

Hinksey Fish-pass, Iffley,  
Oxfordshire



Archaeological Evaluation and  
Watching Brief Report

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## Hinksey Fish-pass, Iffley, Oxfordshire

### *Archaeological Evaluation and Watching Brief Report*

*Written by Mike Sims*

*with contributions from Matt Morgan and illustrated by Markus Dylewski*

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## Summary

*Between September and October 2012 Oxford Archaeology conducted an archaeological test-pit evaluation and watching brief during the construction of a new fish pass at Hinksey Side Weir, South Hinksey, Oxford (NGR: SP 5216 0466). The initial test-pitting revealed two distinct peat deposits overlaid by a sequence of alluvial deposits below topsoil along the length of the channel. Further monitoring of the peat deposits was undertaken because of the possibility of preservation of organic artefacts or structures, but did not reveal any artefactual evidence or evidence for cultivation, nor was any artefactual evidence recovered from the overlying alluvial deposits. Nevertheless, assessment of the peat deposits revealed that waterlogged plant and insect remains were moderately well-preserved, and a radiocarbon date of 670-775 cal AD was obtained on a waterlogged seed from the lower peat deposit. This middle Saxon date is consistent with the general environmental sequence previously suggested from St Aldates, but provides closer dating for peat formation than in earlier investigations. The seeds that were identified suggested an entirely natural vegetation, with no evidence for cultivation in the immediate vicinity at this time. This appears consistent with the apparent absence of mid-Saxon occupation south of the Thames at Oxford.*

## 1 INTRODUCTION

### 1.1 Scope of work

- 1.1.1 Between September and October 2012 Oxford Archaeology (OA) conducted an archaeological test-pit evaluation and watching brief on behalf of the Environment Agency (EA) during the construction of a fish-pass on a branch of the River Thames at Hinksey Side Weir, near Iffley Lock, Oxford (Centred at NGR: SP 5216 0466).
- 1.1.2 The work was undertaken as a condition of Planning Permission (planning ref: 11/03293/FUL). It was initially proposed that the excavation of six test-pits along the length of the proposed route would satisfy the condition, but following the recognition of peat deposits within these test pits, it was realised that these waterlogged deposits not only provided valuable evidence for the past environment of Oxford, but also indicated the potential for the survival of waterlogged organic artefactual evidence such as wooden structures or objects, and objects of bone. The City Archaeologist, David Radford, therefore requested further monitoring of the excavation of the peat deposits found below alluvium along the length of the new channel.
- 1.1.3 OA produced a Written Scheme of Investigation (WSI) showing how it would meet the requirements (OA 2012a; OA 2021b). The work was managed for OA by Tim Allen.

### 1.2 Location, geology and topography

- 1.2.1 The site is situated on the southern edge of the City of Oxford. The fish-pass lay adjacent to the River Thames on its eastern and southern sides, and crossed the floodplain, which continued north and west of its line.
- 1.2.2 The area through which the fish-pass was cut consists of level open grassland at a height of approximately 55m AOD, and is currently used as a mixture of amenity ground and grazing (Fig. 1).
- 1.2.3 The geology of the area is alluvium over 1st Terrace River Gravel (Geological Survey of Great Britain, sheet no. 236) .



### 1.3 Archaeological and historical background

- 1.3.1 Although the location of the proposed fish-pass is close to Iffley Lock, the site itself lies on the west side of the Thames within the conurbation of New Hinksey. This area was covered by water meadows until the spread of urban housing southwards from Oxford along the Abingdon Road encroached upon it in the 19th century. The area was previously within Berkshire, and belonged to the parish of South Hinksey, until it was incorporated into the city of Oxford in 1889.
- 1.3.2 In the medieval period the land south of Folly Bridge was held by Abingdon Abbey as part of the Hundred of Hormer (VCH Oxon, iv, 260). In 2006 OA produced a Desk-Based Assessment (DBA) for a site located approximately 800m to the south-west of the development area. As part of this DBA a map regression of the area was produced which also encompassed the site of the proposed fish-pass. These maps included the 16th-17th century New College Map, Rocque's map of Berkshire of 1761, Andrew's and Dury's map of the country around London, 1777, Ordnance Survey 1st edition Twenty Five inch map of 1875 and the Ordnance Survey Six Inch Map of 1956. The area of the proposed fish-pass has consistently been depicted as open land, with no evidence of any field boundaries or structures in its vicinity on any of these maps (OA, 2006).
- 1.3.3 There are no known archaeological sites within the immediate area. The nearest archaeological site is a middle Iron Age settlement at Whitehouse Road, approximately 1 km to the north-west (Mudd 1993), and environmental evidence of the Iron Age was recovered from St Aldates (Dodd 2003, 10).
- 1.3.4 Stray finds of early Saxon date have come from Iffley across the river, and a settlement was found further downriver at the Oxford Science Park, Littlemore (Dodd 2003, 12). A burial from Christchurch indicates that there was Saxon occupation in the 7th century AD, and documentary evidence suggests that a minster was founded on the site in the 8th century AD.
- 1.3.5 Evidence suggesting an early Saxon stone ford came from St Aldates BT tunnel, sealed by silt containing a timber felled between 577-619 AD, and a mid-Saxon timber bridge at St Aldates dated 660-900 cal AD (Dodd 2003, 15).
- 1.3.6 It is probable that due to its low-lying position, and thus the potential for flooding, the area was not permanently occupied, but its proximity to the River Thames may mean that evidence for features such as fish-traps or structures associated with water transport might be encountered.

