Site, were being excavated, in 1887, two Roman pots were recovered (**OA 26**); a third pot was also found elsewhere on the site (**OA 29**). Roman pot sherds were found during the 19th century in the University Park, c.170m north of the Site (**OA 36**); Roman coins found in the University Park in the 18th century, c.70m north of the Site (**OA 40**).
- 6.4.7 Sherds of Roman pottery were recovered during works at the Rex Richards Building, c.185m north of the Site, and Mansfield College, c.200m west of the Site, but came from insecure contexts and the topsoil (**OA 16, 28**).

6.5 The Medieval Period (AD 410-1550)

Anglo Saxon Period

- 6.5.1 The town of Oxford is believed to have its origins in the early 8th century about the time that the early religious house of St Frideswide was founded on the site of Christ Church. The city was developed as a fortified Burh in the reign of King Alfred or his son Edward the Elder. By the 10th century a network of streets had been established and a defensive circuit constructed. Some evidence for a turf rampart has been found and wherever the early medieval rampart has been observed it has been on or close to the line of the later medieval wall (Dodd 2003).
- 6.5.2 The Site and Study Area lie outside the historic defences of Oxford in the manor of Holywell. The Study Area seems to have been largely rural in character during the early medieval period. There is little evidence for Saxon activity within the Study Area with only one feature identified that dates to this period.
- 6.5.3 An evaluation at Saville House, Mansfield Road identified an earthen agricultural bank underlying a part of the Civil War defences, c.180m south-west of the Site (**OA 34**). An Optically Stimulated Luminescence sample was dated to the year range 845 – 1045.

Later Medieval Period

- 6.5.4 There are few remains dating to the later medieval period within the Study Area. This is to be expected as the Study Area is largely outside the historic core of Oxford. The Site and Study Area lay within the Manor of Holywell before 1086 and were regarded as entirely separate from Oxford City (Crossley & Elrington eds. 1979).

- 6.5.5 In 1086 Holywell was held by the church of St-Peters-in-the-East of Robert d'Oilly. The manor remained with St Peters until the church was appropriated by Merton College in 1294. The college retained the manor in its own hands throughout the 14th century but was leasing it to tenants from at least 1403 (Crossley & Elrington eds. 1979).
- 6.5.6 In the 13th century Holywell was developing into a suburb of Oxford and by 1381 none of the people assessed for Poll Tax were engaged in agriculture (Crossley & Elrington eds. 1979).
- 6.5.7 There is one Grade II Listed Building within the Study Area that dates to the medieval period. Holywell Manor House (**OA 10**) on St Cross Road, c.250m south-east of the Site, was rebuilt in 1516 by Merton College and parts of this remain. However, the manor house was re-conditioned with considerable additions in the early 20th century. The ancient part of the building is L-shaped in plan with wings to the North and East. A medieval seal was found in the garden of 2 South Parks Road in 1862, c.220m west of the Site (**OA 14**). Medieval pottery was found during the 19th century in the University Park, c.170m north of the Site (**OA 27**). The presence of artefacts without secure contexts is likely to be as a result of manuring open fields in the medieval period. The use of manuring in Holywell is documented with a 14th century lease stating that the tenant must manure the field annually and dung sledges being listed amongst the demesne equipment at around the same date (Crossley & Elrington eds. 1979).

6.6 Post medieval Period (1550 – 1900)

- 6.6.1 There are a number of recorded heritage assets within the Study Area. The assets identified within the Study Area include six Listed Buildings and two Registered Parks and Gardens that date to the post medieval period. None of the designated assets will be impacted upon by the proposed development.
- 6.6.2 There is one Grade II* Listed Building, Mansfield College, c.175m west of the Site (**OA 5**), and six Grade II Listed Buildings (**OA 1, 2, 4, 7, 8, 92**) within the Study Area.
- 6.6.3 There are two Grade II Registered Parks and Gardens within the Study Area. Wadham College, c.245m south-west of the Site (**OA 11**) and the University Parks, c.20m North of the Site (**OA 12**).
- 6.6.4 The Site is not clearly shown on either Agas' map of 1578 or Hollar's map of 1643. Neither of these maps shows the full extent of the Site. Only a small area at the southern end of the Site is visible.
- 6.6.5 The Site may contain the remains of part of the Civil War defences of Oxford, as the line of defences is shown within the southern extent of the Site in both the map regression work associated with the Oxford research framework and in Loggan's map of 1675 (Figure 5), (discussed further, below).
- 6.6.6 The construction of the defences of Oxford, during the Civil War, was begun on August 9th 1642, the day on which King Charles declared War. These initial defences were located on the north side of the city but were destroyed when Parliamentary forces held Oxford in September and October of the same year. The King entered Oxford on October 29th and defences were begun again. The sections of defences that have been identified within the Study Area were begun on March 14th 1643 (Lattey et.al. 1936).

- 6.6.7 De Gomme's 1644 plan of the defences of Oxford, indicate that on the north side of the City the walls were augmented by the construction of an outer set of earthworks. The outer works were constructed as a series of earthen ramparts connecting ravelins and bastions providing interlocking fields of fire, and with a dry ditch. The eastern defences appear somewhat more formidable as these are shown as being nearest to the siege works of the Parliamentarians (Lattey et.al. 1936).
- 6.6.8 De Gomme's 1644 plan of the defences of Oxford seems to indicate that the line of fortifications lies immediately to the South of the Site, within the sports ground (Lattey et.al. 1936). However, Loggan's map of 1675 indicates that there may be a bastion from the Civil War defences in the south-west corner of the Site. Loggan's map shows an earthwork bastion or ravelin surrounded by a ditch on its north side, the full extent of the defensive feature is not shown as it extends beyond the edge of the map. The defences shown within the area of the Site form part of the outer defensive line that was constructed to augment the inner defences formed by the medieval town wall.
- 6.6.9 Previous archaeological work, within the Study Area, has produced considerable evidence of the nature and extent of the Civil War defences.
- 6.6.10 At Mansfield College the defence ditch was sectioned in part, c.250m west of the Site. A shallow slot parallel to ditch edge 4m to the east may also have been 17th century in date. The NNW-SSE aligned Civil War ditch lay beneath the western margin of the site (**OA 13**).
- 6.6.11 Parts of the Civil War defence ditch have been identified during two further archaeological interventions, at Mansfield College, c.160m west of the Site. The work has identified remains of the rampart and ditch which was 7m wide and over 2m deep. Portions of the rampart survive as upstanding earthworks (**OA 25, 30**).
- 6.6.12 Civil War Activity was identified at 2-4 South Parks Road, c.150m west of the Site; an excavated ditch was postulated to be an outer defensive ditch (**OA 21**).
- 6.6.13 An Evaluation at Saville House on Mansfield Road, c.180m south-west of the Site, excavated two trenches through the surviving earthwork remains of the Civil War defences. The work identified that the Royalist defences had been built on an existing, Saxon earthwork (**OA 34**).
- 6.6.14 Civil War defences on Mansfield Road, c.160m south of the Site, remain as a scarp 1.2-1.5m high that continues on the west side of Mansfield Road and becomes a definite rampart forming the north eastern boundary of Wadham College garden. It is 10.4m wide and 2.1m above the garden. The mound is shown on early maps as a kink on the inner line of defences (**OA 38**).
- 6.6.15 The Civil War defensive ditch was identified within the New College Sports Ground on St Cross Road, c.120m south-east of the Site. The watching brief identified that the foundations of the demolished houses had not obliterated evidence for the width and shape of the Civil War ditch. The ditch was c.6m wide and was filled by two deposits which contained post-medieval finds and other finds dating from the 19th and 20th centuries. No traces of the internal rampart were observed (**OA 42**).
- 6.6.16 On the basis of what has been identified about the Civil War defences through the previous work, discussed above, it is likely that any remains relating to the defences encountered during construction will be very substantial. The ditch, where it has been excavated, has been found to measure 6-7m across and be in excess of 2m deep. Where surviving sections of the earthwork rampart have been identified they have been found to be c.1.5m high. Where previous remains of the Civil War defences

have been excavated they are usually located accurately on the line shown in Loggan's map.

