

East West Rail Phase 2

Development Stage 2A2: 2A0359/8.1/FB, 2A0162/8.1/FB Work Access and Construction at Land East of Station Road, Oxfordshire

Archaeological Watching Brief Report

EWR Alliance

May 2021

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Executive Summary

Between August and November 2020, East West Rail Alliance (EWR) undertook an intermittent watching brief during the construction of a works area associated with the removal of a level crossing and construction of with an overbridge at 2A2: 2A0359/8.1/FB, 2A0162/8.1/FB, land east of Station Road, Oxfordshire (National Grid Reference (NGR): SP 62050 23690). These works were part of the East West Rail Phase 2 Project.

The natural geology across the Stie was identified at a depth of 66.04m aOD and comprised a 0.1m+ layer of firm yellowish grey clay. This was overlain by a layer of subsoil comprising a mottled grey silty clay to a depth of 0.3m. The area was sealed by a 0.3m deep layer of topsoil comprising mottled grey brown silty clay.

The archaeological watching brief recorded evidence of very truncated ridge and furrow in some areas of the Site with no other archaeological features, deposits or finds present. Therefore, the investigations have shown there are no archaeological remains related to medieval, post-medieval, or earlier activity within the Site beyond some limited indication of the medieval agricultural regime. Further archaeological works at the Site have limited potential to contribute to the general and specific aims set out in the Written Scheme of Investigation (WSI).

The archive, consisting of paper records, drawings and digital photographs, will be collated and deposited with the Oxfordshire Museum under accession number OXCMS: 2021.35. Copies of the watching brief 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: aocarcha1-415971.

1. Introduction

This report documents the results of an archaeological watching brief during intrusive works at the construction area associated with the removal of the level crossing and replacement with an overbridge at 2A2: 2A0359/8.1/FB, 2A0162/8.1/FB, land east of Station Road, Oxfordshire (National Grid Reference (NGR): SP 62050 23690; Figure 1.1). The Site lies within the local authority administrative area of Oxfordshire Council (Cherwell District).

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 August and November 2020.

2. Planning Background

The local planning authority is Oxfordshire County Council (Cherwell District). Archaeological advice to the council is provided by Richard Oram (Planning Archaeologist).

The Site was highlighted within the Heritage Delivery Strategy as requiring a WSI for archaeological works¹. The Site is required for a construction area associated with removal of a level crossing and its replacement with an overbridge. This involved excavations to remove the topsoil, subsoil, and in places, the natural geology adjacent to the road to a maximum depth of 0.6m below ground level (bgl). These excavations were undertaken prior to the area being covered with stone and a concrete slab to cover the high-pressure gas main.

All works were carried out in accordance with the WSI and current best archaeological practice and local and national standards and guidelines².

3. Site Location, Geology and Topography

The Site is located within Development Stage 2A2 of the EWR2 scheme (centred on NGR Ref: SP 62050 23690; Figure 1.1). The Site comprises a triangular parcel of land of approximately 1.3 ha, located to the north-east of Launton, c.2km from the centre of the hamlet. The Site was in use for pasture and is contained within two fields with associated hedgerows and tree lines.

Topographically, the Site is situated on gently sloping ground, at approximately 70m aOD (above Ordnance Datum). The underlying bedrock of the Site is Peterborough Member - Mudstone, a sedimentary bedrock formed in the Jurassic period, between 166.1 and 163.5 million years ago³. A band of alluvium overlies the bedrock along the north-western boundary of the Site.

 ¹ EWR Alliance, 2019. Network Rail (East West Rail Bicester to Bedford Improvements) Order Heritage Delivery Strategy. Unpublished Report
² Historic England, 2015; Campbell, G., Moffett, L., and Straker, S., 2011; ClfA 2014a; ClfA 2014b, Museum of London, 1994; MHCLG, 2019; RESCUE & ICON, 2001; United Kingdom Institute for Conservation, 1983. United Kingdom Institute for Conservation, 1990
³ British Geological Survey Website, 2019

4. Archaeological and Historical Background

Prehistoric (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 area⁴; a band of which is record along the southern 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 Bicester⁶. There is also no evidence for Mesolithic activity in the vicinity of the Site, although lithic scatters have been found during archaeological investigations near Bicester.