## 2 PROJECT AIMS AND METHODOLOGY

### 2.1 Aims

- 2.1.1 The general aims of the watching brief were to:
- establish the presence or absence of archaeological remains within the proposed development area;
  - record the extent, condition, nature, character, quality and date of any archaeological remains affected by the proposed works;
  - establish the ecofactual and environmental potential of archaeological deposits and features within the site and to take samples where appropriate; and
  - make available the results of the investigation.





## 2.2 Methodology

- 2.2.1 The programme of works submitted by the Environment Agency comprised the excavation of approximately 100m of new channel together with associated structures at the connections with the River Thames either side of Hinksey side weir (Fig. 1).
- 2.2.2 The channel measured approximately 5m wide and was of varying depth measured from current ground level, with a minimum depth of 0.75m at its northern end and a maximum depth of 1.54m at the southern, discharge, end.
- 2.2.3 Prior to the excavation of the main channel a series of six test-pits spaced 20m apart were excavated along the length of the proposed route (Fig. 2). This was done using a tracked excavator fitted with a toothless bucket. The results from these test-pits were then used to formulate an appropriate level of archaeological mitigation during the excavation of the channel.
- 2.2.4 The test-pits observed peat deposits sealed below layers of alluvium. It was decided that the alluvial deposits were of minimal archaeological significance and that a watching brief would only be conducted during the excavation of the peat deposits.
- 2.2.5 The channel was excavated using a tracked excavator fitted with a 1.8m wide toothless grading bucket, with the resulting spoil being removed off site by barge.

## 3 RESULTS

### 3.1 Description of deposits

- 3.1.1 The investigation consisted of two distinct phases of work, the initial excavation of the test-pits prior to work starting, and a watching brief conducted during the removal of the peat deposits observed during the test pitting during the excavation of the channel.
- 3.1.2 Each phase of work will be described separately followed by an overall discussion and conclusion.

#### *Excavation of the test-pits*

- 3.1.3 Each of these pits measured approximately 2m long and 1.6m wide. The deposits were removed in a series of 0.15m – 0.2m spits until either the level of impact was achieved or water ingress made further excavation impractical. They were spaced at 20m intervals along the centre-line of the proposed channel (Fig. 2). Environmental samples were taken from all waterlogged deposits with organic remains (hereafter called peat) and in several trenches from the alluvial deposits that overlay them.

#### *Test-pit 1 (Fig. 3, Section 1)*

- 3.1.4 This was excavated to a depth of 1.68m below the current ground level.
- 3.1.5 A layer of dark bluish grey peat was encountered at a depth of 1.32m below ground level (1005). This was sealed by a 0.4m deep layer of blue-grey silty clay (1004), this in turn was overlaid by a 0.2m deep layer of light blue-grey silty clay (1003).
- 3.1.6 Overlying 1003 was a 0.22m deep layer of grey-brown silty clay (1002). Above this was a 0.24m deep layer of mid brown silty clay (1001) which produced charcoal flecking and fragments of post-medieval (19th century) pottery. A 0.26m deep layer of dark brown silty loam topsoil (1000) completed the section. This deposit also produced charcoal flecking and 19th century pottery together with abraded fragments of brick and tile.
- 3.1.7 No significant archaeology was identified in this test pit.

**Test-pit 2 (Fig. 3, Section 2)**

- 3.1.8 Test-pit 2 was excavated to a depth of 1.2m below the current ground level.
- 3.1.9 A layer of light blue-grey peat was observed at a depth of 1m below the current ground level (2006). The environmental sample from this (Sample 8) was processed and assessed for environmental potential, and seeds were extracted for radiocarbon dating (see Appendix C.2). Above this layer was a 0.1m deep band of dark bluish grey peat (2005). This was covered by a 0.12m deep layer of yellowish orange mottled silty clay alluvium (2004). The remainder of the section was composed of a sequence of four deposits analogous to those observed within Test-pit 1 (2003, 2002, 2001 and 2000).
- 3.1.10 No significant archaeology was identified.