- 6.6.17 Only the southern end of the Site is shown in Taylor's map of 1750 and Faden's map of 1789.
- 6.6.18 The Site is shown as being open land in the 1811 Ordnance Survey Surveyor's drawing but was developed by 1876 when the first edition OS 1:2500 map was published (Figure 6). Between 1876 and 1958 all of the OS maps consulted show a large house, facing South Parks Road in the northern part of the Site with a smaller structure shown in the south-eastern corner of the Site as well. The 19th century maps also showed garden paths and features that covered the rest of the Site.

6.7 20th Century

- 6.7.1 There are three Listed Buildings within the Study Area that were constructed in the 20th century. None of the Listed Buildings will be impacted upon by the proposed development. The St Cross Building, c.170m west of the Site, is a Grade II Listed Building (OA 3). There are also two Grade II Listed Buildings that date to the 20th century (OA 6, 9).
- 6.7.2 The Tinbergen Building was designed in 1965 by Sir Leslie Martin, the same architect that designed the St Cross Building, and was completed by 1970 (Sherwood & Pevsner 1974). The lightweight structures at the southern end of the Site were constructed at a later date as they are not shown on an OS plan of 1970.

7 PREVIOUS IMPACTS AND SURVIVAL

- 7.1.1 The Site is located within an area which has been subject to limited phases of construction and demolition from the Civil War and also the 19th century through to the mid 20th century. These phases of work will have had impacts on the remains of earlier structures and deposits within their footprints.

Civil War Defences

- 7.1.2 Where the Civil War ditch has been constructed no earlier remains will have survived as they will have been removed due to the scale of the works. Areas beneath the rampart have been shown in previous work to have protected underlying remains.

Nineteenth Century Houses

- 7.1.3 The Site has been impacted upon by the construction of houses in the mid 19th century. The houses were located towards the northern edge of the Site, facing South Parks Road. A small building was also constructed in the south-eastern most corner of the Site; it is likely to be a garden shed or outhouse. Garden landscaping is shown on some of the maps. The construction of houses and associated garden landscaping will have impacted upon the survival of underlying archaeological remains.

Tinbergen Building

- 7.1.4 The construction of the Tinbergen Building between 1965 and 1970 will have had a significant impact on underlying archaeological remains. The presence of deep basements under much of the building is likely to have removed any evidence for previous features on the Site.

Lightweight Structures South of the Tinbergen Building

- 7.1.5 The lightweight structures that are located at the southern end of the Site will have had some impact upon the survival of any underlying archaeological remains. However, it is likely, given the nature of these structures and their foundations that earlier remains may survive in a partially truncated state.

Twentieth Century Services

- 7.1.6 Extensive evidence for buried services was observed during the Site walkover survey. The trenches for these services will have impacted upon any underlying remains, however they are unlikely to have completely destroyed any sub-surface deposits.

8 ARCHAEOLOGICAL POTENTIAL

8.1 *Prehistoric Periods*

- 8.1.1 There is a high potential for prehistoric remains to be present within the Site, with the Site being located c.50m from a known prehistoric field system. There have also been significant prehistoric remains identified from elsewhere in the Study Area, including Neolithic and Bronze Age ritual landscapes and funerary monuments. A number of findspots of prehistoric flint artefacts recorded from within the Study Area suggests further isolated artefacts may be present within the gravels that underlie the Site.

8.2 *Roman Periods*

- 8.2.1 There is a high potential for Roman remains to be present within the Site. Previous work c.50m away identified that a prehistoric field system continued in use into the early Roman period. There have been a number of Roman artefacts found within the Study Area.
- 8.2.2 The presence of Roman features that date from the 1st – 4th centuries has been shown through previous investigations in the Study Area, and there is the potential for the Site to have remains relating to Roman agriculture and settlement.

8.3 *Early Medieval Period*

- 8.3.1 There is low potential for early medieval remains to be identified within the Site. Only one feature dating to this period has been identified within the Study Area and this is c.180m south-west of the Site. The Site lies outside both the Saxon defences of Oxford and the area of Saxon town settlement.

8.4 *Later Medieval Period*

- 8.4.1 The Site was located within the open fields of Holywell Manor throughout the medieval period.
- 8.4.2 There is low potential for later medieval remains to be present within the Site. No archaeological remains have been identified within the Study Area that date to this period. The presence of artefacts that date to this period within the soil is likely to represent manuring.

8.5 Post-medieval and Early Modern Periods

Civil War Defences

- 8.5.1 There is high potential, in the area of the lightweight structures, for remains relating to the Civil War defences being identified within the Site. The location of a bastion or ravelin is shown on Loggan's map of 1675 (Figure 5) as lying within the south western corner of the Site.
- 8.5.2 The part of the Site beneath the Tinbergen building has very low potential for any remains surviving due to the extensive, deep basement.
- 8.5.3 Where portions of the Civil War defences have been excavated previously the ditch has been found to be very substantial, c.6 - 7m wide and over 2m deep.

9 POTENTIAL IMPACTS

- 9.1.1 Development plans include the demolition of the lightweight structures at the southern end of the Site and the refurbishment of the Tinbergen Building.
- 9.1.2 The refurbishment of the Tinbergen Building will have no impact upon any archaeological remains.
- 9.1.3 After the demolition of the lightweight, single storey structures it is proposed that a two storey brick built structure will be erected. It is planned to use pile foundations. The use of pilings for the foundations will minimise the impact of the development on any underlying archaeological remains and deposits. Deposits within the southern part of the Site may however be damaged by the demolition works, ground preparation or excavation of Pile Caps.
- 9.1.4 The development will not have any impact upon any Listed Building or Registered Park and Garden.

10 POTENTIAL FOR FURTHER WORK

- 10.1.1 This DBA has demonstrated that the Site contains a high potential for archaeological remains, some of which are likely to be of high significance.
- 10.1.2 Potential impacts could be mitigated by a programme of further archaeological works carried out prior to, or during, the construction process. Details will need to be agreed by David Radford, the Oxford City Archaeologist, but may comprise a small scale evaluation, carried out after the demolition of the lightweight structures and intended to examine, sample or record any deposits present prior to their loss to the development. Equally the archaeological effects of the development could be mitigated through the implementation of a watching brief during ground preparation and excavation of the Pile Caps.

11 CONCLUSION

- 11.1.1 This DBA has demonstrated that the Site contains a high potential to contain significant archaeological remains dating from the Prehistoric, Roman and post medieval periods. Of particular significance is the possibility of remains of the Civil War defences being present. There is however no indication that the site has the

potential to contain deposits of sufficient importance to prevent or act as a significant constraint to development.

