

# **East West Rail Phase 2**

Development Stage 2A1: Ecological Compensation Site A1 at Land West of Charbridge Lane, Oxfordshire Archaeological Watching Brief Report

## **EWR Alliance**

June 2022

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## **Executive Summary**

An archaeological watching brief was carried out during the creation of two ponds and the diversion of the river at Ecological Compensation Site A1 at Land West of Charbridge Lane, Oxfordshire, between April and May 2022. These works were part of the East West Rail Phase 2 Project, undertaken on behalf of the East West Rail Alliance.

During the works, archaeological features were revealed underlying two alluvial deposits. These features comprised a stone spread of medium to large blocks of sandstone adjacent to a surface of fine fragments of sandstone. No associated finds were recovered from the features, except a small number of faunal remains (animal bone, probably from farm animals). The environmental sample recovered and assessed did not add any more information that could help in the interpretation of either feature. Both features could be interpreted as having an anthropogenic origin although the area exposed was very small. The features were similar in form to a stone trackway recorded at Mill Meadow c.100m to the north-east of the Site, however it is unknown if they are related. An isolated small pit was also recorded, overlying the alluvial deposits on Site. The stratigraphical position of the pit would suggest it to be late medieval or post-medieval in date.

The archive, consisting of paper records, drawings and digital photographs, will be collated and deposited with the Oxfordshire Museum under accession number OXCMS: 2022.41. Copies of the report will be issued by EWR for onward transmission to the archaeology advisor to the Local Planning Authority and – ultimately – the local studies library, on the understanding that it will become a public document after an appropriate period of time. A digital copy of the report will also be submitted to the Historic Environment Record (HER). A summary of the findings will be submitted to the Archaeological Data Service (ADS) under OASIS ID - aocarcha1-436849.



## 1. Introduction

This report documents the results of an archaeological watching brief during construction work at an Ecological Compensation Site (ECS) A1 ('the Site'). The Site is located within Development Stage 2A1 of the EWR2 scheme (centred on NGR Ref: SP 60012 22950; Figure 1). The Site lies within the local authority administrative area of Cherwell District Council.

All works were undertaken by a team of professional archaeologists and were recorded using current Chartered Institute for Archaeologists (CIfA) standards. The fieldwork took place between March and April 2022.

## Planning Background

The local planning authority is Cherwell District Council and the Archaeological advice to the Council is provided by Richard Oram, Planning Archaeologist for Oxfordshire County Council.

Prior to the works on the Site, a Written Scheme of Investigation (WSI)<sup>1</sup> had been prepared by East West Rail Alliance (EWR). This report will help inform the need for any future programmes of mitigation works within the Site; the results and interpretation include the site narrative as well as assessment of any archaeological finds and environmental samples.

All works were carried out in accordance with the WSI and current best archaeological practice and local and national standards and guidelines<sup>2</sup>.

## 3. Site Location, Geology and Topography

The Site is located within Development Stage 2A1 of the EWR2 scheme (centred on NGR Ref: SP 60012 22950). The Site comprises an irregular parcel of land of approximately 1.3ha located to the west of Bicester, bound by the railway line to the south. The Site is currently in use for arable cultivation and is enclosed by mature trees and hedgerows. Within the wider area, the Site is surrounded by commercial and residential properties of the town of Bicester. The Site lies within the local authority administrative area of Cherwell District Council.

Topographically, the Site is located in a gently sloping landscape with an elevation of approximately 69m Above Ordnance Datum AOD. The underlying bedrock geology of the Site consists of the Kellaways Sand Member - Sandstone and Siltstone and Kellaways Clay Member - Mudstone; sedimentary bedrocks formed approximately 164 to 166 million years ago in the Jurassic Period. Alluvial deposits of clay, silt, sand and gravel are recorded overlying the bedrock geology in the western portion of the Site.<sup>3</sup>



<sup>&</sup>lt;sup>1</sup> EWR Alliance 2021. Development Stage 2A1: Ecological Compensation Site A1 at Land West of Charbridge Lane, Oxfordshire. Unpublished Report.

<sup>&</sup>lt;sup>2</sup> Historic England, 2015. *Archaeological Guidance Paper 3: Standards and Practices in Archaeological Fieldwork*; Campbell, G., Moffett, L., and Straker, S., 2011. *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*; Chartered Institute for Archaeologists 2020a. *Standard and Guidance for an Archaeological Excavations*. Chartered Institute for Archaeologists, 202b. *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*; Chartered Institute for Archaeologists, 2019. *Code of Conduct*; Museum of London, 1994. *Archaeological Site Manual*; Chartered Institute for Archaeologists, 2014. *Code of Conduct*; Museum of London, 1994. *Archaeological Site Manual*; MHCLG, 2019. *National Planning Policy Framework*; RESCUE & ICON, 2001. *First Aid for Finds*; United Kingdom Institute for Conservation, 1983. *Conservation Guidelines No.2*; United Kingdom Institute for Conservation, 1990. *Guidance for Archaeological Conservation Practice*.

<sup>3</sup> British Geological Survey Website, 2022



# 4. Archaeological and Historical Background

## Prehistoric (*c.* 500,000BC – AD43)

There is an absence of evidence for Palaeolithic in the vicinity of the Site. This is thought to be due to alluvial deposits masking early prehistoric remains in this area<sup>4</sup>; a band of which is recorded along the north-western extent of the Site. However, there is presently little identified evidence for Lower Palaeolithic remains on the gravel terraces of the River Cherwell in the area around Bicester<sup>5</sup>. There is little evidence for Mesolithic activity in the vicinity of the Site. There have, however, been several lithic scatters found in archaeological investigations in the wider area, including at Slade Farm *c.*2.25km north-west of the Site and Bicester Village Coach Park, *c.* 3km to the south-west. Several irregular features of probable Mesolithic date were identified at the former<sup>6</sup>, while the latter yielded *c.*4,500 Mesolithic flints, some of which were associated with probable contemporary tree throws<sup>7</sup>.

Little evidence of Neolithic activity can be found within the wider environs surrounding the Site, and no evidence is present directly within the Site. There is no evidence of Bronze Age activity within the Site or its immediate vicinity. In the wider area, at the site of Whitelands Farm<sup>8</sup> (c.3.5km to the south-west of the Site), excavations revealed evidence of Bronze Age funerary monuments, including two ploughed out barrows, a cremation, and a Beaker burial. Much of the Bronze Age evidence around Bicester has been identified in recent years as part of archaeological works related to suburban residential development and the A421 Chesterton Lane Overpass/Wendlebury-Bicester Dualling<sup>9</sup>

The Oxfordshire and Buckinghamshire landscapes had been extensively cleared of woodland by the Middle/Late Iron Age as evidenced from sites across the county, with environmental data indicating a rise in open grassland environments <sup>10</sup>. Evidence for land division during this period has been clearly identified, and where recorded, the divisions appear to represent stock enclosures and droveways, and taken together with large assemblages of cattle bones, are suggestive of a strong pastoral element to the economy. The remains of Middle to Late Iron Age features representing evidence of settlement, quarrying, and domestic activity in the form of ditches, stone-lined tanks, ovens, pits, post-hole structures and ditched enclosures were identified in the area of Whitelands Farm c.3.5km south-west of the Site<sup>11</sup>

Iron Age enclosed settlement and land management is observable in the wider landscape, with Late Iron Age remains encountered 1.5km west of the Site during trial trenching at Compound A1<sup>12</sup> associated with an Iron Age/Romano-British settlement (MOX12267) previously excavated in 2002. A further Late Iron Age or Roman farmstead and associated field system (MOX23494) are located c.600m to the south of the Site.