**Test-pit 3 (Fig. 3, Section 3)**

- 3.1.11 This was excavated to a depth of 1.3m below the current ground level.
- 3.1.12 A deposit of dark blue-grey peat (3005) was recorded at a depth of 1m. This was overlain by a similar sequence of deposits (3004, 3003, 3002, 3001 and 3000) as recorded within Test-pit 2.
- 3.1.13 No archaeological features or finds earlier than 19th century were identified.

**Test-pit 4 (Fig. 4, Section 4)**

- 3.1.14 This was excavated to a depth of 1.5m below ground level.
- 3.1.15 A probable continuation of the dark blue-peat deposit (4004) was encountered at a depth of 1m. Fragments of decayed plant material could be identified within this deposit together with small abraded stone fragments. This deposit was later processed and the environmental potential assessed (see Appendix 3). The deposit may have been composed of two separate layers, as observed in Test-pit 2, but extensive flooding obscured the section before further investigation could be attempted. The peat was overlaid by a sequence of deposits similar to those recorded within Test-pit 2 (4003, 4002, 4001 and 4000).
- 3.1.16 No archaeological features or finds earlier than 19th century were identified.

**Test-pit 5**

- 3.1.17 Test-pit 5 was excavated to a depth of 1.32m.
- 3.1.18 A layer of mid grey-blue silty clay containing occasional small pebbles (5005) was observed at a depth of 1.16m below ground level. This was overlaid by a similar sequence of deposits to those recorded within Test-pit 1 (5004, 5003, 5002, 5001 and 5000).
- 3.1.19 No archaeological features or finds earlier than 19th century were identified.

**Test-pit 6**

- 3.1.20 This was excavated to a depth of 1.32m below ground level.
- 3.1.21 A dark blue-grey peat deposit was observed at a depth of 0.78m below ground level (6004). This was overlaid by a 0.2m deep layer of dark grey silty clay containing flecks of orange sandy clay (6003). Embedded into the top of this deposit was an irregular lens of decayed wood 0.08m in depth and measuring approximately 0.58m in diameter (6002). It is thought this is a naturally occurring inclusion rather than structural remains.



Both 6002 and 6003 were covered by a 0.24m deep layer of light orange-brown silty clay (6001). This was sealed below a 0.3m deep layer of dark brown topsoil (6000)

3.1.22 No archaeological features or finds earlier than 19th century were identified.

### ***Watching brief during the excavation of the channel***

- 3.1.23 After consideration of the results from the test-pitting it was decided to conduct a watching brief during the excavation of the fish pass channel. The topsoil, subsoil and alluvial layers overlying the peat deposits were removed by machine without archaeological supervision, and the peat deposits were then excavated down to the final impact depth under archaeological supervision. Due to both water ingress and health and safety considerations during this operation it was impossible to examine the peat deposits *in situ* and any excavated material was deposited to one side of the excavation for examination by the attending archaeologist prior to removal off site.
- 3.1.24 The observations from the watching brief were broadly similar to the results recorded during the test-pitting, and a sample recorded section (Fig. 3, Section 7) is indicative of the stratigraphy observed.
- 3.1.25 The surface of the dark blue-grey peat (5) was exposed within the southern half of the channel only. This could be seen to be in excess of 0.28m thick within the deepest part of the excavation. This was sealed by a 0.18m deep layer of light blue-grey silty clay (4). The colour of this deposit suggests that it may have been partly waterlogged, but was subject to drying due to the fluctuating water table. Overlying this was a 0.2 m deep deposit of yellowish orange-brown silty clay (3), clearly alluvium. Above 3 was a 0.25m deep layer of orange-brown silty clay (2), another alluvial deposit. There were occasional charcoal flecks and fragments of 19th century artefacts within the top third of this deposit, probably intrusive from the topsoil above.
- 3.1.26 The present day topsoil and turf (1) was represented by a 0.25m layer of dark grey-brown clay loam which contained numerous fragments of pottery, brick and glass together with charcoal, clinker and ash flecks.

## **3.2 Finds**

- 3.2.1 Fragments of 19th/early 20th century pottery, brick, tile, clay pipe stem and bottle glass were observed within layers 1, 2, 1000, 2000, 3000, 4000, 5000, 5001 and 6000. The presence of this material was recorded but it was not retained. No other artefacts were observed during the course of the investigations.

## **3.3 Environmental remains**

- 3.3.1 Environmental samples measuring 40 litres in size were taken from each of the peat deposits observed. Three samples were processed, and the results are described in Appendix C. A radiocarbon date was obtained on a seed from sample 8, context 2006 (see Appendix C, section 2).