- 11.1.2 Although the Site has been subject to development in the 19th and 20th centuries there is good potential for it to contain undisturbed archaeological remains in the area of the lightweight structures at the southern end of the Site. It is unlikely that remains will be present within the footprint of the basement beneath the Tinbergen Building.
- 11.1.3 Although detailed development plans have not been finalised, current proposals involve the demolition of the 20th century lightweight structures and the subsequent construction of a new two storey building. The new building will not greatly increase the footprint currently covered by the lightweight structures. It is proposed that the new building will be constructed using pile foundations.
- 11.1.4 Further archaeological works may be required in order to further identify and record surviving archaeological deposits prior to them being affected by the development. This is likely to involve an Archaeological Watching Brief or Evaluation. Any planned works will need to be agreed with David Radford of Oxford City Council.

Oxford Archaeology

July 2015

Appendix One

Gazetteer of known archaeology within the Study Area

OA = Oxford Archaeology

UAD = Oxford City Urban Archaeological Database

NMR = National Monuments Record

HS = Historic Sources

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
1	Listed Building	No 1, South Parks Road - House, now University of Oxford offices built in 1868-9, by William Wilkinson, for John C. Wilson. Buff brick with red brick dressings and plain-tile roof with various elaborate ridge and end stacks. High Victorian style with string courses and mostly with stone mullion windows with sashes. Grade II Listed Building	MOX23564
2	Listed Building	No 2, South Parks Road - House, now University of Oxford offices built in 1865-6, by William Wilkinson, for George Rolleston. Brick in three colours with brick dressings, string course and eaves cornice. Plain tile hipped and gabled roofs with terracotta flashings and various elaborate ridge stacks. High Victorian style with Gothic arched relieving arches of various types over segmental or flat brick stone arches to sash windows. Grade II Listed Building	MOX23565
3	Listed Building	Dyson Perrins Chemistry, Laboratory, South Parks Road - A Chemistry Laboratory built in 1911-13 with 1920-22 addition and later additions to the side and rear, by Paul Waterhouse. Red brick and ashlar elevations. Grade II Listed Building	MOX15794
4	Listed Building	Wadham College, East Garden Wall - On East of Fellows' Garden 1685 at cost of Robert Smith, M D. Mayor of Wells. Rubble. Two small excavations were carried out to establish the origins of a small stone building against the eastern boundary wall of the college. The conclusion was that it had been adapted from a Friary building but that the visible stone mouldings were re-used and had been inserted since the Dissolution. Grade II Listed Building	MOX14841

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
5	Listed Building	Mansfield College - Founded as a theological College by the Congregationalists in 1886. Built in Milton ashlar in 1887-89 on three sides of a square facing South, to the late Gothic designs of Basil Champneys, Robert Bridgeman being the carver. Grade II* Listed Building	MOX14889
6	Listed Building	No 1 Saville Road - Built in 1902 by C. Nicholson. Roughcast rendered with Bath stone dressings and a plain tile roof. Two storeys with attic in three bays with a wing to rear right. Ashlar quoin strips to the corners and to the ground-floor openings of the entrance elevation. Grade II Listed Building	MOX15003
7	Listed Building	Mansfield College, Screen in front of the Chapel along Mansfield Road - A stone plinth wall, piers with moulded caps, panels of cast and wrought-iron, erected in 1886. Grade II Listed Building	MOX15729
8	Listed Building	No 9, Mansfield Road - Built in 1892-3 by Sir T G Jackson in the early 17th century style. Coursed rubble with ashlar dressings, two storeys and attic. Projecting 2-storey porch with Venetian window above the door. Red tile roof and chimneys of red brick and stone bands. Grade II Listed Building	MOX15186
9	Listed Building	University of Oxford, St Cross Building, Manor Road - Library and teaching space for Law, English and Statistics. Built between 1961 and 1965 by Sir Leslie Martin and Colin St John Wilson. Buff brick with a raked joint to every third course, black anodised aluminium; flat roof. Compact, interlocking plan of one to three storeys comprising three libraries, each of different sizes and at different levels. Grade II* Listed Building	MOX15694
10	Listed Building	Holywell Manor House, St Cross Road - The original house was rebuilt in 1516 by Merton College and parts of this remain but the whole was reconditioned with considerable additions in the early 20th century. The ancient block is L shaped in plan with wings to the North and East. Grade II Listed Building	MOX11517
92	Listed Building	Manchester College, A theological college mainly supported by Unitarians and transferred to Oxford in 1889. Built in Doultong ashlar with dressings of Darley Dale Millstone Grit in 1890-3 to the late Gothic designs of Thomas Worthington and F M Elgood. Grade II Listed Building	1046676

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
11	Registered Park and Garden	Wadham College, Grade II Registered Park and Garden. College quadrangles and gardens, laid out between the late 18th and 20th centuries and incorporating the site of formal 17th century gardens.	1001293
12	Registered Park and Garden	The University Parks, Oxford, Grade II Registered Park and Garden. Mid 1860s suburban park, with playing fields laid out in the 1870s, and an associated pleasure walk (1865) alongside the River Cherwell. The site was laid out by the University of Oxford for use principally by the staff and students but with access also for the residents of Oxford.	1001651
13	Archaeological Remains	Site of Civil War Defences, South Parks Road - Below the modern bank lay banks of loam, gravel and gravelly loam m which suggested that the defences may have been made of good plough soil and may have utilised an existing headland as a bank. The top bank of loam m overlay a collapsed wall-like structure. Site immediately east of the north-south element of Civil War defences. The defence ditch was sectioned in part. A shallow slot parallel to ditch edge 4m to the east may also have been 17th century in date. The rest of the site contained Roman features of 2nd - 4th century date. A series of 2nd century North-South ditches and roughly parallel ditch alignments to east and west respectively were identified. Post holes and gullies between may indicate site of a rectilinear timber structure dating from the mid 3rd-4th century. Carbonised grain and plant remains were recovered. A small isolated pit contained Neolithic flint work. The NNW-SSE aligned Civil War ditch lay beneath the western margin of the site.	MOX11886
14	Findspot	Find from Parks Road in 1862 - A medieval seal was found in a garden south-east of the University Museum.	MOX25420

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
15	Archaeological Remains	Bronze Age Barrow at Oxford University Science Area - One ditch about 3m deep at the eastern end of the observatory and two 1.8m wide and 1.8m deep at the south west of the site were seen in 1958. The contractor's excavations for the new laboratory exposed four ditch sections, suggesting a double concentric ring. A burnt pit with a cremation was also found. Excavation showed this to have been a secondary deposit in the barrow mound. Single ring ditches, seen in AP's, 150m to north indicate this may be part of a major barrow cemetery. Contractor's trenching exposed the intersection of two ditches, part of an undated field system, in an area close to a known Bronze Age barrow. A pit with Early Iron Age sherds in base was also found.	MOX11611
16	Archaeological Remains	Excavations north of the Rex Richards Building, University Science Area, in 1993 - Work was carried out prior to construction of an underground magnet house. The work enabled the fills of the two concentric barrow ditches located in 1982 to be investigated and more information gathered about the later features cut into these. A number of ditches and pits were identified although they were disturbed by modern pipe trenches. The fills contained a quantity of Iron Age pottery, mostly early to middle. It was not possible to identify the nature of the Iron Age activity from the features seen. Two Roman pot sherds were found in the ploughsoil and quantities of animal bone were found.	MOX25368
17	Findspot	Roman Vase (University Observatory) - A Roman Vase was found while digging the foundations of the Observatory in 1876.	MOX11484
18	Findspot	Finds from 2 South Parks Road in 1862-71 - Artefacts were found in the garden of Professor Rolleston's house. A piece of Roman quern and part of a mortarium were recorded in 1871. Earlier finds included a seal and gibbet irons.	MOX25471
19	Findspot	Building work at the University Observatory in 1876 - When the foundations of the Observatory were dug, part of a vase was found. This was originally thought to be Roman, but is recorded in the Ashmolean Museum as 17th century.	MOX24877
20	Findspot	Watching Brief at the Rex Richards Building, University Science Area, in 1982 - A single prehistoric flint flake was recovered.	MOX25634