<sup>&</sup>lt;sup>4</sup> Hardaker, T. (2014) The Lower and Middle Palaeolithic of Oxfordshire. In Hey, G and J, Hinds (eds) Solent-Thames Research Framework; Hey, G. 2014. Late Upper Palaeolithic and Mesolithic: Resource Assessment. In G. Hey, and J. Hind, (eds) Solent- Thames Research Framework.

<sup>&</sup>lt;sup>5</sup> Network Rail, 2018. Order Environmental Statement. Volume 2ii - Route Section 2A. Chapter 7, Cultural Heritage.

<sup>&</sup>lt;sup>6</sup> Ellis, P., Hughes, G. and Jones, L. (2000) An Iron Age Boundary and Settlement Features at Slade Farm, Bicester, Oxfordshire: a report on excavations 1996. *Oxoniensia* LXV. Online at http://www.oxoniensia.org/volumes/2000/ellis.pdf [accessed 18 January 2022]

<sup>&</sup>lt;sup>7</sup> Oxford Archaeology South (2014). Bicester Village Coach Park: excavation report. Oxford Archaeology unpublished report. Online at: https://eprints.oxfordarchaeology.com/1727/1/BIV13\_PdfA.pdf [accessed 18 January 2022].

<sup>&</sup>lt;sup>8</sup> Martin, J., 2011. 'Prehistoric, Romano-British, and Anglo-Saxon Activity at Whitelands Farm, Bicester'. Oxoniensia, Vol. 76, 173-240.

<sup>&</sup>lt;sup>9</sup> Martin, J., 2011. 'Prehistoric, Romano-British, and Anglo-Saxon Activity at Whitelands Farm, Bicester'. Oxoniensia, Vol. 76,173-240

Network Rail, 2018. Order Environmental Statement. Volume 2ii - Route Section 2A. Chapter 7, Cultural Heritage.
 Martin, J., 2011. 'Prehistoric, Romano-British, and Anglo-Saxon Activity at Whitelands Farm, Bicester'. Oxoniensia, Vol. 76, 173-240.

<sup>&</sup>lt;sup>12</sup> EWR Alliance, 2019b. Compound A1: Land East of Bicester Road, Bicester, Oxfordshire: An Archaeological Evaluation Report. Unpublished report.



## Roman Period (AD 43 – AD 410)

There is sufficient evidence within Oxfordshire to indicate a general continuity from the Late Iron Age period, although with some relocation to the new road network. Although this is broadly the case, there are exceptions in Bicester, for example Slade Farm (c.2.25km north-west of the Site) <sup>13</sup> where occupation appears to have ceased at the time of the Roman occupation.

The Romano-British period saw widespread activity across the EWR route and the wider landscape<sup>14</sup> Alchester was a sizeable Roman town and legionary fortress located c.4km to the south-west of the Site. Beyond its limits, the rural pattern of settlement, of dispersed villas and farmsteads in the wider area suggests a variety of dwellings from small 'native' type farmsteads and small farms with Roman style buildings, to more substantial villas. Roman pottery (MOX12267) has been found in association with the possible Late Iron Age or Roman features c.300m east of the Site, and Romano-British and Iron Age settlement evidence is also visible in the wider landscape such as the ditch and post-hole (MOX23494) recorded c. 450m south of the Site.

During trial trenching and excavation at Mill Meadow, directly to the east of the Site, and at Compound A1, c. 300m east of the Site, the remains of Late Iron Age and Romano-British settlement and land management were encountered<sup>15</sup>.

## Early Medieval (AD410 – AD1066)

The settlement of Bicester evolved either side of a ford over the River Bure and close to the Saxon Minster of St Edburg's. The first group of farms were established in the vicinity of what became the Manor of King's End, followed by a later settlement on the east side of the Bure which became the Manor of Market End.

No heritage assets dating from the Early Medieval period have been identified within the Site or in the surrounding area suggesting a Low potential for encountering Early Medieval heritage assets within the Site.

## Late Medieval (AD1066 - AD1540)

The Site lies in the east of Bicester which was first recorded in The Domesday Book<sup>16</sup> of 1086 as Berencestra. There are no heritage assets of late medieval date present within the Site. However, a probable windmill mound is recorded c. 200m to the north-east (MOX5020); a demesne windmill was mentioned in 1279 and it is possible that these remains date from this period<sup>17</sup>. During geophysical survey and trial trenching across the Site, several features were noted around the probable windmill mound.

Other Late Medieval heritage assets within the area include a market cross (MOX5007) of probable Late Medieval date located approximately 400m to the south-east. Also, evidence of ridge of furrow (MOX24816; MOX12722) is located 850m to the south-west and 665m to the south-east of the Site.

<sup>&</sup>lt;sup>17</sup> Victoria County History of Oxford, Vol VI, p.237.





<sup>&</sup>lt;sup>13</sup> Ellis, P., Hughes, G. & Jones, L., 2000. An Iron Age Boundary and Settlement Features at Slade Farm, Bicester, Oxfordshire: a report on excavations, 1996. Unpublished report.

Network Rail. 2018. Order Environmental Statement. Volume 2ii - Route Section 2A

<sup>&</sup>lt;sup>15</sup> EWR Alliance, forthcoming. Launton Landscape Post-Excavation Assessment

<sup>&</sup>lt;sup>16</sup> Domesday Book Online, 2019



## Post Medieval (AD1540 – c.1750) and Industrial Period (c.1750 – 1901)

The Site is located c.1.5km east of the historic core of Bicester and at the start of the post-medieval period the area surrounding the Site was still predominantly rural and the pattern of open-field cultivation prevailed.

A post-medieval ornamental pond (MOX5008) is recorded c.400m south-east of the Site.

The line of the Buckinghamshire Railway from Oxford to Bletchley (MOX5870) is a non-designated heritage asset runs along the southern boundary of the Site. The railway line was opened in 1850.

## Modern Period (Post-1901)

Ordnance Survey maps show that there was very little change in the surrounding area from the postmedieval to the modern period, with the landscape staying rural and agricultural in nature though with increased urban development in the later 20th century.

There are no recorded modern heritage assets within the Site.

## Historic Landscape Character

The present character of the Site can be defined as probable pre-18th century regular type enclosures, bordering a later 19th century railway line to the south. Surrounding fields are characterised in a similar way.

#### **Previous Work**

The available LiDAR data has been analysed and the data shows the windmill mound and associated earthworks predominantly in the north-east corner of the land parcel the Site is situated within. No other archaeological features are visible within the Site itself.

A geophysical gradiometer survey was undertaken in October 2018<sup>18</sup>. No anomalies or features of a definitive archaeological nature were identified. A number of discrete linear trends were identified in the far north of the dataset, along with a further linear to the south. Though they have the potential to be archaeological in origin, their poor magnetic strength means only a tentative interpretation can be formed as to their origin. A windmill mound is reported to be located in the survey area itself, and it is possible that several of the linear trends identified could relate to these remains. A discrete pit-like anomaly was also detected in the dataset which could be archaeological in origin, however its isolated position means that other more natural origins are possible. A number of agricultural trends relating to field drainage have also been identified and geological trends were also identified in the southern part of the Site. Several areas of magnetic disturbance of a likely modern date were also detected. These were especially visible at the survey edges and boundaries. A response relating to a large modern service was also detected running east-west along the southern boundary.