## **4 DISCUSSION AND CONCLUSIONS**

- 4.1.1 Waterlogged deposits containing organic remains (described above as peat) were recorded in all of the test-pits and all along the southern part of the fish-pass in the Watching Brief. Although the colour of these deposits varied somewhat, this is probably the result of local variations in the mineral leaching down the profile, and of the level of decay of organic remains at the interface between permanent waterlogging and seasonal drying out. Despite this, the level of the top of the peat was fairly consistent,



occurring between 53.70m aOD and 53.85m aOD, except in Test-pit 6, where the top was 53.55m aOD. Only one peat deposit was recognised in most of the trenches, but in Test-pit 2 a distinction was noticed between a lower and an upper peat, and a radiocarbon date was obtained on a seed from the lower deposit (2006), at a height of approximately 53.65m aOD). The date (SUERC-43324; 1279 ± 24 BP), calibrates to 670-775 AD at 95% confidence. This is the late 7th to late 8th century AD, and so dates to the earlier part of the middle Saxon period.

- 4.1.2 The date of the peat is in agreement with Mark Robinson's model of the hydrological sequence south of Oxford city, which suggested flooding with little or no alluviation from AD400-AD725, followed by renewed alluviation from then until the late medieval period (Robinson in Dodd 2003, 70 Figure 3.4). The previous radiocarbon dates associated with this sequence were however obtained when dating was not so precise, and give only broad mid-late Saxon dates for the transition from peat to alluvium (ibid., 78-79). This date is therefore significant in helping to tie this sequence down more closely.
- 4.1.3 The level of the top of the peat also falls close to that estimated by Mark Robinson for the middle Saxon period at St Aldates, which he placed at 54m aOD, based on separate observations of 53.80m and 54.18m aOD (Robinson in Dodd 2003, 79-80).
- 4.1.4 In terms of environmental potential, the peat deposits at the Hinksey fish-pass are significant, as many of the dates for the sequence at Oxford were obtained on wooden timbers, rather than on peat, and preserved peat deposits of this period are very scarce.
- 4.1.5 The peat deposits appear to indicate that the area was covered by slow moving or stagnant water at that time. The results of the limited assessment of the environmental samples suggest that the vegetation preserved within these deposits was all naturally occurring, with no evidence for agricultural activity being recovered. This is consistent with the scant evidence for early or mid-Saxon activity south of St Aldates given in the archaeological background (Section 1.3 above).
- 4.1.6 The sequence of alluvial deposits observed suggests that the area has been subject to periodic flooding. The absence of any intervening layers of topsoil between these deposits may suggest that this was a frequent occurrence with no long intervening dry periods, although buried topsoils are notoriously difficult to distinguish in such alluvial sequences, and may simply not be distinguishable macroscopically. No evidence of human activity was recovered from the samples of these deposits observed in the test-pits.
- 4.1.7 The widespread presence of fragmented 19th/early 20th century domestic refuse such as pottery, charcoal and ash within the layers of topsoil is indicative of manuring practices of the period and which may suggest that the area was under cultivation at times. Cultivation may also explain the migration of this material into the uppermost part of the alluvium below.
- 4.1.8 No evidence of water management or of other riverside activities such as fisheries were observed during the course of the investigation.



**APPENDIX A. ARCHAEOLOGICAL CONTEXT INVENTORY**

Context	Type	Depth	Comments	Finds	Date
<b>Channel Excavation</b>					
1	Layer	0.25m	Present day topsoil and turf	Pottery, brick, tile, glass, clay pipe	19th/Early 20th century
2	Layer	0.25m	Subsoil, possible earlier plough soil ?	Pottery, brick, tile	19th/Early 20th century
3	Layer	0.2m	Alluvium	-	-
4	Layer	0.18m	Alluvium	-	-
5	Layer	> 0.28m	Peat	-	-
<b>Test-pit 1</b>					
1000	Layer	0.26m	Present day topsoil and turf	Pottery, brick, tile, glass	19th/Early 20th century
1002	Layer	0.24m	Subsoil	-	-
1003	Layer	0.22m	Alluvium	-	-
1004	Layer	0.4m	Alluvium	-	-
1005	Layer	> 0.3m	Peat	-	-
<b>Test-pit 2</b>					
2000	Layer	0.18m	Present day topsoil and turf	Pottery, brick, tile, glass	19th/Early 20th century
2001	Layer	0.2m	Subsoil, possible earlier plough soil ?	-	-
2002	Layer	0.26m	Alluvium	-	-
2003	Layer	0.14m	Alluvium	-	-
2004	Layer	0.12m	Alluvium	-	-
2005	Layer	0.1m	Peat	-	-
2006	Layer	> 0.2m	Peat	-	-
<b>Test-pit 3</b>					
3000	Layer	0.2m	Present day topsoil and turf	Pottery, brick, tile, glass	19th/Early 20th century
3001	Layer	0.08m	Subsoil	-	-