No evidence for Neolithic activity is recorded close to the Site, with Neolithic activity within Oxfordshire primarily based within the Thame valley close to the river's confluence with the River Thames, approximately 17km southwest of the Site⁷. However, activity has been found further afield and the absence of known Neolithic sites may be a result of limited archaeological investigation, rather than limited activity during this period.

Despite a wealth of Bronze Age activity in the county of Oxfordshire, there is no evidence of Bronze Age activity in proximity to the Site. There is an observable bias in Bronze Age occupation towards Milton Keynes and Aylesbury and as a result, Bronze Age remains within the region appear to be primarily focused within the Ouzel river valley, c. 25 km to the east between Bletchley and Leighton Buzzard. Oxfordshire had been subject to extensive woodland clearance carried out in the Middle/Late Iron Age, with environmental data corroborating the rise in open grassland environments⁵. Iron Age enclosed settlement and land management is observable in the wider landscape, with Late Iron Age remains encountered 2km south-west of the Site during trial trenching at Compound 2A1⁶. The remains were associated with an Iron Age/Romano-British settlement (MOX12267) previously excavated in 2002.

No prehistoric heritage assets were identified within the Site boundary.

Romano-British (AD43 – AD410)

The Romano-British period saw widespread activity across the EWR route and the wider landscape⁷. Dispersed rural settlement has been encountered beyond the limits of the major Romano-British centres such as Alchester in the region of Oxfordshire and along the 2A EWR route. Remains to the west of the Site were found in 2002 during an excavation at Bicester Perimeter Road, c.2.5km from the Site (MOX12667; SMR Ref: 16540). A ditch and posthole were recorded which contained bone and Iron Age and Romano-British pottery. Further Late Iron Age to Romano-British evidence was then encountered in 2004, c. 3km south-west of the Site (MOX23494; SMR Ref: 26122). A farmstead and field system dated to the 2nd and 3rd centuries AD was excavated with trackways and field ditches as well as two wells. During trial trenching at Compound 2A1, remains of Late Iron Age and Romano-British settlement and land management was encountered in 2019 which appears to be the northern periphery of the settlement.

⁴ 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

⁵ Lambrick, G. (2014) The Later Bronze Age and Iron Age: Resource assessment. In G. Hey, and J. Hind, (eds) Solent-Thames Research Framework

⁶ EWR Alliance, 2019b. Compound A1: Land East of Bicester Road, Bicester, Oxfordshire: An Archaeological Evaluation Report. Unpublished report.

⁷ EWR Alliance, 2018. Network Rail Order Environmental Statement. Volume 2ii - Route Section 2A. Chapter 7, Cultural Heritage.

Early Medieval (AD410 – AD1066)

There is no current archaeological evidence recorded within the Site or surrounding area which dates to the early medieval period; much of the activity at that time centred around Marsh Gibbon, c. 2km southeast of the Site, and Bicester, c. 3km to the south-west⁸.

Late Medieval (AD1066 – AD1540)

The manorial estates of Marsh [Gibbon] and Launton are recorded in the Domesday Book (1086) within the Hundred of Mow. Based on the Site's current position; approximately 1.5km north-east of the limits of Launton and c. 2km north-west of Marsh Gibbon, it is likely that it lay beyond the limits of settlement within the associated ploughlands. This is further evidenced by the presence of ridge and furrow, visible on LiDAR imagery and ridge and furrow visible on aerial photographs in the surrounding area. There was high potential for such remains to be present, although these were not visible upstanding within the Site itself.

