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County Planning

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Camilla Fisher RPS Group Plc.

30 November 2021

By email only

Dear Ms. Fisher,

Application Ref:WSCC/015/18/NH (APP/P3800/W/18/3218965)Proposal:Recycling, Recovery and Renewable Energy Facility and Ancillary
Infrastructure

Address: Former Wealden Brickworks (Site HB), Langhurstwood Road, Horsham, West Sussex, RH12 4QD

Condition(s):

Thank you for your recent submission regarding the above. The Council has considered the information and I am now able to inform you that:

Condition 13 – Archaeological Written Scheme of Investigation

In light of the issues identified during initial on-site investigations, the submitted updated scheme (ref: Written Scheme of Investigation for a Programme of Archaeological Work – JAC26374 Rev 5 – 18/11/21) is **accepted as a revised scheme in respect of condition 13**. This replaces the previous version and must be implemented and adhered to in full.

Yours sincerely

James Neave



WEALDEN 3RS FACILITY, HORSHAM, WEST SUSSEX

Written Scheme of Investigation for a Programme of Archaeological Work





Document Status						
Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date	
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Rev 5	For Issue	Mick Rawlings	Camilla Fisher	Mick Rawlings	18/11/2021	

Approval for issue

Mick Rawlings

man

2021-11-18

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Contents

1	INTRODUCTION	1
2	AIMS, OBJECTIVES AND SIGNIFICANCE	6
3	METHODOLOGY	8
4	REFERENCES AND DOCUMENTS CONSULTED1	5

Figures

Figure 1	Site location
i igui e i	

- Figure 2 Geology
- Figure 3 OS 6" map 1874
- Figure 4 OS 25" map 1912-13
- Figure 5 OS 6" map 1961

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



1 INTRODUCTION

Planning consent was granted (on appeal) in February 2020 for a recycling, recovery and renewable energy (3Rs) facility and ancillary infrastructure at the former Wealden Brickworks, Langhurstwood Lane, Horsham, West Sussex (APP/P3800/W/18/3218965), following refusal of the planning application (WSCC/015/18/NH) by West Sussex County Council.

1.2 A condition (No. 13) attached to the consent states:

[•]No demolition/development hereby permitted shall take place until a Written Scheme of Investigation has been submitted to and approved in writing by the County Planning Authority. The scheme shall include an assessment of significance and research questions – and:

- *i)* The programme and methodology of site investigation and recording;
- ii) The programme for post investigation assessment
- iii) The provision to be made for analysis of the site investigation and recording;
- *iv)* The provision to be made for publication and dissemination of the analysis and records of the site investigation;
- v) The provision to be made for archive deposition of the analysis and records of the site investigation; and
- vi) The nomination of a competent person or persons/organization to undertake the works set out within the Written Scheme of Investigation.

Thereafter the Written Scheme of Investigation shall be implemented as approved'.

- 1.3 This document represent the Written Scheme of Investigation (WSI) required in response to the above condition (No. 13) and has been prepared by the Heritage team at RPS Planning and Environment, part of RPS Group plc, on behalf of Britaniacrest Recycling Ltd. It describes the methodologies that will be employed in the undertaking of the programme of archaeological work at the development site.
- 1.4 A previous WSI (Rev. 3, dated 13th May 2020) was submitted to the archaeological advisor at West Sussex County Council and was approved in writing by West Sussex County Council. That WSI described a programme of archaeological excavation and recording that would be undertaken in respect of the remains of a former brick kiln at the development site.
- 1.5 However, following commencement of this programme of archaeological excavation and recording a significant amount of asbestos was found to be present over and within the former brick kiln. The archaeological excavation work was halted and it was agreed with the archaeological advisor at West Sussex County Council that health and safety precautions meant that no further physical investigation of the former brick kiln was possible.
- 1.6 This revised WSI proposes an alternative programme of remote recording of the exposed elements of the former brick kiln, along with additional research into the origins and the history of the brickworks that used to be present within the development site. Another element of the archaeological work described within the previous WSI, comprising a watching brief to maintained during groundworks in the southern part of the development site, remains unchanged within this revised WSI.

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



1.7 This revised WSI will be submitted to the archaeological advisor at West Sussex County Council and will be approved in writing prior to the commencement of the additional research and reporting required for the former brick kiln.

The development site

- 1.8 The development site comprises approximately 3.8 hectares of land within the former Warnham and Wealden Brickworks site, *c*. 3.3 km to the north of Horsham Railway Station in West Sussex (**Figure 1**). It is centred on National Grid Reference TQ 1714 3434, and is relatively flat at around 50 m above Ordnance Datum (aOD).
- 1.9 The western part of the development site is mostly taken up by a large portal frame building currently in use as a Waste Transfer Station / Materials Recovery Centre, whilst the eastern part comprises concrete hardstanding with a few smaller buildings. The site boundary (as defined in the application) includes the access road which extends east to meet Langhurstwood Road.
- 1.10 The development site is bounded to the south by the internal access road, beyond which is the Weinerberger brickworks factory (also known as Warnham Brickworks), and to the west by the London-Horsham railway. To the east is another internal access road which separates the site from the Brookhurst Wood Mechanical and Biological Treatment (MBT) facility operated by Biffa in partnership with West Sussex County Council. Immediately to the north of the development site are two ponds located within dense scrub, beyond which is an area of vacant land containing several derelict former brickworks buildings.
- 1.11 The underlying basal geology of the development site comprises mudstone of the Weald Clay Formation, laid down in the Cretaceous Period (**Figure 2**). No superficial deposits are recorded (British Geological Survey).