A follow up resistivity survey did not provide quantifiable results, due to unknown interference to the equipment<sup>19</sup>.

In June 2019<sup>20</sup>, an archaeological evaluation was undertaken both within and to the north of the Site. Only two trenches were excavated within the Site boundary (trenches 17 and 18), with possible

<sup>&</sup>lt;sup>18</sup> EWR Alliance, (2018). Land West of Bicester Bypass, Charbridge Lane Overbridge Diversion (Gradiometer): Archaeological Geophysical Survey. Unpublished report.

<sup>&</sup>lt;sup>19</sup> EWR Alliance, (2019a). Land West of Bicester Bypass, Charbridge Lane Overbridge Diversion (Resistivity): Archaeological Geophysical Survey. Unpublished report..

<sup>&</sup>lt;sup>20</sup> EWR Alliance (2019b). East West Rail Phase 2; Land West of Bicester Bypass, Charbridge Lane Overbridge Diversion, Oxfordshire: An Interim Archaeological Evaluation Report.



evidence from Romano-British activity identified. This was represented by pottery sherd finds within subsoil and topsoil. One sherd piece from topsoil in Trench 17 may indicate that a shallow ditch which crossed Trench 17 and 18 is of Romano-British date, but no further finds or features were identified for confirmation of dating evidence.

Evidence for a medieval mill mound and associated features were identified to the immediate north of the Site through upstanding earthworks, and evaluation trenching.

Excavations directly to the north-east of the Site, at Mill Meadow, revealed remains which spanned four broad historical and archaeological periods: prehistory, Roman, medieval, and post-medieval and comprised ditch features, pits and postholes, along with a trackway/road provisionally dated to the early medieval period.

## Research Aims and Objectives

The aims of the archaeological works were defined as being:

- To establish the presence/absence and significance of archaeological remains within the Site.
- To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
- To record and sample excavate any archaeological remains encountered.
- To assess the eco-factual and environmental potential of any archaeological features and deposits.

The location of the railway on the southern boundary of the Site means that there is a high potential for remains associated with the post-medieval construction of the railway. Iron Age and Romano-British remains have been found directly adjacent to the Site suggesting a high potential for further remains of the Iron Age and British-Romano period to be found within the Site, though no features identified could be confirmed from this period during evaluation works.

The following Specific Research Objectives (SROs) from the Heritage Delivery Strategy<sup>21</sup> were included within the WSI. Where remains of Iron Age settlement or agriculture are encountered within the Site, they may have the potential to contribute to:

- SRO09: What is the evidence for pre-Iron Age phases of enclosure, and to what extent were Iron Age and Romano-British field systems and settlement influenced by earlier structuring of the landscape?
- SRO10: Can we identify regional patterns in the form, location and status of Late Bronze Age and Iron Age settlements across the route, and are there associated differences in landscape organisation and enclosure? Further, can we detect a decline in mobile domestic activity as the period progressed?
- SRO12: Can we clarify the development of the architecture and building techniques of late prehistoric houses from the Middle Bronze Age to the Iron Age?

If Romano British features are encountered within the Site, they may have the potential to contribute to:

<sup>&</sup>lt;sup>21</sup> EWR Alliance, 2019. Network Rail (East West Rail Bicester to Bedford Improvements) Order Heritage Delivery Strategy. Unpublished Report Section 4.4



- SRO18: Can we investigate continuity of local traditions by excavating sites with well-preserved deposits of both Late Iron Age and Roman date?
- SRO19: Can we study more Roman settlement types?
- SRO25: Identify evidence for late Roman occupation and attempt to identify any continuity in settlement patterns between the end of the Romano-British period and the Early Medieval period.

Where remains of medieval ridge and furrow or industrial activity are encountered within the Site, they may have the potential to contribute to:

- SRO29: Understand the chronology of development and character of later medieval field systems and their relationship to settlement across the region
- SRO30: Better understand the character and organisation of later medieval ridge and furrow and field systems
- SRO37: Can we understand better the extent of medieval industrial activity and the relationship between agricultural practices and estates e.g. milling.

If features associated with the railway were encountered within the Site, they may have the potential to contribute to:

 SRO45: Investigate the link between the development of the railways and broader changes in the historic landscape during the post-mediaval period, such as urban settlement expansion and the decline of the canal network.

# 6. Methodology

The Heritage Delivery Strategy and WSI defined the Site procedures for archaeological watching brief, in agreement with the Archaeology Officer at Oxfordshire County Council. The document detailed how the archaeological works would be undertaken. All work was carried out in accordance with local and national guidelines:

- Historic England (2015a). Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide.
- Chartered Institute for Archaeologists (CIfA 2020a). Standard and Guidance for an Archaeological Excavations.
- Chartered Institute for Archaeologists (CIfA 2020b). Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives.
- Chartered Institute for Archaeologists (ClfA 2019). Code of Conduct.
- National Planning Policy Framework (DCMS 2018).

A unique site code EWR22 ECS A1 was assigned by AOC Archaeology. The archaeological works were carried out between March 2022 and April 2022 and were supervised by Carlos Fernández González under the overall direction of Nuala C. Marshall (Project Manager).

The archaeological watching brief was carried out during the construction of two ponds and the river diversion within the proposed ecological compensation area (Figures 1 & 2).

All intrusive works were monitored by the supervising archaeologist. The method of work was directed by the construction team under archaeological monitoring. A GPS fitted to the excavator ensured that



the design reached the required depth for the construction works. A smooth bladed bucket was used to excavate the ground to a maximum depth 1.75 m below ground level or 66.35m aOD and when potential archaeological features were encountered these were hand-excavated. The recording of the archaeological features on site encountered difficulties in that the excavated area kept being flooded by the numerous broken drainpipes, either through wear or by the excavation process.

The Site was excavated in one phase and on completion, information was digitally submitted for sign off by Richard Oram of Oxfordshire County Council.

## 7. Results

Across the Site (Figure 1 & 2) the natural geology comprised a firm mid yellow greyish sandy clay (104 & 204) and was encountered in Pond 1 and 2 in the eastern part of the Site (Plate 1& 2). A dark grey brownish clay of mudstone (305) was present as the natural geology within the western side of the Site in Pond 3. Both deposits were encountered at a height of 67.27 m aOD and 66.85m aOD respectively.

#### POND 1

#### **Table of Stratigraphic Sequence**

<u> </u>					
Context Number	Thickness	Height of Deposit	Interpretation		
101	0.1	68. 02 m aOD	Deposit: Soft dark brown silty clay with inclusions of fine-medium stones.		
102	0.6	67.92m aOD	Deposit: Soft light brown greyish silty clay. No inclusions		
103	0.15	67.32m aOD	Deposit: Soft mid grey sandy clay. No inclusions		
104	2+	67.17m aOD	Deposit: Firm mid yellow greyish sandy clay		

The natural geology (104) was overlaid in Pond 1 by a 0.15m thick alluvial layer (103) of soft mid grey sandy clay with no inclusions (Figure 6; Plate 2). Overlying alluvial layer (103) was another alluvial deposit (102), a 0.6m thick layer of soft light brown greyish silty clay with no inclusions which contained no finds. Capping the sequence was a 0.1m thick topsoil (101), which comprised soft a dark brown silty clay with inclusions of fine-medium stones.