3002	Layer	0.4m	Alluvium	-	-
3003	Layer	0.12m	Alluvium	-	-
3004	Layer	0.2m	Alluvium	-	-
3005	Layer	> 0.3m	Peat	-	-
<b>Test-pit 4</b>					
4000	Layer	0.2m	Present day topsoil and turf	Pottery, brick, tile, glass	19th/Early 20th century
4001	Layer	0.3m	Subsoil	-	-
4002	Layer	0.3m	Alluvium	-	-
4003	Layer	0.26m	Alluvium	-	-
4004	Layer	> 0.44m	Peat	-	-
<b>Test-pit 5</b>					
5000	Layer	0.22m	Present day topsoil and turf	Pottery, brick, tile, glass	19th/Early 20th century
5001	Layer	0.24m	Subsoil, possible earlier plough soil ?	Pottery	19th/Early 20th century
5002	Layer	0.24m	Alluvium	-	-
5003	Layer	0.2m	Alluvium	-	-
5004	Layer	0.26m	Alluvium	-	-
5005	Layer	> 0.16m	Alluvium	-	-
<b>Test-pit 6</b>					
6000	Layer	0.3m	Present day topsoil and turf	Pottery, brick, tile, glass	19th/Early 20th century
6001	Layer	0.24m	Subsoil	-	-
6002	Lens	0.04m	Deposit of decayed wood/vegetable matter. Probable natural inclusion	Wood	-
6003	Layer	0.2m	Alluvium	-	-
6004	Layer	> 0.54m	Peat	-	-



## APPENDIX B. BIBLIOGRAPHY

Dodd, A, (ed.) 2003 Oxford before the University: the Late Saxon and Norman archaeology of the Thames Crossing, the Defences and the Town, Oxford Archaeology Thames Valley Landscapes Monograph No. 17

Mudd, A, 1993 Excavations at Whitehouse Road, Oxford, 1992, *Oxoniensia* **58**, 33-85

Oxford Archaeology, 2006 Towles Mill,

Oxford Archaeology, 2012a Hinksey Fish-Pass, Written Scheme of Investigations, unpublished client report prepared for the Environment Agency by Oxford Archaeology

Oxford Archaeology, 2012a Hinksey Fish-Pass, Written Scheme of Investigations, unpublished client report prepared for the Environment Agency by Oxford Archaeology

Stace, C, 2010 New Flora of the British Isles (third edition), Cambridge, Cambridge University Press.



## APPENDIX C. ENVIRONMENTAL ASSESSMENT

### C.1 Assessment of Three Peat Samples from Hinksey Fish-pass for Waterlogged Plant Remains and Carbon 14 Dating Potential

By Julia Meen and Kath Hunter

- C.1.1 Six environmental samples were taken from peat deposits encountered during the watching brief at Hinksey Fish Pass in September 2012. Of these, three were selected for assessment of their potential for waterlogged plant remains and for material that could be carbon 14 dated.
- C.1.2 Two of these were from test-pit 2, the only one in which two successive peaty deposits were noted. Sample <8> came from context (2006), and was a sticky, smooth grey (5Y 6/1 to 5/1) clay with a small amount of silt and with few inclusions. Sample <7> was taken from overlying context (2005), an olive grey (5Y 4/2) silty clay with some fine sand. Sample <2> was taken from a different test-pit, in order to check whether preservation was better further along the line of the fish-pass. This was a black (5Y 2.5/1) silty clay with occasional small pebble inclusions from context (4004).

#### **Methodology**

- C.1.3 1L of each sample was hand floated onto a 250µm mesh and the heavy residues of each were sieved over a separate 250µm mesh, after which both flots and residues were retained in water and stored in a refrigerated room at approximately 5°C to prevent drying out of any waterlogged material. The flots were scanned for plant remains and potential for carbon 14 dating using a binocular microscope at approximately x15 magnification. Identifications were made with reference to published guides and the comparative seed collection held at OAS, and with guidance from Kath Hunter. Plant nomenclature follows Stace (2010).

#### **Results**

- C.1.4 Sample <8>, from context (2006), contained abundant waterlogged stems of monocotyledon plants, as well as common root material. A number of waterlogged seeds were also present, mostly of *Mentha sp.* (mint), which was common, but a single example of a decayed *Ranunculus sp.* (buttercup) seed was also noted. A snail, numerous worm egg cases, and a small quantity of charcoal was also present. Overall, the preservation was observed to be fairly poor. A radiocarbon date of 670-775 cal AD at 95% confidence was obtained on a seed from this sample (SUERC-43324; 1279 ± 24 BP).
- C.1.5 Sample <7>, from context (2005), also contained abundant stems of monocotyledon plants as well as root material. A small number of seeds of *Mentha sp.* (mint) were noted, as was a seed of a water crowfoot (*Ranunculus sp.* Batrachium type). Several seeds belonging to the Cyperaceae (sedge) family, possibly of *Eleocharis sp.* (spike-rush), were noted, and these have been extracted and could potentially be used for carbon 14 dating. A monocotyledon leaf was noted, and a number of insect fragments were observed, as well as worm egg cases.
- C.1.6 Sample <2>, from context (4004), contained a small number of waterlogged seeds, including three different species from the Cyperaceae (sedge) family, one of *Ranunculus sp.* (buttercup), and one of *Mentha sp.* (mint). Several fragments of insect





were noted. Plant stems were frequent, including a large piece which has been extracted and could potentially be used for carbon 14 dating.