Archaeological Background

- 1.12 The planning application for the consented development was supported by an Environmental Statement (ES) which identified the likely significant effects of the development on all aspects of the environment (RPS 2018). Chapter 9 of the ES addressed Archaeology and Cultural Heritage, and was in turn supported by Appendix 9.1: Desk-based Heritage Assessment. This document presented a detailed assessment of the archaeological and historic environment resources within the vicinity of the development site.
- 1.13 The Desk-based Heritage Assessment concluded that there was limited evidence for prehistoric or Roman activity in the areas, and that the development site had been woodland and then used as agricultural land until being developed as a brickworks at some time between 1897 and 1912. The railway just to the west was opened in 1867 as part of the London, Brighton and South Coast Railway.
- 1.14 At a location approximately 150 m south of the development site and just east of the railway, at least one mine pit has been recorded. These are pits of (usually) medieval or early postmedieval date dug to explore the presence of iron ore with a view to its extraction if present. In the Weald area they are likely to have been associated with an east-west aligned band of sandstone (Horsham Stone Member) laid down in the Cretaceous Period (**Figure 2**) formed in a horseshoe-shaped outcrop centred around Horsham, and is a prominent feature between

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



Horsham and Crawley, but also extends to the south and east of Christ's Hospital, and as far as Cowfold, Bolney and Staplesfield. It is of note, however, that the Horsham Stone Member lies to the south of the development site and does not actually underlie it.

- 1.15 The 1st edition of the Ordnance Survey (OS) 6" (to the mile) map was published in 1874 and showed the development site to be located within an area of agricultural land to the east of the railway (**Figure 3**). The 2nd edition of this map (published in 1898) shows that the development site still comprised agricultural land, but that a brickyard had been established to the southwest, on the opposite side of the railway. This is named on the map as the 'Warnham Brick Yard' and it represents the initial phase of brickmaking in the area.
- 1.16 By the time of the later edition of the 25" (to the mile) OS map (published in 1912-13), a larger brickworks had been established on the eastern side of the railway, including the land which now comprises the development site (**Figure 4**). This was the Wealden Brickworks. The recorded activity appears to include shallow extraction of clay (for brickmaking) from within much of the development site along with the construction of a row of four kilns adjacent to the railway. The southernmost of the four kilns was located within the present development site, as was a chimney attached to the southern side of the kiln immediately to the north, but this kiln and also the other two were outside the development site. A tramway connecting a processing building next to the kilns with an area of clay extraction crossed the development site, whilst further to the south (and still within the development site) the map shows an 'Engine Shed' and adjacent (water) 'Tank'.
- 1.17 A Cultural Heritage Assessment of the former Wealden Brickworks was produced with regard to proposed redevelopment of the area. This included the area of the current development site as well as the land to the north (URS 2012). The URS report collated information from a number of sources, predominantly an earlier report on the surviving structures at the brickyard (Martin 2003) and a general review of brickmaking in Sussex (Beswick 2001).
- 1.18 The Wealden Brickworks was initially established by the Peters' family who purchased the land in 1888. The brickworks was subsequently acquired by the Sussex Brick Co. Ltd which in 1899 became part of the Sussex and Dorking United Brick Companies. The 1912 OS map (Figure 4) shows the brickworks with the new kilns installed by the Sussex and Dorking United Brick Companies and it is reported that by 1903 the Wealden Brickworks was producing as many as 12 million bricks each year. The new kilns were coal-fired continuous Hoffman kilns, designed specifically for brickmaking.
- 1.19 The image below dates from 1928 and shows three kilns adjacent to the railway. Comparison with the 1912 OS map (**Figure 4**) suggests that these are the three large kilns indicated on that map, with the smaller northernmost kiln shown in 1912 having been demolished by 1928 (this was not a Hoffman kiln and was probably one of the earlier kilns which predated the Hoffman ones). The right-hand kiln in the image below is the one which was located within the present development site. Documentary records indicate that the third Hoffman kiln at the brickworks was constructed some time after 1903; the one within the development site is slightly different to the other two in that it has a curving rather than a pitched roof and this may indicate that it was the later one of the three. The image also shows that the production building shown on the 1912 map had been demolished and the tramway shown on the same map had been removed. It also shows the sidings which were added to the railway in order to enable the delivery of coal for the kilns and also the export of finished bricks.