Post-medieval (AD1540 – c.1750) and Industrial Period (c.1750 -1901)

Early mapping depicts the settlements of 'Mershe Gibbon', 'Bicester' and 'Launton' in the vicinity of the Site, although minimal detail of the settlements or surrounding land is given⁹. In the late 18th century, more detailed mapping of the Site shows Station Road to the west of the Site, aligned south-west to north-east between Launton and Poundon¹⁰. A singular rectangular structure is depicted at the southwestern extent of the Site on Ordnance Survey mapping from 1881 onwards; however, the structure no longer stands. Ordnance Survey mapping from the 19th century illustrates the Site within a landscape of enclosed fields with the Site shown as either pasture or arable land¹¹.

The line of the existing railway, established in the mid-19th century, runs to the immediate south of the Site. The site of Launton Station (MOX5012; SMR Ref: 5870) is recorded located 80m to the southwest of the Site on the railway line.

Modern Period (Post-1901)

There has been minimal change to the Site throughout the 20th and 21st centuries, as exemplified by cartographic evidence¹² and aerial imagery. The Site has continued to occupy enclosed fields throughout the modern period with part of a rectangular structure located at the south-western corner of the Site.

Historic Landscape Character

The present character of the Site can be defined as 18th to 19th century parliamentary type enclosures with a late nineteenth century railway to the north.

⁸ ibid

⁹ Saxton, 1574. Oxonii, buckinghamiae et berceriae Comitatuum.

 ¹⁰ Cary, J., 1794. Cary's England, Wales and Scotland (Sheets 23-24).
¹¹ Ordnance Survey, 1815. Bicester; OS, 1881. Oxfordshire XXIII.3. 25 inch to the mile; OS, 1885. Oxfordshire XXIII. Six inch to the mile; OS ¹² OS, 1900. Buckinghamshire XXI.NE. Six inch; 25 inch. OS, 1922. Oxfordshire XXIII.3. 25 inch to the mile. OS, 1923. Buckinghamshire XXI.NE. Six inch; OS, 1952. Buckinghamshire XXI.NE. Six inch; OS, 1968. OS Plan, 1: 2,500.

5. Aims of the Investigation

The archaeological watching brief aimed to:

- Establish the presence/absence of archaeological remains within the Site.
- Determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
- Record and sample excavate any archaeological remains encountered.
- Assess the eco-factual and environmental potential of any archaeological features and deposits.
- Enable the Archaeological Officer for Oxfordshire Council to make an informed decision on any requirement for mitigation.
- Make available to interested parties the results of the investigation.

The specific aims of the investigation were defined as:

• To determine the presence, nature and extent of any medieval and post-medieval agricultural activity, and to establish the nature and date of this evidence.

6. Methodology

The Heritage Delivery Strategy¹³ and WSI¹⁴ defined the site procedures for archaeological watching briefs, in agreement with the Planning Archaeologist at Oxfordshire County Council. The document detailed how the watching brief would be undertaken. All work was carried out in accordance with local and national guidelines¹⁵.

The archaeological watching brief involved the monitoring of topsoil and subsoil stripping within the site boundary. All excavation was carried out with an excavator fitted with a toothless ditching bucket.

A unique site code EWR20-2A2 was assigned by AOC Archaeology.

The watching brief was carried out intermittently between the 12th of August and the 20th of November 2020 and was supervised by Lindsay Dunbar and Leonie Teufel under the overall direction of Yvonne Roberson (Project Manager).

 ¹³ EWR Alliance, 2019. Network Rail (East West Rail Bicester to Bedford Improvements) Order Heritage Delivery Strategy. Unpublished Report
¹⁴ EWR Alliance, 2020. EWR2 Condition 9(b) WSI - Development Stage 2A2: 2A0162/8.1/FB Work Access and Construction Site at Land East of Station Road, Oxfordshire
¹⁵ CIfA 2014

7. Results

Excavations took place across the Site over an area equating to approximately 200m (NE-SW) by a of maximum 80m wide (Figures 1.1 & 1.2). Excavations continued to a maximum depth of 0.7m bgl.