No archaeological features or finds were present in Pond 1.







Plate 1: General view of Pond 1, looking north.



Plate 2: Representative Section of Pond 1, looking north.

## POND 2

## **Table of Stratigraphic Sequence**

Context Number	Thickness	Height of Deposit	Interpretation
201	0.03	68.06m aOD	Deposit: Soft dark brown silty clay with inclusions of fine-medium stones.
202	0.58	68.03m aOD	Deposit: Soft light brown greyish silty clay. No inclusions



203	0.2	67.45m aOD	Deposit: Soft mid grey sandy clay with occasional charcoal flecks.
204	0,18+	67.27m aOD	Deposit: Firm mid yellow greyish sandy clay

The natural geology (204) was truncated by a potential construction cut [207] with a flat base and no visible sides, in which was laid a 0.1m thick stone surface (205) of fine blocks of sandstone (Figure 3; Plate 6). Stone surface (205) was orientated NE-SW and measured 3m in length by 0.2m in width within the pond area. Directly to the east of surface (205), a 0.2m thick stone spread deposit (206) was recorded and comprised mid grey sandy clay mixed with frequent medium to large blocks of sandstone and with very occasional fine to medium pebbles (Figure 2 & 3; Plate 4-6).



Plate 3: General view of Pond 2, looking south.





Plate 4: General view of surface feature (205) and stone spread (206) looking north-east.



Plate 5: Detail view of surface feature (205) looking south.



Plate 6: Detail view of stone spread (206) looking east.

Overlying the deposit (206) was an alluvial layer (203); a 0.2m thick mid grey sandy clay deposit (Figure 6; Plate 5-7) containing occasional charcoal flecks and some animal bones which were found in the excavated area above the stone surface (205). Overlying (203), another alluvial deposit was present comprising a 0.58 m thick layer of light brown greyish silty clay (202) with no inclusions and contained no finds (Plate 7). This was overlain by a dark brown silty clay topsoil deposit with inclusions of fine-medium stones (201).



Plate 7: Representative Section of Pond 2, looking north

## **River Diversion**

## **Table of Stratigraphic Sequence**

Table of Guang-apine Coquence						
Context Number	Thickness	Height of Deposit	Interpretation			
301	0.2	68.1m aOD	Deposit: Soft dark brown silty clay with inclusions of fine-medium stones.			
302	0.25	67.9m aOD	Deposit: Firm mid brown silty clay.			
303	0.3	67.65m aOD	Deposit: Mid brown silty sand with very frequent gravels of fine-medium size.			
304	0.5	67.15m aOD	Deposit: Soft mid grey sandy clay. No inclusions and no finds			
305	0,3+	66.85m aOD	Deposit: Firm dark grey brownish clay. Mudstone			

The natural geology (305) was overlaid in Pond 3 by two alluvial deposits (Figure 6; Plate 9). The earliest alluvial deposit was a 0.5m thick layer of mid grey sandy clay (304) that contained no finds or inclusions. Overlying (304) was a 0.3m mixed layer (303) of gravels and mid brown silty sand that contained no finds.



Plate 8: General view of River Diversion, looking north.



Plate 9: Representative Section of River Diversion, looking west.

Cut [307] was located within the western area of Pond 3 and was interpreted as a small pit (Figure 6; Plate 10) cut into the alluvial layer (303). It measured c. 0.70m in diameter and 0.2 m in depth and it had a subcircular shape, sharp break of slope, moderate sides and a concave base. The pit was filled with a light brownish grey silty clay deposit (306) with very occasional fine gravel stones. No finds were recovered from the fill deposit.



Plate 10: Pit [307], looking south-west.

Overlying pit [307] was the subsoil, a 0.25m thick layer (302) of mid brown silty clay which revealed no finds (Figure 6; Plate 10). This was overlain by the topsoil, a 0.2m thick dark brown silty clay deposit with inclusions of fine-medium stones. Cut into the topsoil was a modern hedgerow [309], measuring 0.61m deep with moderate sides and a L-shaped in plan, orientated SW-NE and turning into NW-SE. Cut [309] was filled by a dark brown silty clay deposit (308), highly bioturbated and with very frequent inclusions of roots (Figure 4 & 5).

### 8. Finds

A small number of artefacts were recovered from deposit (203). These were fauna of two different species (horse and lamb). The assemblage is too small to be of use for understanding the diet, economy or status of the site beyond indicating the presence of these taxa in the past.

#### Environmental

The environmental samples produced very small quantities of carbonised remains with a charcoal assemblage formed of mixed fuel debris which is likely redeposited. Given the small size of this assemblage its potential for answering further research questions concerning the role of wood species at this site and its relationship to nearby Mill Meadow is negligible.

### 10. Conclusions

During the archaeological works at Land West of Charbridge Lane, Oxfordshire, a small number of archaeological features were revealed. The presence of medium and large blocks of sandstone (205) adjacent to a potential surface of small fine fragments of sandstone (206) has been interpreted as an archaeological feature. The area exposed for both features was very narrow, making it very difficult to give a firm interpretation for them. The environmental sample from the feature (205) produced very small quantities of carbonised remains with a charcoal assemblage formed of mixed fuel debris of ash and oak tree which is likely redeposited and in a secondary deposition. The stone surface does not extend westward or into the north-west, which could support an interpretation of the feature as a layer for a track way. The features were similar in form to a stone trackway recorded at Mill Meadow c.100m to the north-east of the Site, however it is unknown if they are related. Both features were sealed by two alluvial layers, whose chronology is uncertain within this Site.



A small pit [307] was found in Pond 3, cut into an alluvial layer of gravels (303), which overlays another alluvial deposit (304), found over the whole extension of the Site. The stratigraphic position of the pit would suggest it to be late medieval or post-medieval in date. The small pit could be interpreted as the basal remains of a post, however its isolated nature allows no further interpretations to be made.

A geophysical survey undertaken within the site suggested there was limited potential for archaeology to be present, only recording a number of discrete linear trends whose presence has not been confirmed during this archaeological watching brief.

The waterlogged nature of the Site, located in a flood plain, and the small number of archaeological features found may perhaps indicate that it was considered a less-desirable location for settlement or even agricultural use.

No archaeological evidence was encountered on the Site to contribute to the specific research questions identified in the WSI. However, there may be potential for contribution when looked at alongside the results of the Mill Meadow excavations and surrounding Launton Landscape. Based on the findings of these investigations no further works are required.

## 11. Publication and Archive Deposition

The archive, consisting of paper records, drawings and digital photographs, will be collated and deposited with the Oxfordshire Museum under accession number OXCMS: 2022.41. Copies of the report will be issued by EWR for onward transmission to the archaeology advisor to the Local Planning Authority and – ultimately – the local studies library, on the understanding that it will become a public document after an appropriate period of time. A digital copy of the report will also be submitted to the Historic Environment Record (HER). A summary of the findings will be submitted to the Archaeological Data Service (ADS) under OASIS ID - aocarcha1-436849.