## C.2 Radiocarbon date



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## RADIOCARBON DATING CERTIFICATE

05 December 2012

<b>Laboratory Code</b>	SUERC-43324 (GU28843)
<b>Submitter</b>	Rebecca Nicholson Oxford Archaeology South Janus House Osney Mead Oxford OX2 0ES
<b>Site Reference</b>	Iffley Fish Bypass (IFISH12)
<b>Context Reference</b>	2006
<b>Sample Reference</b>	<8>
<b>Material</b>	Waterlogged Seed : various
<b><math>\delta^{13}\text{C}</math> relative to VPDB</b>	-26.8 ‰
<b>Radiocarbon Age BP</b>	1279 $\pm$ 24

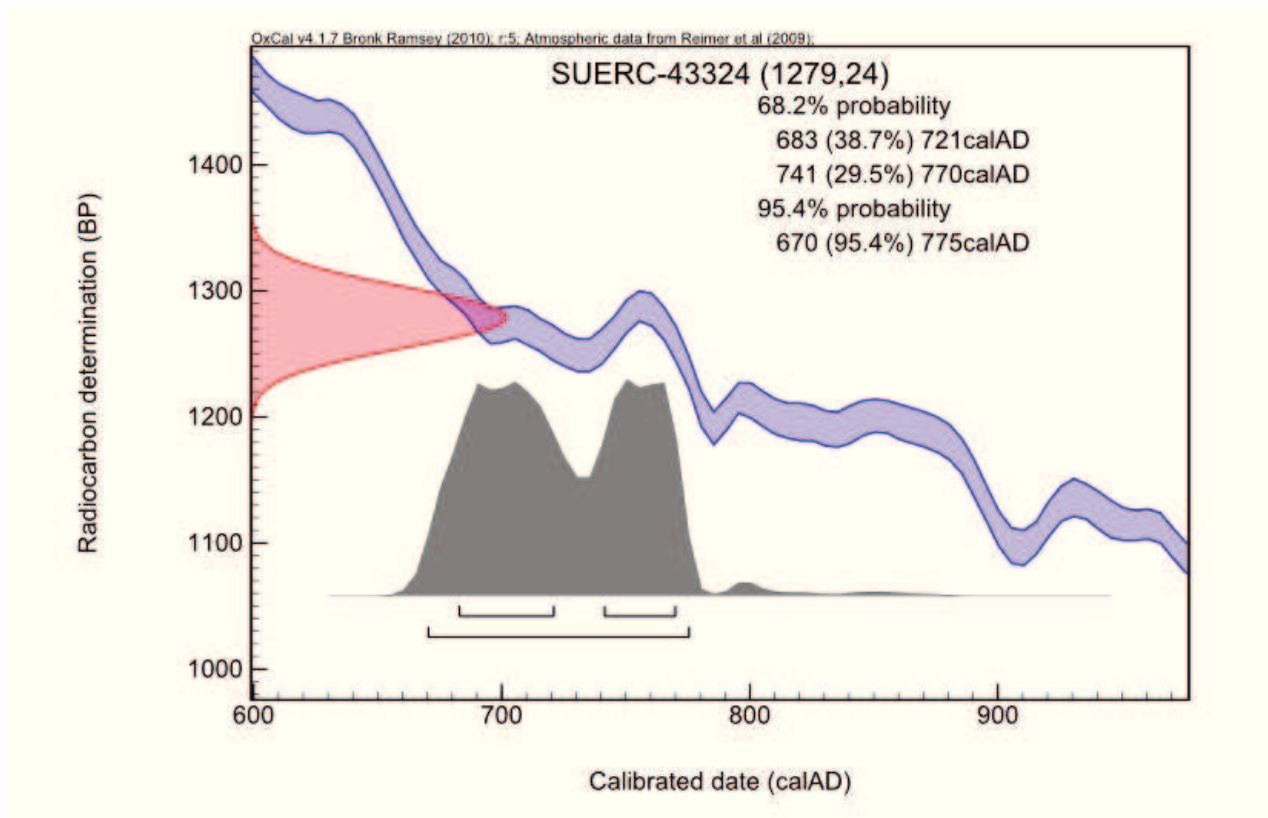
**N.B** The above  $^{14}\text{C}$  age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standards, background standards and the random machine error.

The calibrated age ranges are determined using the University of Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.1 (Bronk Ramsey 2009). Terrestrial samples are calibrated using the IntCal09 curve while marine samples are calibrated using the Marine09 curve.