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
21	Archaeological Remains	Prehistoric to Civil War Activity at 2-4 South Parks Road - The site consists of three main periods: Neolithic/Bronze Age activity was revealed in the form of pits and a single ditch. Roman occupation ranged from the 2nd - 4th centuries and exhibited features (ditches, inhumation, and gully ditch around a haystack) that lie on the edge of settlement. It is possible that there was a North - South boundary between this site and that found on Mansfield Road. The final period was that of the Civil War with an excavated ditch postulated to be an outer defensive ditch.	MOX23199
22	Archaeological Remains	Excavations at the Rodney Porter Building, University Science Area, in 1989 - A trench was dug before construction of the new building and a watching brief carried out during the work. The trench crossed the two concentric Bronze Age barrow ditches located in 1982 at the Rex Richards Building. Both ditches had a U section. A number of later features had been cut into the ditch fills including ditches, but the nature of the contractors' work made it difficult to interpret these. One pit cutting the ditches contained early Iron Age pottery.	MOX25200
23	Findspot	Find from the University Parks in 1879 - A brass tradesman's token, marked Edward Witts 1666, was recovered.	MOX25463
24	Findspot	Excavations in the University Parks in 1877 - During gravel digging near the new Observatory a 17th century jug was found.	MOX25348

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
25	Archaeological Remains	Excavations at Mansfield College in 1998-9 - Much of the site was occupied by Roman features, mostly from the 3rd - 4th centuries although some late 1st or early 2nd century ditches were found. Parallel ditch alignments flanking post holes and gullies suggested rectilinear enclosures during both periods. One possible timber structure from the later Roman period was identified. An infant burial from that period was also recovered. Finds, including charred grain and peas, suggested a low status rural site. Part of the Civil War defence ditch also crossed the site and was investigated. A shallow slot parallel to the ditch edge and 4m east of it may also be 17th century. During 1999 an isolated pit with Neolithic flint was found. More Roman material was recovered and a fairly substantial enclosure located in the south-west corner. A small amount of Neolithic/ Bronze Age lithic implements were also recovered.	MOX25120
26	Findspot	Building work at Mansfield College in 1887 - When the foundations for the college were dug, two Roman pots were found. A bronze nail and thimble were also recovered.	MOX24870
27	Findspot	Finds from the University Parks in the 19th Century - Medieval pottery was collected, much of which was in the Goldie Collection.	EOX5179
28	Findspot	Excavations at Mansfield College in 1992 - Small amounts of prehistoric and Roman pottery were recovered as well as a post medieval clay tobacco pipe. None of the finds came from securely dated contexts.	MOX25119
29	Findspot	Roman Pot (Mansfield College) - A small pot, patterned and painted, was recovered from the foundations of the college in 1887.	MOX11442

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
30	Archaeological Remains	Civil War Ditch, Roman settlement and Neolithic pit at Mansfield College -An evaluation was carried out through the line of supposed Civil War earthwork defences, which form part of the southern boundary of the college. The surviving portion of the defences run East - West and are 2.4m high. A ditch to the North of the earthwork was confirmed by trenches. The ditch was 7m wide and over 2m deep. A small excavation in two areas fronting Love Lane revealed single Neolithic pit, dated by flintwork), part of a Roman settlement, and a section of a ditch forming part of the Civil War defences. Roman occupation was rural in nature, and based on ditched enclosures; two main phases were identified: late 1st-mid 2nd century, and late 3rd - 4th century.	MOX12048
31	Findspot	Excavations at Manchester College in 1913 - When the new Arlosh Hall was constructed post medieval pottery and clay pipes were found.	MOX25118
32	Findspot	Evaluation at Sir William Dunn Laboratory, University Science area, in 1995-6 - A single sherd of Iron Age pottery was found.	MOX24928
33	Archaeological Remains	Undated Pits, Sir William Dunn School of Pathology - A watching brief revealed a low density of archaeological activity, with most features of modern date. Two undated pits were recorded at the eastern edge of the site.	MOX12064

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
34	Archaeological Remains	Evaluation at Savile House, Mansfield Road, Oxford - Oxford Archaeology undertook an archaeological evaluation, topographical survey and auger survey of the upstanding Royalist Civil War defensive bank at Savile House. Two trenches were excavated, both measured 1.5m ² in plan. Both were shored and fully excavated to the top of the underlying terrace gravel. The evaluation revealed a post hole cut into the Summertown-Radley terrace gravel, overlain by a series of deposits forming an earthen bank. A shallow mixed deposit of sand, gravel and silt, that could suggest the stripping of topsoil and trample, was overlain by a bank of re-deposited loessic subsoil, this was in turn overlain by a very compacted layer of re-deposited sand and gravel. An Optically Stimulated Luminescence sample from the re-deposited loess produced a date range of AD 880-1045, this date suggests that the Royalist defensive line in this location utilised a pre-existing landscape feature, perhaps a Late Saxon agricultural earthwork.	MOX26855
35	Archaeological Remains	Prehistoric and Early Roman Field Systems at Halifax House -Excavation has produced evidence of human activity from Mesolithic/Neolithic flints to 19th century landscaping. Earliest features date to the Bronze Age, consisting of a single ditch with an adjacent pit. Iron Age features include a ditch and pit in the centre of site. The large shallow pits at the centre of the site may also date to the Iron Age. Iron Age and Roman activity has been excavated to the North and West of this site. The remains suggest minor rural settlement of Middle or Late Iron Age date which does not remain in occupation for very long into the Roman period.	MOX23197
36	Findspot	Finds from the University Parks in the 19th Century - Roman pot sherds form part of the James Parker Collection.	EOX5177
37	Archaeological Remains	Undated Curvilinear Ditch, University Clubhouse, Mansfield Road - Evaluation revealed an undated curvilinear ditch, thought likely to be prehistoric.	MOX23812

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
38	Archaeological Remains	Site of Civil War Town Defences, Mansfield Road - Near King's Mound House is a scarp 1.2-1.5m high continuing on the west side of Mansfield Road which becomes a definite rampart forming the north eastern boundary of Wadham College garden. It is 10.4m wide and 2.1m above the garden. The mound is shown on early maps as a kink on the inner line of defences. A map of 1837 names it as a Potter's mound. At this time Mansfield Road was not made and the mound formed part of the boundary between the Parks and Holywell gardens.	MOX11769
39	Findspot	Find from Merton College Cricket Ground in 1886 - A bronze token was recovered.	MOX25412
40	Findspot	Excavations in the University Parks in the 18th Century - Roman coins were found during the work.	MOX25350
41	Archaeological Remains	Post Medieval Bank & Ditch (between Playing Fields, Mansfield Road and St Cross Road) - A contractor's trench across the presumed line of the Civil War defences did not identify features of Civil War date. The extant bank and ditch are likely to date to the 19th or 20th century.	MOX11915
42	Archaeological Remains	Civil War Defensive Ditch, New College Sports Ground, St Cross Road - The watching brief identified that the foundations of the demolished houses had not obliterated evidence for the width and shape of the Civil War ditch. The development area was known to be located on the city's Civil War defences, which were constructed c.1642 incorporating earlier medieval defences, and which were still visible in this location on the OS map of 1875. The ditch was c.6m wide and was filled by two deposits which contained post-medieval finds and other finds dating from the 19th and 20th centuries. No traces of the internal rampart were observed. It is likely that the fills were dumped into the ditch at a relatively recent date to level the area.	MOX12074
43	Findspot	Excavations in St Cross Road in 1961-4 - During construction of the Law Library a large quantity of pottery was recovered, some of which was post medieval.	MOX25325
44		Number not used	
45	Findspot	Prehistoric Antler Implement - A prehistoric perforated Celt of antler was found in Manor Road.	MOX11518