The natural geology (003) was identified at a depth of 66.04m aOD and comprised of a 0.1m+ layer of firm yellowish grey clay. The natural geology was overlain by a layer of subsoil (002) with a maximum thickness of 0.3m. This comprised a mottled grey silty clay formed into bands representing truncated ridge and furrow running northwest-southeast and visible across the south of the Site (Figure 1.2). These were not identified within the Site to the northeast or the southwest due to severe truncation from later activity including deep rooting from hedgerows, trees and land drain construction. Where the ridge and furrow were evident, they were clearly disturbed by the construction of the high-pressure gas main and subsequent reinstatement of the field drains in this area. The area was sealed by a 0.3m deep layer of topsoil comprising mottled grey brown silty clay (001). This was relatively level with only faint indications of upstanding remains of ridge and furrow (Plate 1-2).

No archaeological features or deposits were recorded within the Site during the watching brief.

Context Number	Thickness	Height of Deposit	Interpretation
001	0.3m	66.64m aOD	Topsoil: A grey mottled silty clay with occasional sub- rounded stone inclusions.
002	0.3m	66.34m aOD	Subsoil: A grey mottled silty clay with occasional sub- rounded stone inclusions, similar to topsoil but formed in bands NW-SE aligned truncated ridge and furrow. Remnants of ridge measured c. 4m wide with c. 3m wide furrows between.
003	>0.1m	66.04m aOD	Natural Geology: Firm yellow grey clay with rare small stone inclusions. Cut by modern gas pipe and several stone and ceramic field drains. Clearly disturbed by gas pipe works across a corridor minimum 2-3m either side of visible pipe cut.

Table of Stratigraphic Sequence





Plate 1: Mid-excavation view of ridge and furrow after topsoil strip adjacent to gas main, looking northeast



Plate 2: Detailed view of ridge and furrow during topsoil strip, looking east





Plate 3: Post-excavation view across middle area adjacent to gas main, looking east



Plate 4: Post-excavation view after topsoil strip at north east corner, looking northeast

8. Finds

There were no finds recovered from the Site during the watching brief.

9. Conclusions

The archaeological watching brief recorded no archaeological features, deposits or finds. Therefore, the investigations have shown there are no archaeological remains related to medieval, post-medieval, or earlier, activity within the site beyond truncated remnants of ridge and furrow cultivation.

The truncated and disturbed fragmentary ridge and furrow cultivation did not allow a full understanding of the field system in this particular area of the Site. The Site as a whole was truncated in many areas due to modern activity including deep rooting from hedgerows, trees and land drain construction. Where the ridge and furrow were evident, they were clearly disturbed by the construction of the high-pressure gas main and subsequent reinstatement of the field drains in this area. It is therefore unclear whether there is a genuine paucity of archaeology pre-dating the ridge and furrow or whether the agricultural activity and disturbance from utilities installation has removed any archaeological features which may have been present.

No archaeological evidence has been encountered to help answer specific research questions identified in the WSI¹⁶.

10. Publication and Archive Deposition

The site archive will comprise all artefacts, ecofacts and written and drawn records. Archaeological finds rarely have any monetary value, but they are an important source of information for future research, included in museum exhibits and teaching collections. The Chartered Institute of Archaeologists⁹ and the Society of Museum Archaeologists recommend that finds are publicly accessible and that landowners donate archaeological finds to a local museum. The receiving museum will be the Oxford Museum Service.

On completion of the project arrangements will be made for the archive to be deposited with Oxford Museum Service, with the consultant/developer/landowner. The paper and digital archive will be security copied via the Archaeology Data Service (ADS) under OASIS ID - aocarcha1-415971 (Appendix C).