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email [g.cook@suerc.gla.ac.uk](mailto:g.cook@suerc.gla.ac.uk) or Telephone 01355 270136 direct line.



### Calibration Plot





## APPENDIX D. SUMMARY OF SITE DETAILS

Site name:	Hinksey Fish-pass, Iffley, Oxfordshire
Site code:	IFISH12
Grid reference:	Centred at NGR SP 5216 0466
Type of investigation:	Machine excavation of six test pits and a watching brief on the excavation of the main channel.
Date and duration of project:	25th September to 11th October 2012
Area of site:	Approximately 1000m <sup>2</sup>
Summary of results:	<p>The investigation observed deposits of peat throughout the length of the channel at a depth of between 0.8m and 1m below the current ground level. A seed from a lower peat gave a radiocarbon date of 660-770 AD. The peat was composed of naturally occurring vegetation with no evidence for agricultural activity from the macroscopic plant remains. Sealing the peat was a sequence of discrete alluvial deposits suggesting that the area has been subject to periodic flooding in the later Saxon and medieval periods. No evidence for activity was observed within these deposits. The widespread presence of fragmented 19th/early 20th century domestic refuse such as pottery, charcoal and ash within the layers of topsoil is indicative of manuring practices of the period, also indicates that the area was under cultivation. Cultivation may also explain the migration of material into the upper level of the subsoil.</p> <p>No evidence for water management or other riverside activities was observed during the course of the investigation.</p>
Location of archive:	The archive is currently held at Janus House Oxford, and will be deposited with The Oxfordshire County Museum Service under the Accession Number OXCMS:2012.124