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
46		Number not used	
47		Number not used	
48		Number not used	
49	Archaeological Intervention	Watching Brief at New Earth Sciences Oxford University Science Area South Parks Road, Oxford - a watching brief was maintained during the construction of the New Earth Sciences building in the University Science Area. No archaeological features of interest were observed during monitoring of the ground works.	EOX4484
50	Archaeological Intervention	Watching Brief at Gene Function Site, South Parks Road, in 1999 - The excavation of geotechnical pits and service location pits before construction were monitored. No archaeological features or finds were recorded.	EOX4859
51	Archaeological Intervention	Centre for Gene Function, South Parks Road, Oxford - Excavations revealed part of a late Neolithic/early Bronze Age ring ditch enclosing the crouched inhumations of a child and three adult females. Radiocarbon dating of the four skeletons indicates that the barrow was used as a place of burial over several centuries. The earliest and richest burial of an adult female, 2460 to 2040 cal. BC, is unusual in having suffered a blow to the back of the head, probably from a bronze axe. This injury is one of the few documented examples of violence in the late Neolithic/ early Bronze Age period in Britain.	EOX4308
52	Archaeological Intervention	Excavation of Barrow under Rex Richards Building in Oxford University Science Area - An archaeological watching brief was undertaken in 1982 and excavations to the East were undertaken in 1989. The excavation consisted of three sections through ditches.	EOX1299

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
53	Archaeological Intervention	Excavations north of the Rex Richards Building, University Science Area, in 1993 - Work was carried out prior to construction of an underground magnet house. The work enabled the fills of the two concentric barrow ditches located in 1982 to be investigated and more information gathered about the later features cut into these. A number of ditches and pits were identified although they were disturbed by modern pipe trenches. The fills contained a quantity of Iron Age pottery, mostly early to middle. It was not possible to identify the nature of the Iron Age activity from the features seen. Two Roman pot sherds were found in the ploughsoil and quantities of animal bone were found.	EOX4716
54	Archaeological Intervention	Recording at Memorial Garden, Rothermere Centre, South Parks Road - excavation for foundations of garden features exposed a Roman ditch and confirmed the line of the Civil War defences.	EOX4355
55	Archaeological Intervention	Watching Brief at the Department of Physiology in 1998 - Work was carried out when piles and service trenches for an extension were dug. No archaeological finds or features were recorded.	EOX4950
56	Archaeological Intervention	Excavations at Mansfield College in 1998-9 - Work was carried out prior to construction of an Institute for American Studies. Much of the site was occupied by Roman features, mostly from the 3rd - 4th centuries although some late 1st or early 2nd century ditches were found. Parallel ditch alignments flanking post holes and gullies suggested rectilinear enclosures during both periods. One possible timber structure from the later Roman period was identified. An infant burial from that period was also recovered. Finds, including charred grain and peas, suggested a low status rural site. Part of the Civil War defence ditch also crossed the site and was investigated. A shallow slot parallel to the ditch edge and 4m East of it may also be 17th century. During 1999 an isolated pit with Neolithic flint was found. More Roman material was recovered and a fairly substantial enclosure located in the south-west corner.	EOX4822

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
57	Archaeological Intervention	Watching brief at University Science Waste Area, Oxford University, Oxford - An archaeological watching brief was undertaken by Oxford Archaeology during the ground works associated with the construction of a new University Science Waste Store sited adjacent to the Old Observatory and Observation Tower and abutting University Parks in January 2015. The watching brief observed that the area of the proposed development and associated works was located on a terrace of modern made ground, possibly arising from the construction of the buildings immediately to the south. The depth of impact was such that archaeologically significant layers were not exposed.	EOX5842
58	Archaeological Intervention	Watching Brief at the Rex Richards Building, University Science Area, in 1982 - A single prehistoric flint flake was recovered.	EOX4714
59	Archaeological Intervention	Prehistoric and Roman Activity and a Civil War Ditch: Excavations at the Chemistry Research Lab, 2-4 South Parks Road, Oxford - An archaeological Evaluation revealed Roman ditches and associated postholes along with some modern features. Following on from this work, an excavation was done.	EOX1879
60	Archaeological Intervention	Watching Brief at Mansfield College in 1999 - The excavation of ten geotechnical test pits was monitored on the site of the proposed new chemistry and molecular science laboratory. No archaeological features were identified and no finds retrieved.	EOX4850
61	Archaeological Intervention	Prehistoric and Roman Activity and a Civil War Ditch: Excavations at the Chemistry Research Lab, 2-4 South Parks Road, Oxford - An area of c. 70 x 70m was excavated; work done in 4 stages as spoil was stockpiled on site and reused to construct the pile mats.	EOX1880

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
62	Archaeological Intervention	Excavations at the Rodney Porter Building, University Science Area, in 1989 - A trench was dug before construction of the new building and a watching brief carried out during the work. The trench crossed the two concentric Bronze Age barrow ditches located in 1982 at the Rex Richards Building. Both ditches had a U section. A number of later features had been cut into the ditch fills including ditches, but the nature of the contractors' work made it difficult to interpret these. One pit cutting the ditches contained early Iron Age pottery.	EOX4715
63	Archaeological Intervention	Mansfield College - An archaeological Watching Brief revealed details of the construction of the main college buildings and deposits of made ground associated with the 19th century landscaping of the college grounds.	EOX2643
64	Archaeological Intervention	Roman settlement at Mansfield College - An archaeological watching brief was undertaken to investigate Civil War earthworks, but other remains were Roman, necessitating a small excavation over two years.	EOX819
65	Archaeological Intervention	Excavations at New Chemistry labs, South Parks Road, in 2001 - The excavation exposed a Neolithic pit alignment, a Bronze Age boundary ditch or cursus, and two phases of Roman settlement, possibly representing two farmsteads. The implication for the important Roman finds from Mansfield College adjoining is that there is no villa, but perhaps a relatively high status farmstead. The Civil War outer trace at this point proved to have a wet ditch, which was only slowly infilled.	EOX4338
66	Archaeological Intervention	Excavations at New College School in 1959 - When work was carried out on construction of the hall and classroom block, it is said that sections of the Civil War Ditch were uncovered.	EOX3857
67	Archaeological Intervention	Watching brief at Mansfield College - Groundworks for a new accommodation block provided four sections across the Civil War defence. Section 2 shows the front of the embankment to south, Section 3 showed the inside edge of the ditch, and Section 4 showed the outer edge of the ditch with gravel and a buried soil profile.	EOX4349