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Victoria County History of Oxford, Vol VI, p.237

# Appendix A

# A.1 Context register

Context	Context Description	Context Interpretation	Depth (m)
101	Deposit: Soft dark brown silty clay	Topsoil	0.1
102	Deposit: Soft light brown greyish silty clay. No inclusions	Natural alluvial	0.6
103	Deposit: Soft mid grey sandy clay. No inclusions	Natural alluvial	0.15
104	Deposit: Firm mid yellow greyish sandy clay	Natural	2+
201	Deposit: Soft dark brown silty clay	Topsoil	0.03
202	Deposit: Soft light brown greyish silty clay. No inclusions	Natural alluvial	0.58
203	Deposit: Soft mid grey sandy clay with occasional charcoal flecks.	Natural alluvial	0.2
204	Deposit: Firm mid yellow greyish sandy clay	Natural	0,18+
205	Deposit: Friable fine blocks of sandstone	Surface	0.1
206	Deposit: soft mid grey sandy clay mixed with frequent medium to large blocks of sandstone and with very occasional fine to medium pebbles	Stone Spread	0.2
207	Cut: Flat base. Sides were not visible.	Structural Cut	Indetermine d
301	Deposit: Soft dark brown silty clay	Topsoil	0.2
302	Deposit: Firm mid brown silty clay.	Subsoil	0.25
303	Deposit: Mid brown silty sand with very frequent gravels of fine-medium size.	natural alluvial	0.3
304	Deposit: Soft mid grey sandy clay. No inclusions and no finds	natural alluvial	0.5
305	Deposit: Firm dark grey brownish clay. Mudstone	natural	0,3+



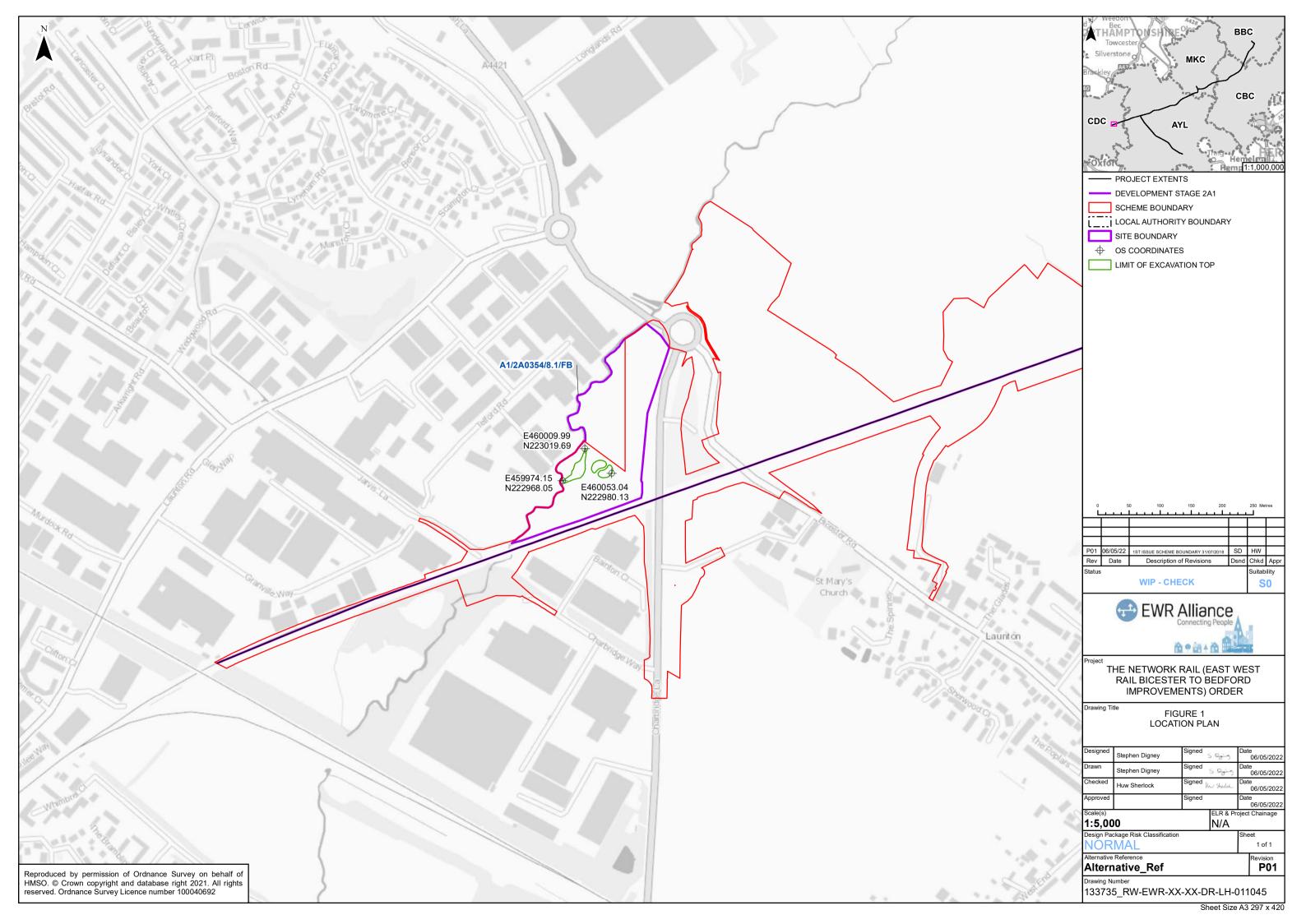
306	Fill: Firm light brownish grey silty clay with very occasional fine gravel stones.	Fill of pit	0.2
307	Cut: Subcircular feature, sharp break of slope, moderate sides and concave base	Cut of pit	0.2
308	Fill: Soft dark brown silty clay with very frequent inclusions of roots. Highly bioturbated	Fill of hedge row	?
309	Cut: Moderate sides, not bottomed. SW-NE orientated and turning into NW-SE	Cut of Hedge row	?