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Figure 1: Site location

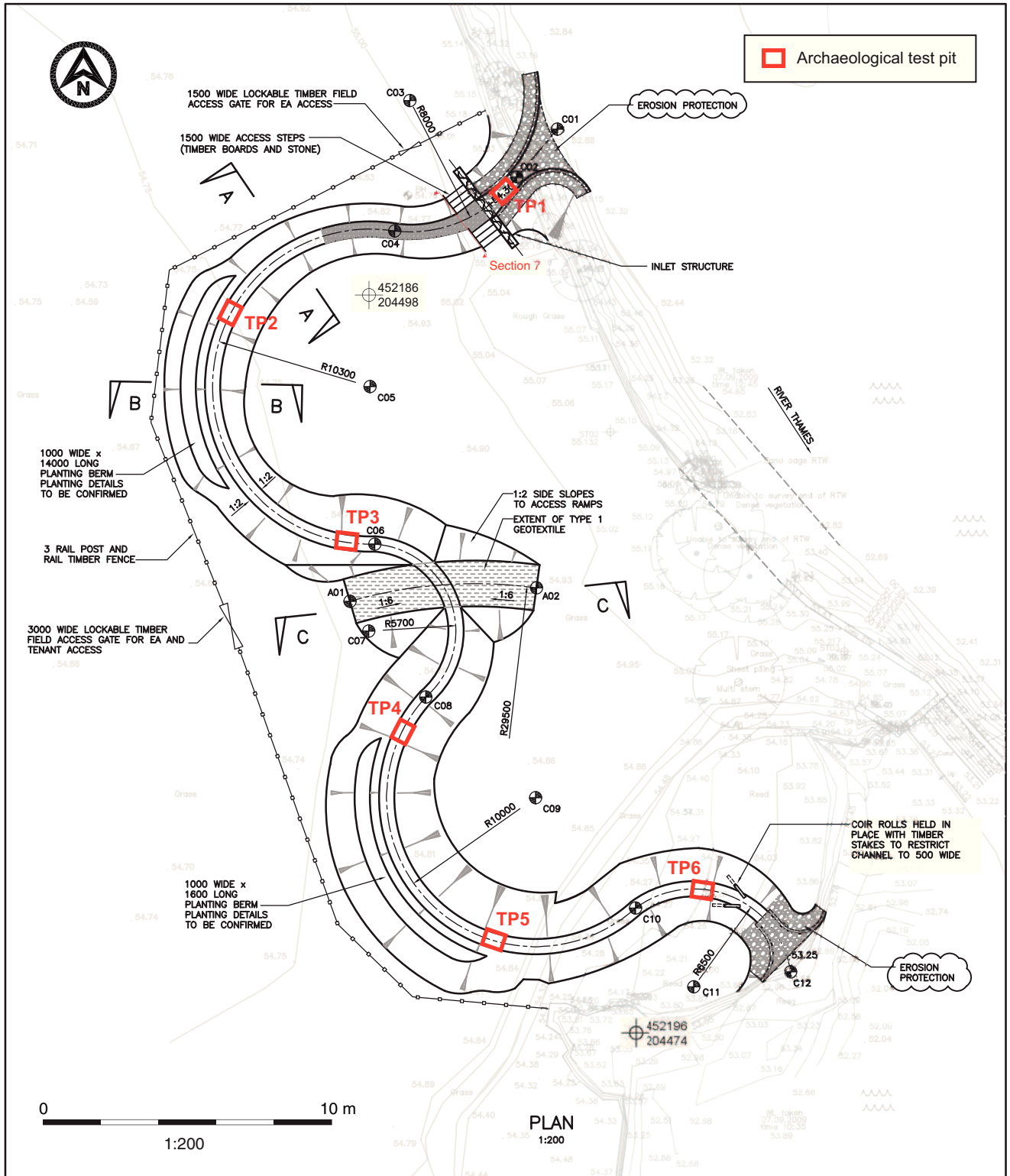


Figure 2: Test pit locations and extent of works

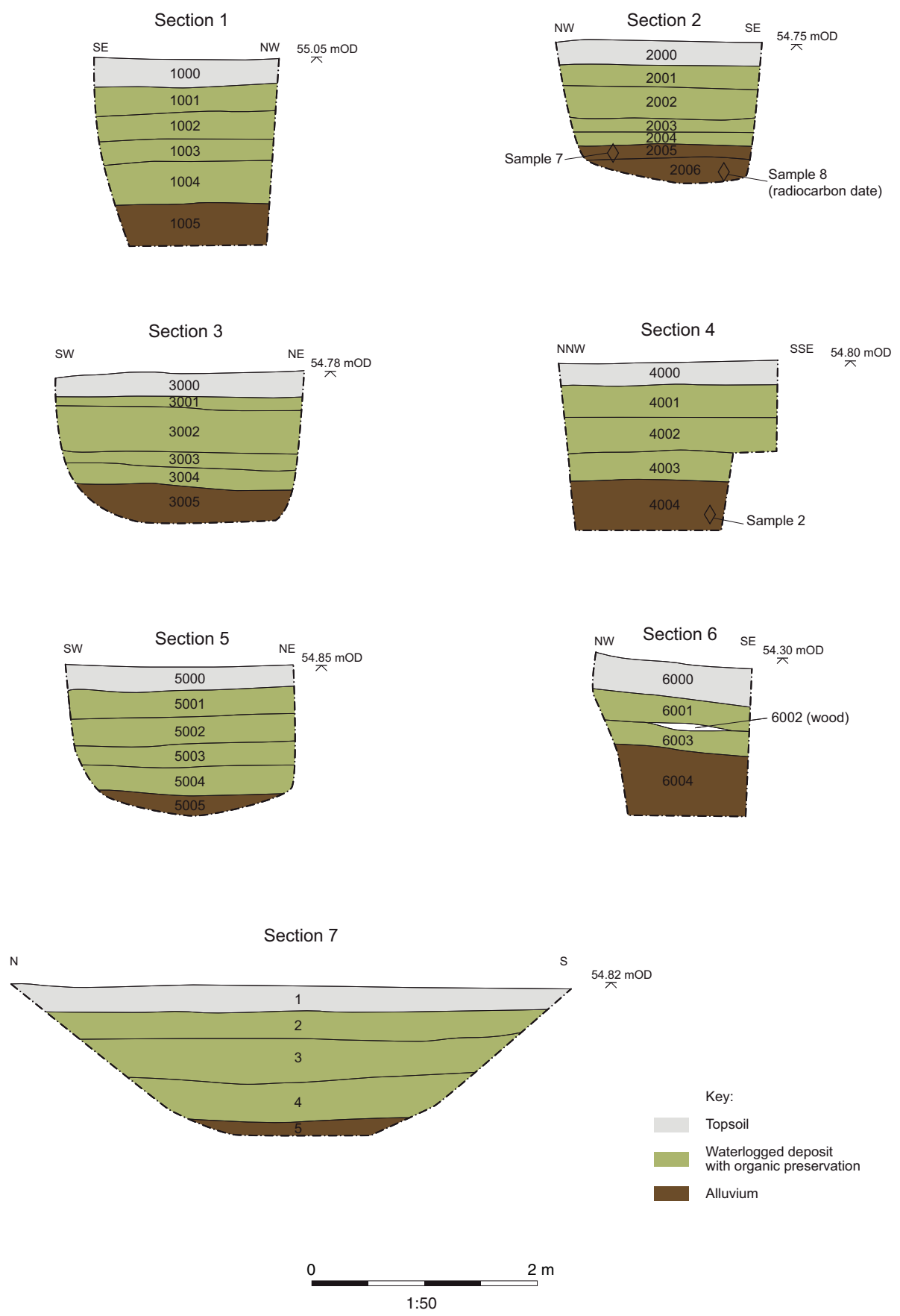


Figure 3: Sections



Plate 1: Test pit 1



Plate 2: Test pit 2



Plate 3: Test pits



Plate 4: Test pit





Plate 5: Test pit 5



Plate 6: Test pit 6



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