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
68	Archaeological Intervention	Excavation at New Buildings and Kitchen Terrace site, Mansfield College, Oxford - geo-technical test pitting and bore holing, at Mansfield College, were monitored. This revealed details of the construction of the main college buildings and deposits of made ground associated with the 19th century landscaping of the college grounds.	EOX4404
69	Archaeological Intervention	Excavations at Mansfield College in 1992 - Work was carried out prior to building development and targeted the supposed line of the Civil War defences. The southern boundary of the college consists of an East - West aligned earthen bank. The excavations found a large ditch running along the north side of the bank, at least 7 m wide and 2 m deep. There was no reliable dating evidence.	EOX4776
70	Archaeological Intervention	Mansfield College, Oxford: Archaeological Evaluation - An evaluation trench was excavated through the line of Civil War defences, which survive as an earthwork on the South side of the college.	EOX1364
71	Archaeological Intervention	Sir William Dunn School of Pathology - The majority of features observed during an archaeological watching brief were modern. The absence of finds from one possibly man-made pit feature made it impossible to date. Despite localised truncation or removal of potential archaeological horizons, which might have resulted in destruction of small features, it is clear that substantial features would have been identified if present.	EOX2842
72	Archaeological Intervention	Evaluation at Sir William Dunn Laboratory, University Science area, in 1995-6 - Work was carried out before construction of an extension for the School of Pathology. It was followed by a Watching Brief. No archaeological features were identified. Early ploughsoils containing medieval pottery were seen. A single sherd of Iron Age pottery was also found.	EOX4717

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
73	Archaeological Intervention	Evaluation at Savile House, Mansfield Road, Oxford - Oxford Archaeology undertook an archaeological evaluation, topographical survey and auger survey of the upstanding Royalist Civil War defensive bank at Savile House. Two trenches were excavated, both measured 1.5m ² in plan. Both were shored and fully excavated to the top of the underlying terrace gravel. The evaluation revealed a post hole cut into the Summertown-Radley terrace gravel, overlain by a series of deposits forming an earthen bank. A shallow mixed deposit of sand, gravel and silt, that could suggest the stripping of topsoil and trample, was overlain by a bank of re-deposited loessic subsoil; this was in turn overlain by a very compacted layer of re-deposited sand and gravel. An Optically Stimulated Luminescence sample from the re-deposited loess produced a date range of AD 880-1045, this date suggests that the Royalist defensive line in this location utilised a pre-existing landscape feature, perhaps a Late Saxon agricultural earthwork.	EOX5894
74	Archaeological Intervention	Halifax House South Parks Road Oxford. An archaeological watching brief revealed a complex of prehistoric and Roman field systems including ditches, gullies, pits and postholes with pottery and animal bone were identified, as were some later plough scars and 19th century garden features.	EOX4300
75	Archaeological Intervention	Prehistoric and Early Roman Field Systems at Halifax House, South Parks Road - The redevelopment of houses along South Parks Road was monitored by means of an archaeological Watching Brief. The northern half of the site was truncated by deep cellars, but gardens in the southern part of the site were undisturbed. Excavation concentrated in this area, and revealed Late Iron Age and Romano-British agricultural activity.	EOX1877
76	Archaeological Intervention	Excavation on the site of the new Oxford Molecular Pathology Institute, University Parks, Oxford - An archaeological strip, map and record excavation was undertaken during the redevelopment of the OMPI. A single east - west gully dated to the Roman period was recorded.	EOX3892

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
77	Archaeological Intervention	Evaluation behind 6-8 South Parks Road in 1996 - No features were found on the land behind these properties although a few finds were recovered.	EOX4805
78	Archaeological Intervention	Civil War Defences, RCHME 1939 - Civil War earthworks only survive in small portions in the NE of the city. Defences were thrown up at the outbreak of war, but these were largely destroyed by Parliamentarian troops. In 1642, after the King's entry, a complete scheme recorded in Gomme's plan was constructed. These were slighted and dismantled in March 1647.	EOX5276
79	Archaeological Intervention	Land to rear of 6-8, South Parks Road - An archaeological Evaluation comprising of three small machine-cut trenches produced no significant archaeological features or deposits. A very small quantity of finds was recovered.	EOX2834
80	Archaeological Intervention	Evaluation and watching brief at the new University Club House, Mansfield Road, Oxford - The evaluation revealed an undated curvilinear ditch, thought to likely be prehistoric. Modern services and tree roots obstructed excavations designed to locate features associated with the extant earthworks known as 'Kings Mound'. Terracing on the site was found to be a result of landscaping for the current playing field. The subsequent Watching Brief, in 2003, revealed the presence of part of the inner Civil War defences in the form of a ditch and associated bank.	EOX4296
81	Archaeological Intervention	University Clubhouse, Mansfield Road - An archaeological Evaluation revealed an undated curvilinear ditch that is thought to be prehistoric.	EOX2780
82	Archaeological Intervention	An Archaeological Evaluation at Linacre College, Oxford - A single, undated, 'ditch like' feature was encountered.	EOX2374
83	Archaeological Intervention	Evaluation at Linacre College Garden, Oxford - The only sign of human intervention on the site was the presence an alluvium filled ditch like feature on the edge of a dark organic layer. This was located in two of the trenches but was inexplicably missing from a middle trench, suggesting its irregularity was more due to natural factors than human agency. From the fill of one 'ditch segment' came an oyster shell and a small fragment of possible roof tile. No other features or artefacts were noted from the site.	EOX3882

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
84	Archaeological Intervention	Excavations in St Cross Road in 1982 - Work was carried out for Keble College squash courts. A break of slope on the north edge of Balliol College sports field was believed to be part of the Civil War defences. The excavation was expected to show a ditch in front of the bank. No ditch was found and the bank proved to be 19th century rubbish.	EOX4753
85	Archaeological Intervention	New College Sports Ground, St Cross Road - Initial fieldwork on site was confined to establishing how much of the Civil War defence ditch survived in plan and then making a scaled plan of the ditch within the development site. It quickly became clear that the foundations of the demolished houses, while invasive in terms of depth, had not obliterated evidence for the width and shape of the ditch. The watching brief has established that the majority of the ditch survives both in plan and section; the piled foundation design ensured minimal disturbance of in situ archaeological deposits.	EOX2794
86	Archaeological Intervention	Watching Brief at New College Sports Ground in 1998 - Work was in advance of construction of residential accommodation. Five houses were demolished. Below the demolition remains of the Civil War defence ditch had survived. It was c. 6m wide and filled with two deposits of post medieval and later material. The internal rampart was not seen.	EOX4823
87	Archaeological Intervention	Excavations in St Cross Road in 1961-4 - Work was carried out for construction of the Law Library. Large quantities of pottery were recovered, some of which was post medieval.	EOX3846
88	Archaeological Intervention	Cottages NW of Holywell Manor, St Cross Road, MHLG, 1950 - A building survey was undertaken and the Cottages were found to date from the 18th century were single-storeyed and of coursed rubble construction.	EOX4186
89	Archaeological Intervention	Building Survey at Holywell Manor House in 1999 - The house was constructed in 1516. No details of the survey are available.	EOX5255

<i>New OA Ref. No</i>	<i>Feature Type</i>	<i>Description</i>	UAD Source
90	Archaeological Intervention	Holywell Manor House, RCHME 1939 - Holywell Manor House is now an annex of Balliol College. It stands immediately North of St Cross church. It is of two storeys with cellars and attics; the walls are of rubble and the roofs are slate-covered. It was rebuilt in 1516 by Merton College.	EOX5308
91	Archaeological Intervention	Former Cock Pit, Holywell Manor - Archaeological investigations revealed the lowered area around the fighting stage of a 17th century cock pit. The purpose-built, octagonal cock pit building appears to have overlaid the infilled ditch of the north side of the manor house which was held by the church of St Peter in the East at Domesday and later by Merton College.	EOX2881