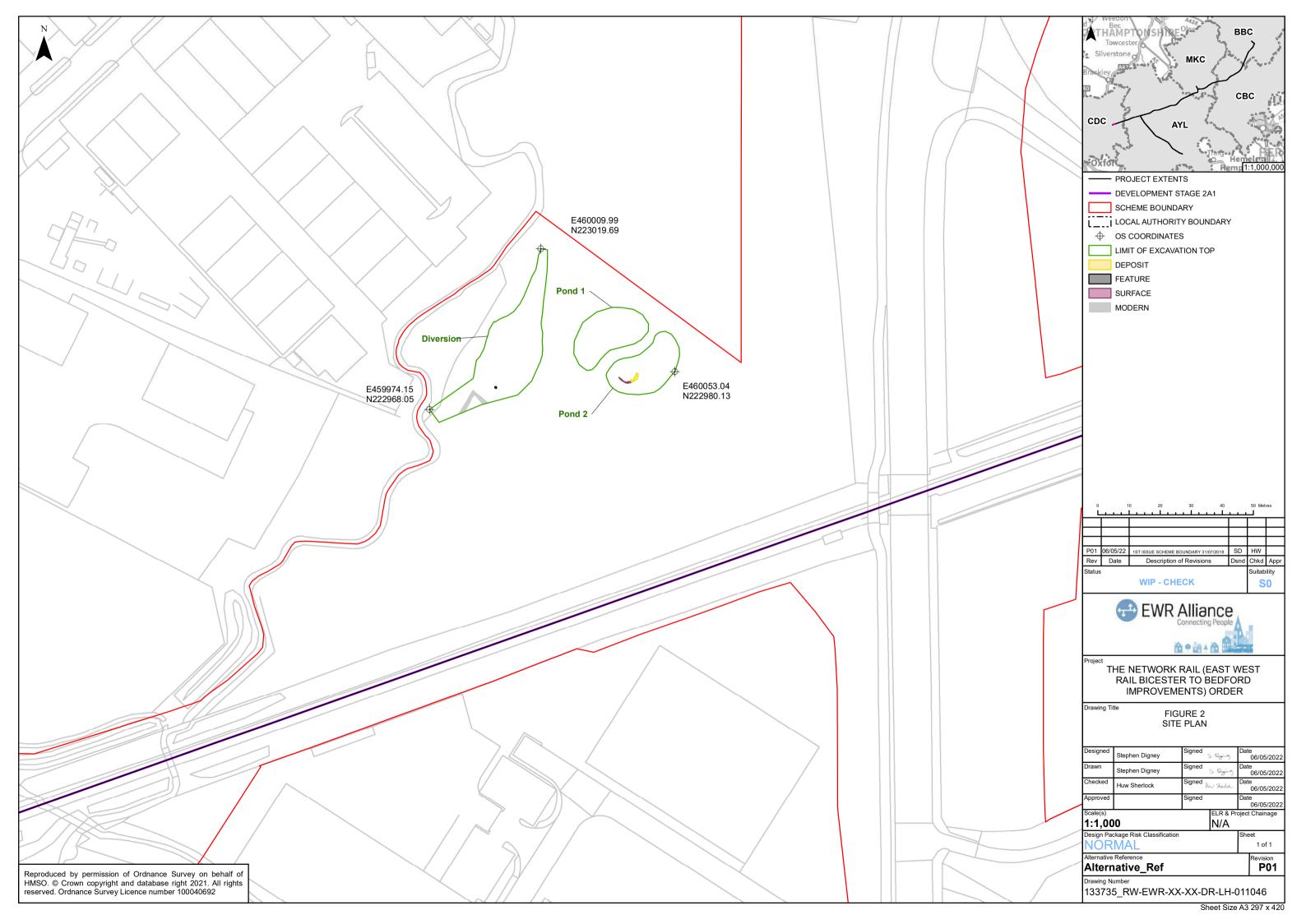


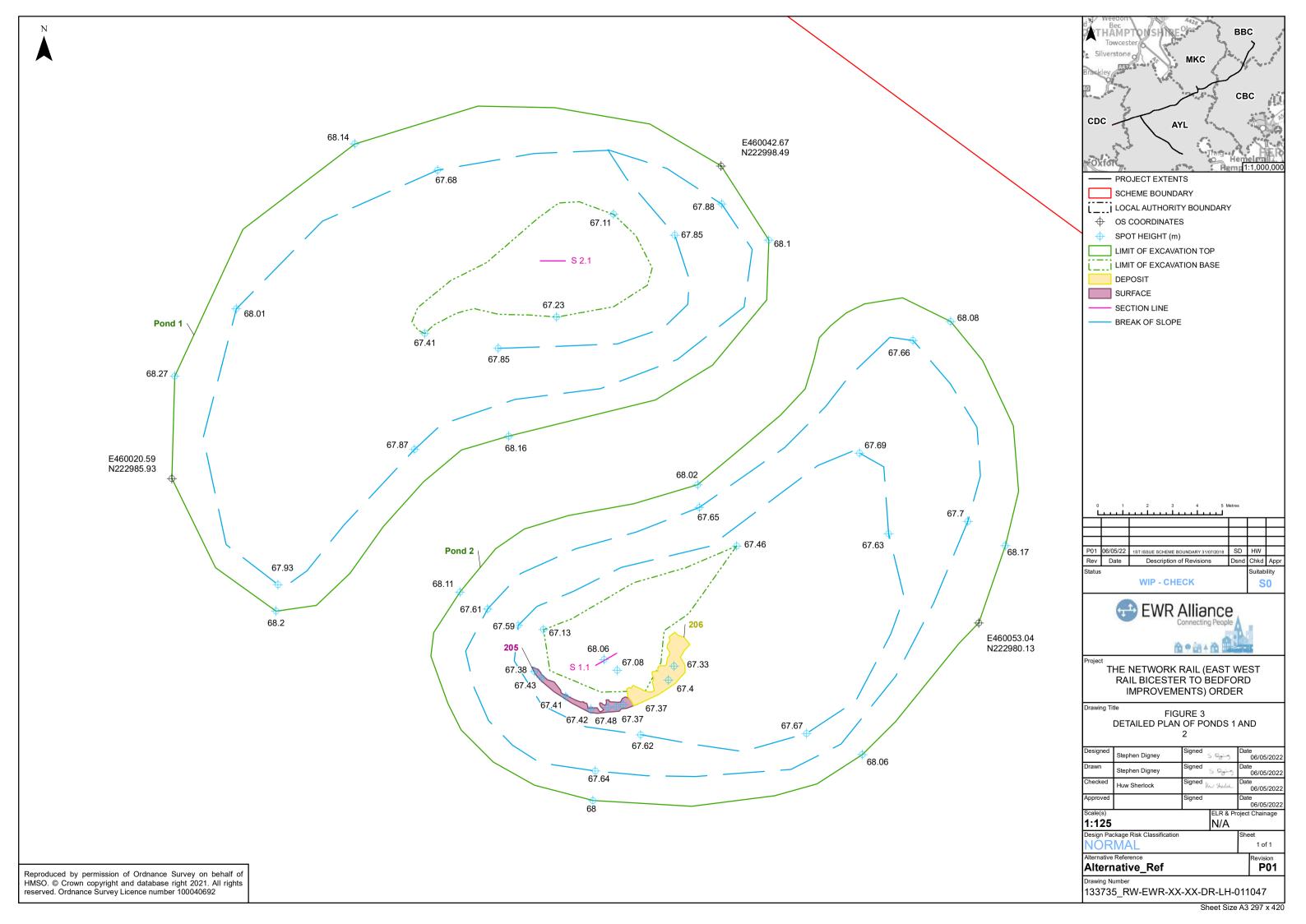
# Appendix B

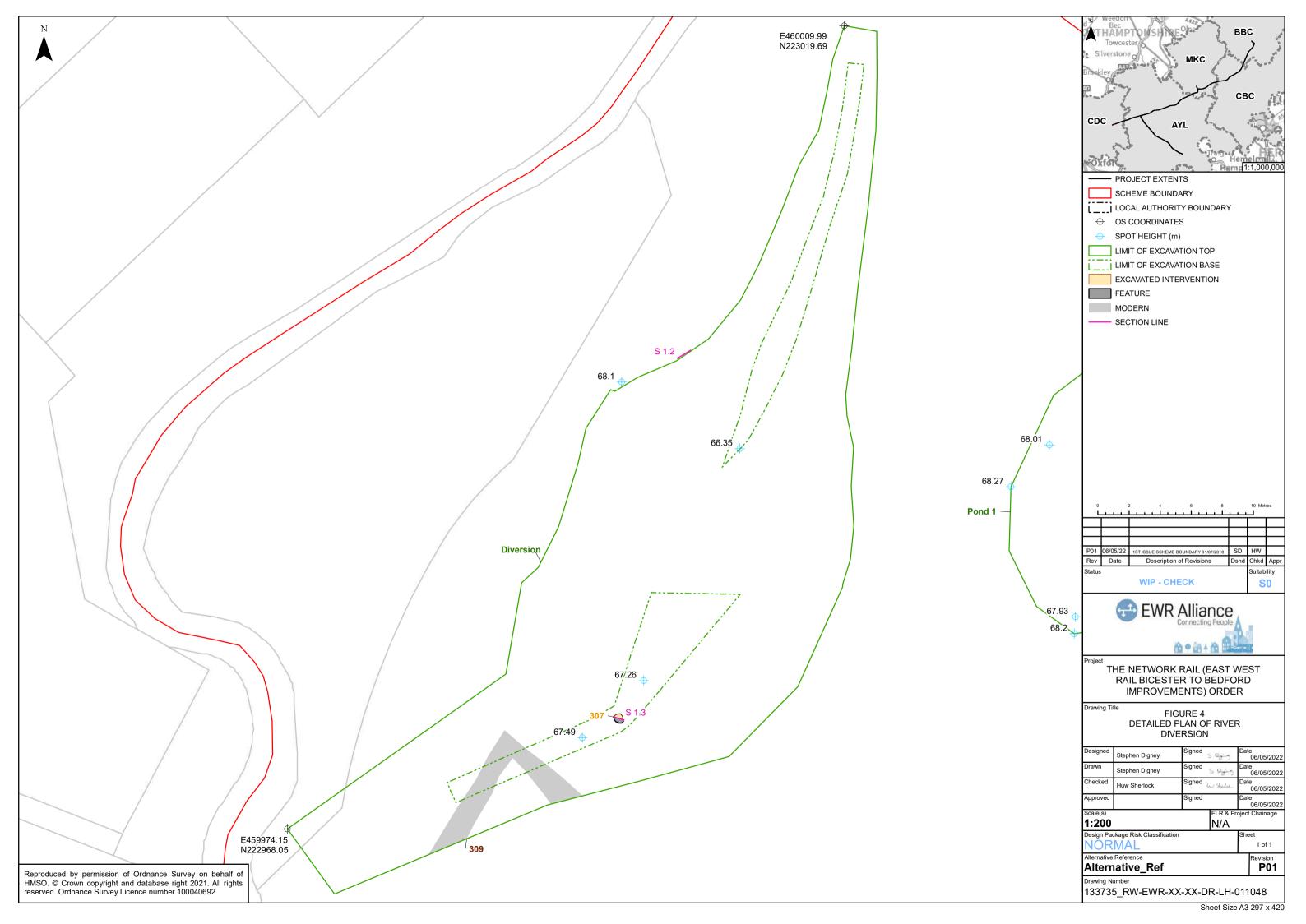
B.1 Figures

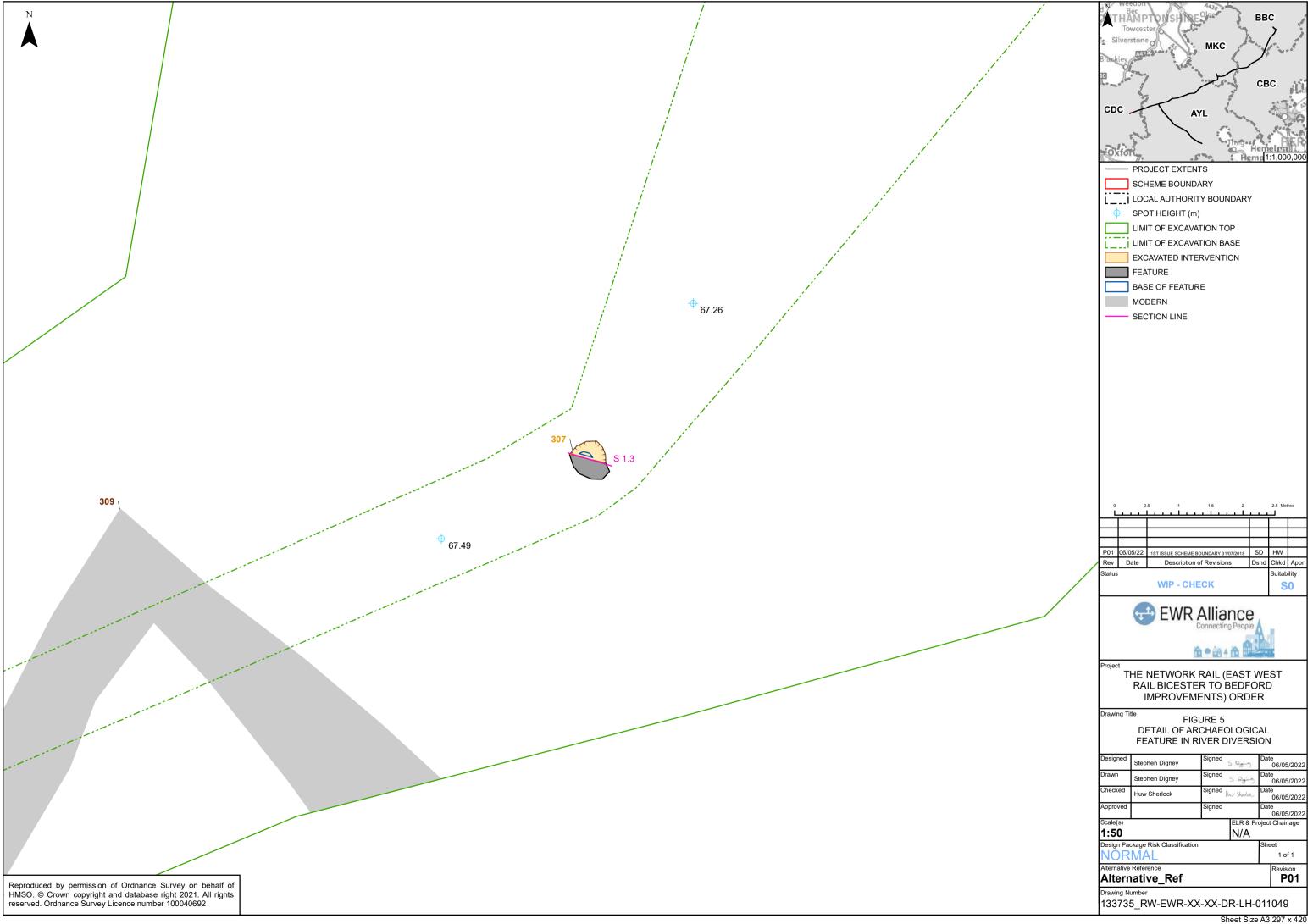


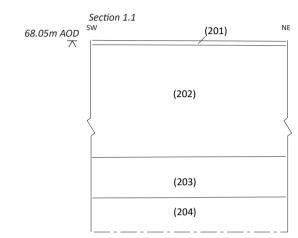


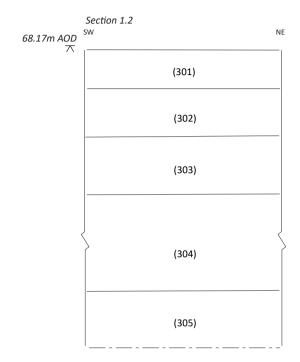


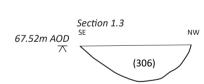


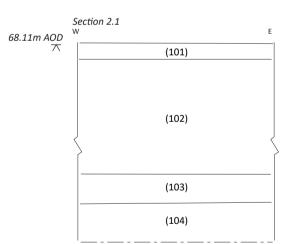


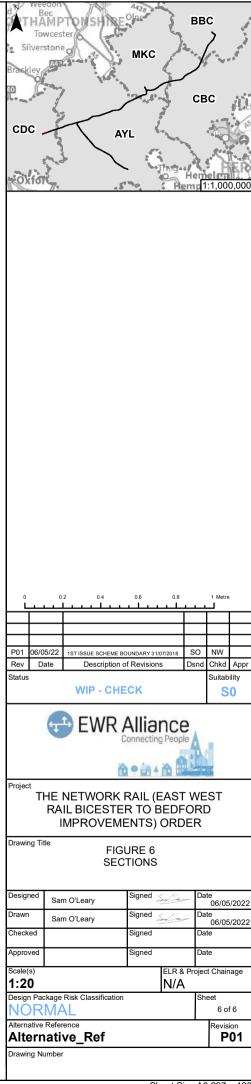














# Appendix C

## C.1 Specialist Assessments

#### **Animal bone**

#### Matilda Holmes

Four fragments of animal bone were recovered by hand collection and sampling, comprising the following:

- Layer 206, sample 1: unidentified large mammal fragment
- Context 204: a lamb humerus and a horse tibia (refitted from two fragments)

The assemblage is too small to be of use for understanding the diet, economy or status of the site beyond indicating the presence of these taxa in the past.

#### **Environmental**

Jackaline Robertson

#### Introduction

One washover and one bag of charcoal were submitted for environmental assessment from the archaeological watching brief undertaken at EWR ECS A1 in Oxfordshire. The sample was collected from a deposit associated with the excavation of ponds and a brook diversion at an ecological site located directly to the west of Mill Meadow. A small assemblage of charcoal was recovered from this sample. The aims of this assessment were to identify the charcoal to species, assess its potential for further study, its suitability for radiocarbon dating and if this material can contribute to an understanding of this sites relationship to Mill Meadow.

#### Methodology

The bulk sample was processed in its entirety in laboratory conditions at AOC archaeology London using a floatation method designed to retrieve both ecofacts and artefacts (cf. Kenward et al. 1980). The wash over was assessed at AOC archaeology Edinburgh and was scanned using a high-powered microscope at x10-x40 magnification.

A maximum of five charcoal fragments larger than 4mm were selected for further analysis. Species identifications were confirmed by analysing the transverse, tangential and radial sections at x70-x450 magnification and using keys and texts stored at AOC Edinburgh (Hather 2000; Schweingruber 1990). Taxonomy and nomenclature for plants follows Stace (2010).

#### The assemblage

#### The charcoal





The charcoal assemblage was small (1.01g) and five fragments were identified as ash (Fraxinus sp.) and oak (Quercus sp.). Oak made up 60% and ash 40%. Preservation of the charcoal was good.