The site archive will be deposited with Oxford Museum Service under accession number OXCMS: 2021.35 within one year of the completion of fieldwork (if no further work is required). It will then become publicly accessible.

11. Bibliography

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EWR Alliance, 2018. Network Rail Order Environmental Statement. Volume 2ii - Route Section 2A. Chapter 7, Cultural Heritage.

¹⁶ EWR Alliance, 2020. EWR2 Condition 9(b) WSI - Development Stage 2A2: Development Stage 2A2: 2A0162/8.1/FB Work Access and Construction Site at Land East of Station Road, Oxfordshire



EWR Alliance, 2019a. Network Rail (East West Rail Bicester to Bedford Improvements) Order: Heritage Delivery Strategy. Unpublished report

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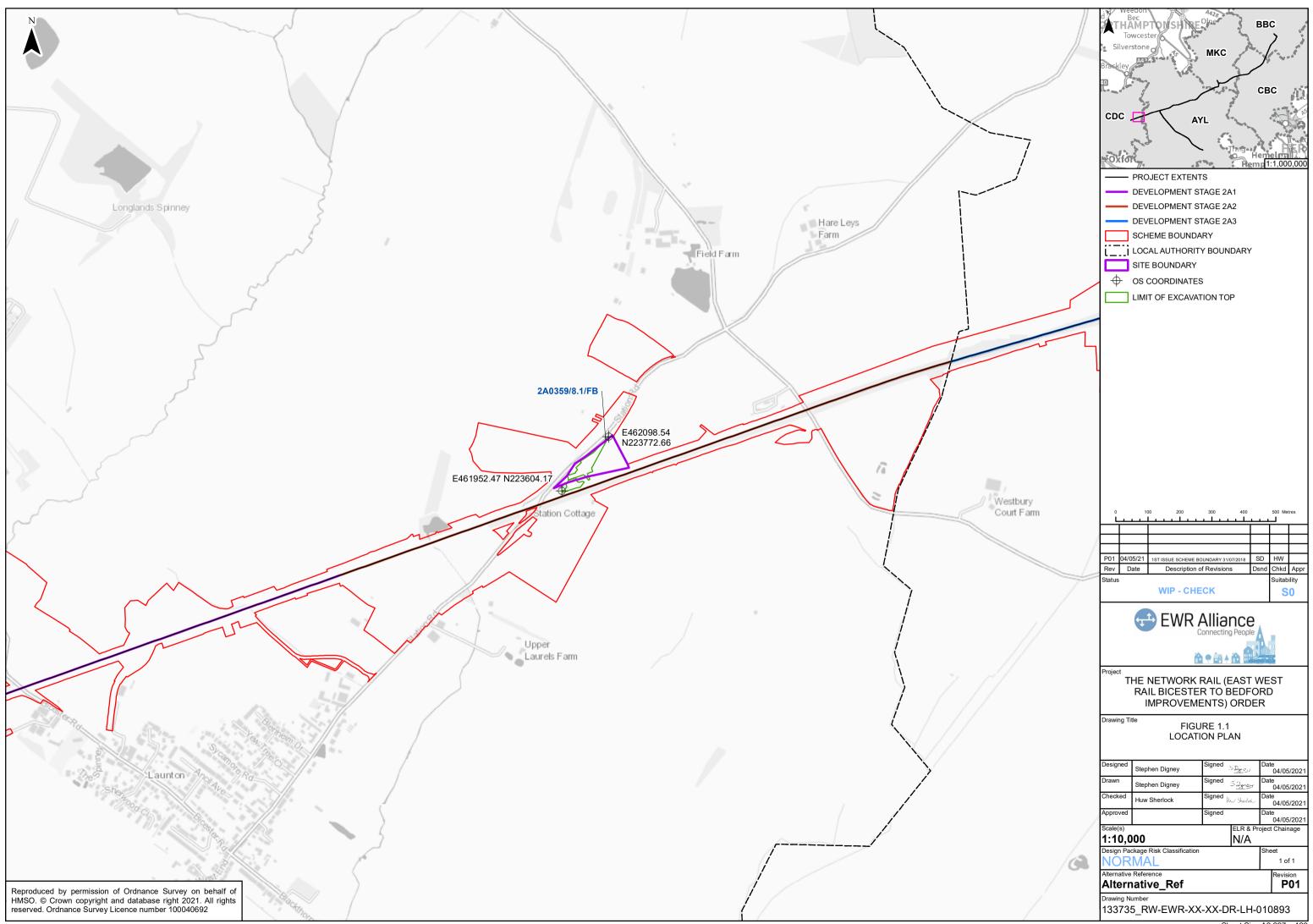
Appendix A. Context Register