Appendix 2

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1:2500 Ordnance Survey Map of Oxford 1876

1:500 Ordnance Survey Map Oxford 1889

1:10560 Ordnance Survey Map of Oxford 1887

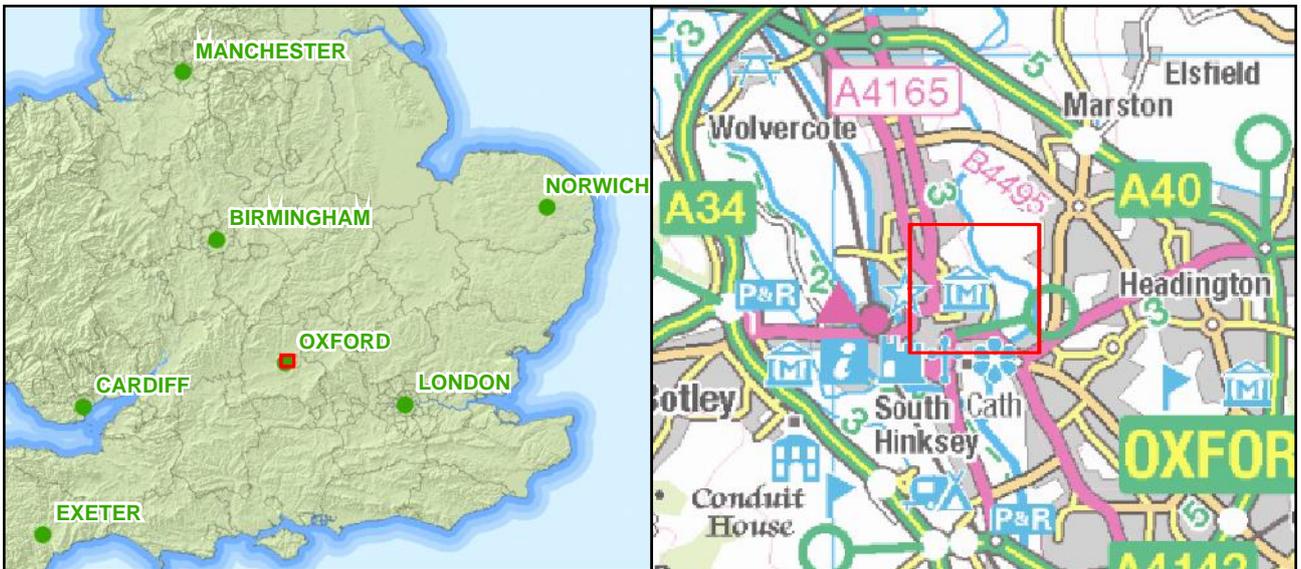
1:2500 Ordnance Survey Map of Oxford 1900

1:2500 Ordnance Survey Map of Oxford 1921

1:2500 Ordnance Survey Map of Oxford 1939

1:1250 Ordnance Survey Plan 1958

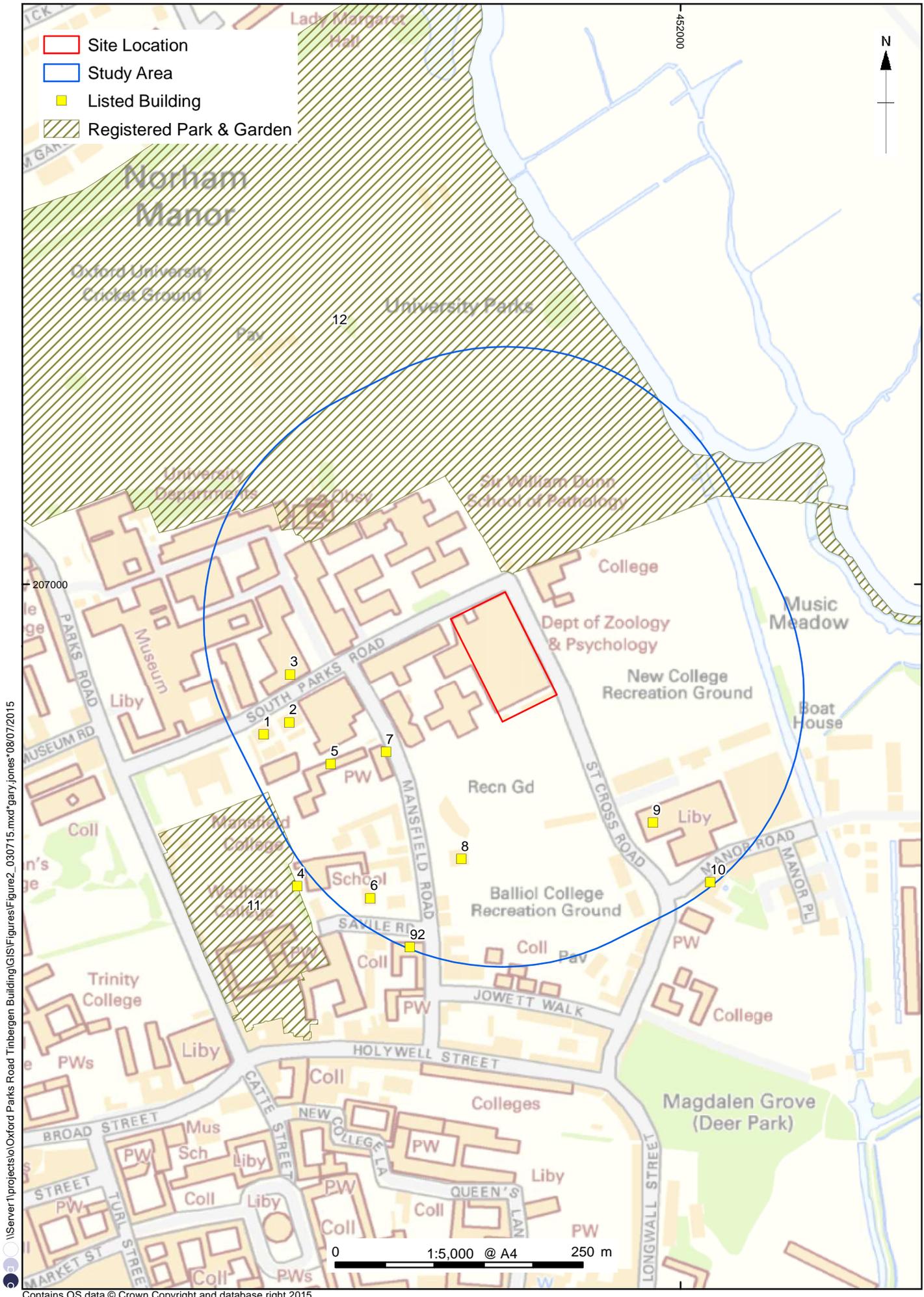
1:1250 Ordnance Survey Plan 1970



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Figure 1: Site location



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Figure 2: Designated Features