#### Modern contamination

Modern contamination was composed of large quantities of roots, cereal, chaff, seeds and insect eggs. It is possible the charcoal fragments may have suffered from some reworking caused by root and insect activity that may have undermined their archaeological security.

#### Summary of the contextual units

Context: (206) Deposit, Sample <1>

The charcoal assemblage (1.01g) was formed of oak (60%) and ash (40%) which have derived from redeposited fuel debris.

#### Discussion and statement of significance

The charcoal assemblage is formed of mixed fuel debris which is likely reposited. The two species identified are both native to Britain. Ash is found in hedgerows, scrub or more open woods whereas oak is adaptable to a variety of growing conditions (Stace 2010, Linford 2009). Given the small size of this assemblage its potential for answering further research questions concerning the role of wood species at this site and its relationship to nearby Mill Meadow is negligible.

#### Recommended further work

The charcoal has been fully identified and given the small size of the assemblage no further work is recommended. If material is needed for radiocarbon dating, then the ash is suitable. Where possible oak should be avoided for dating as it is a slow growing species which can prove unreliable. The washover and charcoal are stored in a stable and dry condition at AOC Archaeology. Once all work is completed at this site this material is recommended for discard as it is too small to contribute to understanding the economic role of wood at this site.

Table 1: Charcoal Species

Sample	Context	Species	Name	Frag	RW	Weight(g)
1	206	Fraxinus sp.	Ash	2		
1	206	Quercus sp.	Oak	3		1.01





# Appendix D

#### **OASIS Form** D.1

#### OASIS ID - aocarcha1-436849

**Project details** 

EWR Development Stage 2A1: Ecological Compensation Site A1 at Land West of Project name

Charbridge Lane, Oxfordshire.

Short description of the project

An archaeological watching brief was carried out for the excavation of three ponds at an Ecological Compensation Site A1 at Land West of Charbridge Lane, Oxfordshire, between April and May 2022. These works were part of the East West Rail Phase 2

Project, undertaken on behalf of the East West Rail Alliance.