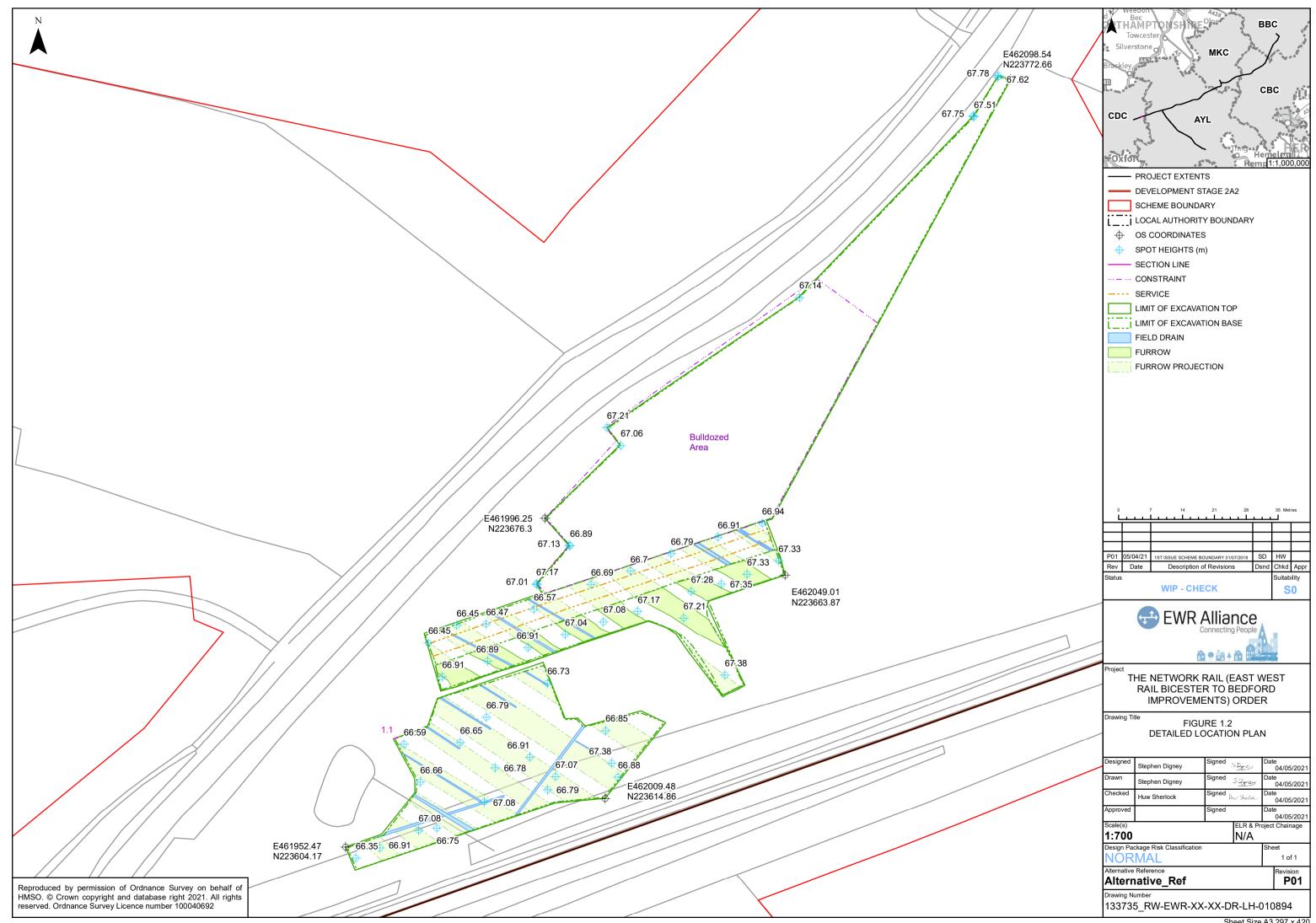
Context	Description	Interp	Length	Width	Max Depth
001	A grey mottled silty clay with occasional sub-rounded stone inclusions.	Topsoil	Across Site	Across Site	0.3m
002	A grey mottled silty clay with occasional sub-rounded stone inclusions, similar to topsoil but formed in bands NW-SE aligned truncated ridge and furrow. Remnants of ridge measured c. 4m wide with c. 3m wide furrows between.	Subsoil	Across Site	Across Site	0.3m
003	Firm yellow grey clay with rare small stone inclusions. Cut by modern gas pipe and several stone and ceramic field drains. Clearly disturbed by gas pipe works across a corridor minimum 2-3m either side of visible pipe cut.	Natural Geology	Across Site	Across Site	>0.1m