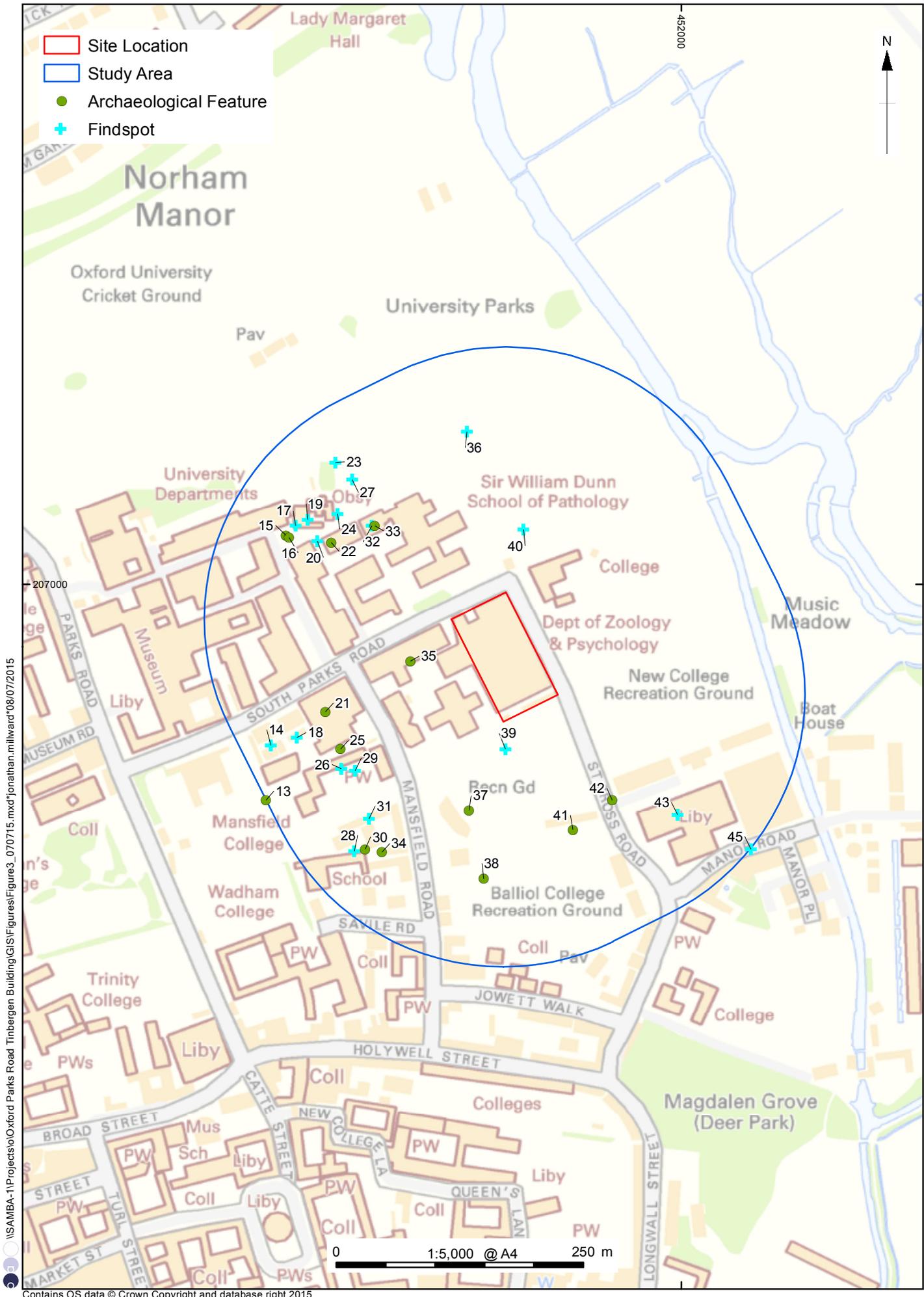


Figure 3: Archaeological Sites



Site Location
Study Area

Figure 5: Loggan's Map of Oxford, 1675

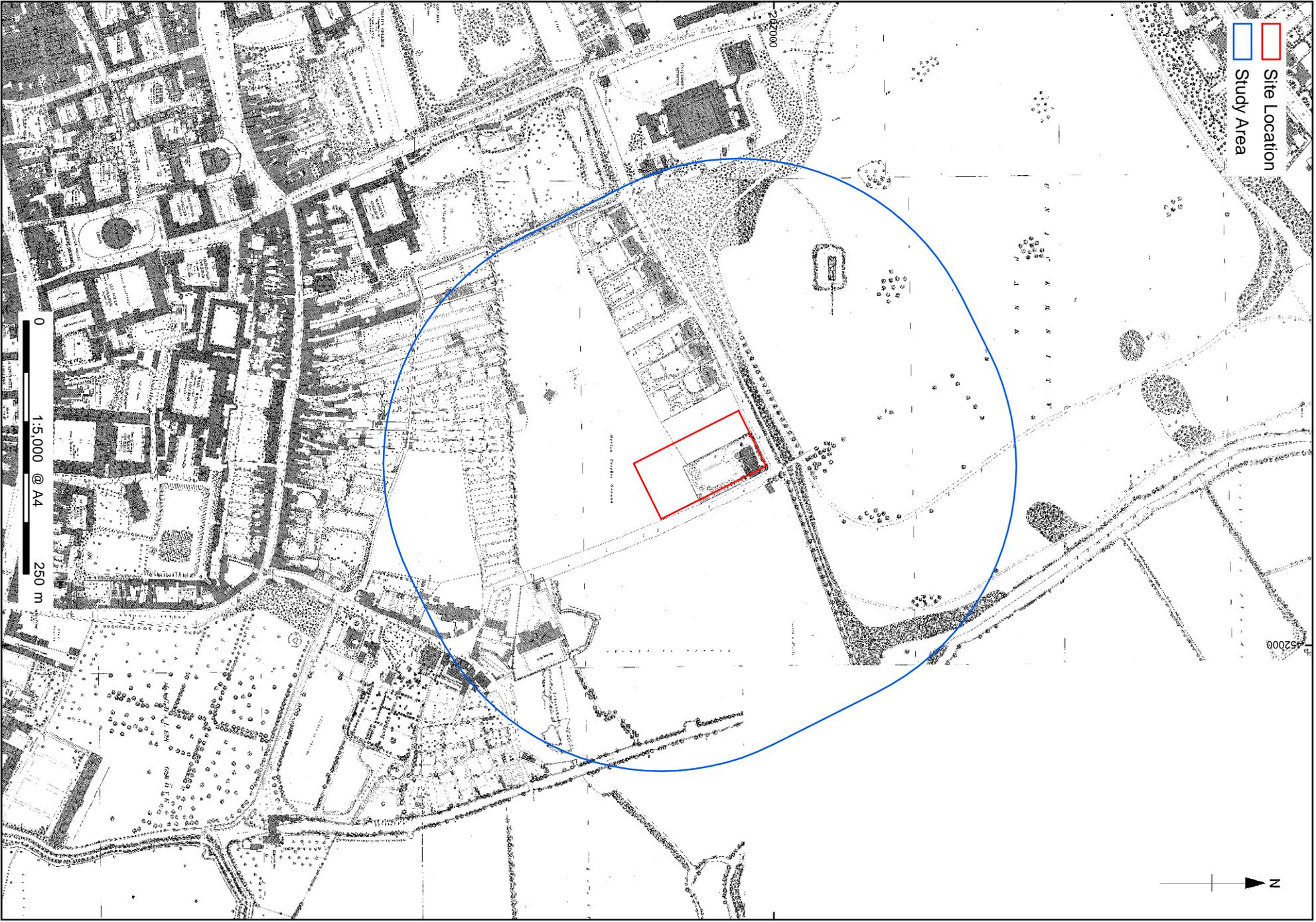


Figure 6: Ordnance Survey Map of Oxford, 1876



Figure 7: Plan of the Development Proposals



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