During the archaeological works, some potential archaeological features were revealed underlying two alluvial layers 0.52 m thick. These features consisted in a stone spread feature with medium to large blocks of sandstone adjacent to a surface of fine fragments of sandstone. Both deposits revealed no finds except a small number of fauna remains of farm animals. The environmental sample recovered and analysed did not add any more information that could help in the interpretation of either feature. Both features could be interpreted as having an anthropic origin although the area exposed was very small. An isolated small pit was also recorded, overlying the alluvial deposits on Site. This stratigraphical position gives us a chronology for the feature which could correspond to the Late-Medieval or early Post-Medieval period.

The waterlogged nature of the Site, located in a flood plain, and the very small number of archaeological features recorded may perhaps indicate it was considered a less-

desirable location for settlement or even agricultural use.

Project dates Start: 28-03-2022 End: 14-04-2022

Previous/future work Yes / No

Any associated project reference

codes

EWR22 ECS A1 - Sitecode

Type of project Recording project

Site status None

Current Land use Cultivated Land 1 - Minimal cultivation

NONE None Monument type Significant Finds **NONE None** 

Investigation type "Watching Brief"

Prompt Planning condition

**Project location** 

Country England

Site location OXFORDSHIRE CHERWELL BICESTER Site A1 at Land West of Charbridge

Lane.

Postcode OX264SW



Study area 1.3 Hectares

Site coordinates SP 60012 22950 51.90141967662 -1.127656389678 51 54 05 N 001 07 39 W Point

**Project creators** 

Name of Organisation **EWR Alliance** 

Project brief originator

**Buckinghamshire County Council** 

Project design originator

**EWR Alliance** 

Project director/manager Nuala Woodley

Project supervisor

Carlos Fernández González

**Project archives** 

Physical Archive recipient

**Buckinghamshire County Museum** 

**Physical Contents** 

"Animal Bones", "Ceramics", "Environmental", "Worked stone/lithics", "Wood"

Digital Archive recipient

**ADS** 

**Digital Contents** "none" Digital Media "Text" available

Paper Archive

recipient

**Buckinghamshire County Museum** 

"Animal Bones", "Ceramics", "Environmental", "Wood", "Worked stone/lithics" **Paper Contents** 

Paper Media available

"Report"

**Project** bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title EWR Development Stage 2A1: Ecological Compensation Site A1 at Land West of

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Author(s)/Editor(s) Carlos Fernández González

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Carlos Fernández González (carlos.fernandezgonzalez@aocarchaeology.com) Entered by

Entered on 27 May 2022