Appendix B. Figures







Sheet Size A3 297 x 420

Appendix C. Oasis Form

OASIS ID: aocarcha1-415971

Project details

Project name	Development Stage 2A2: 2A0162/8.1/FB Work Access and Construction Site at Land East of Station Road, Oxfordshire
Short description of the project	In August to November 2020, East West Rail Alliance (EWR) undertook an intermittent watching brief during the construction of a works area associated with removal of the level crossing and construction of an overbridge, on land east of Station Road, Oxfordshire. These works were part of the East West Rail Phase 2 Project. The archaeological watching brief recorded evidence of very truncated ridge and furrow in some areas of the site with no archaeological features, deposits or finds evident across the majority of the area. Therefore, the investigations have shown there are no archaeological remains related to medieval, post-medieval, or earlier, activity within the site beyond some limited indication of the medieval agricultural regime.
Draigat datas	
Project dates	Start: 12-08-2020 End: 20-11-2020
Project dates Previous/future work	
,	
Previous/future work	No / No
Previous/future work Type of project	No / No Recording project
Previous/future work Type of project Site status	No / No Recording project None

Project location

Prompt

Site location	OXFORDSHIRE CHERWELL LAUNTON 2A0162/8.1/FB
Postcode	OX26 5EG
Study area	1.3 Hectares
Site coordinates	NGR - SP 62050 23690 LL - 51.907849461676 -1.097902329505 (decimal) LL - 51 54 28 N 001 05 52 W (degrees) Point
Height OD / Depth	Min: 66m Max: 66.04m

Planning condition

Project creators

Name of	EWR Alliance
Organisation	

Project brief originator EWR Alliance





Project design originator	EWR Alliance
Project director/manager	Yvonne Robertson
Project supervisor	Lindsay Dunbar
Type of sponsor/funding body	developer
Name of sponsor/funding body	EWR Alliance
Project archives	
Physical Archive Exists?	'No physical archive'
Digital Archive recipient	Oxford County Museum Service
Digital Media available	'Images raster / digital photography', 'Spreadsheets', 'Text'
Paper Archive recipient	Oxford County Museum Service
Paper Media available	'Drawing','Report'
Project bibliography	
Title	Development Stage 2A2: 2A0162/8.1/FB Work Access and Construction Site at Land East of Station Road, Oxfordshire An Archaeological Watching Brief Report

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