- 1.20 A steam excavator was purchased for the brickyard in 1912 which allowed excavation of clay to greater depth and at a faster rate, enabling production to increase to 100,000 bricks per day, and by the late 1930s there was a light railway in one part of the brickworks and a wire rope haulage system in another part.
- 1.21 Part of the brickworks was taken over during the Second World War and used by the Canadian army as a base for the assembly and maintenance of Churchill tanks. There was a substantial expansion of the brickworks in the post-war period as national demand for bricks increased significantly. New kilns were constructed adjacent to the railway line, including further examples within the development site.



Aerial view of Warnham Brickworks, 1928 (after Beswick 1993)

- 1.22 The 1961 OS 6" map shows the new kilns to the south of the early 20th century examples, along with other buildings which were associated with this increased production of bricks (**Figure 5**).
- 1.23 Increased competition eventually led to a reduction in demand and gradual closure of the brickworks. The 1980 OS map of this area shows that some of the kilns had been demolished, whilst a large steel-sheeted portal frame building was constructed in the western part of the development site by 1991 following the removal of all kilns from within this area. This building was later extended to the north (beyond the current development site) although this northern extension has since been removed.
- 1.24 A photographic survey of the surviving buildings within the development site was undertaken with regard to a previous application. This covered four buildings: the large steel-sheeted

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



portal frame building; a welfare building, an office and reception building and a boiler house (SLR 2105).

2021 Investigations

- 1.25 An initial archaeological exploratory trench was opened in April 2021 just to the west of the large steel-sheeted portal frame building. The location of this trench is indicated on **Figure 1**. The exploratory trench confirmed the presence and location of remains associated with the former early 20th century brick kiln in the north-western part of the development site. The remains appeared to be reasonably well-preserved beneath sub-base material placed here ahead of the establishment of a thick concrete slab. The exposed remains were cleaned and recorded, but no detailed excavation was undertaken at that stage.
- 1.26 Subsequent to the recording of the remains of the former early 20th century brick kiln, and with the agreement of the archaeological advisor at West Sussex County Council, the concrete slab was broken out across the whole of the area of the former early 20th century brick kiln. This included land west of the large steel-sheeted portal frame building (in the vicinity of the initial exploratory trench) as well as land within the large steel-sheeted portal frame building.
- 1.27 Archaeological investigation of the remains of the former early 20th century brick kiln in line with the methodology set out in the previous WSI commenced in June 2021. The sub-base material was removed and the upper parts of the remains of the former early 20th century brick kiln were exposed and cleaned. However, it became clear that the material overlying the remains of the former early 20th century brick kiln, which also infilled the voids within the former kiln, was heavily contaminated with broken pieces of asbestos sheeting. This contaminated material may well have originated from the demolition of the former kiln.
- 1.28 Despite initial attempts to remediate the area of archaeological investigation in order for further work to be undertaken safely, it was found that the broken asbestos sheeting was present within the whole of the investigation area, and that there was also a high risk of asbestos dust within the material overlying and infilling the remains of the former early 20th century brick kiln. The risks associated with asbestos dust were increased by the fact that much of the area of investigation was within the large steel-sheeted portal frame building, where ventilation would be reduced.
- 1.29 It was therefore agreed with the archaeological advisor at West Sussex County Council that no further physical investigation of the remains of the former early 20th century brick kiln could be safely undertaken. The exposed remains of the former kiln were recorded photographically, including images taken using a drone that could be safely flown within the large steel-sheeted portal frame building by a pilot remaining outside the building.



2 AIMS, OBJECTIVES AND SIGNIFICANCE

- 2.1 The overall aim of the programme of archaeological work is to examine and record any surviving remains of the earliest brickmaking kilns known to have been present within the development site, also any other evidence associated with brickmaking or with iron ore extraction.
- 2.2 Chapter 9 of the ES submitted in support of the application (RPS 2018) included a section (9.10) regarding 'Further Mitigation Measures'. This stated:

'The site of the Hoffman kiln, within the north west corner of the site, comprises demolished underground remains only. These are currently underneath the existing building. On this basis, no work on the remains can safely or reasonably take place until the superstructure of the building is removed.

Following an appropriate level of demolition of the existing building, mitigation of the effect of development on the Hoffman kiln is proposed through a programme of excavation and recording of the asset prior to construction of the proposed development.

Following the works on the site of the Hoffman kiln described above, no further mitigation would be required'.

- 2.3 However, the response to the application provided by the Senior Archaeologist (Planning Services) at West Sussex County Council stated:
 - 'Reasonable archaeological mitigation measures have been proposed, involving the investigation and recording of buried remains of one of the earlier kilns in the north-western part of the site.
 - The mitigation measures (archaeological investigation and recording) should also include buried remains of minepits (medieval / early post-medieval iron ore extraction pits), if these extend northwards into the site from their known location adjoining the existing brickworks'.
- 2.4 Chapter 9 of the ES identified that the remains of the Hoffman kiln are of 'low' signficance (in respect of the terminology used in Environmental Impact Assessments), but there was the potential to recover information that could contribute to local research objectives (RPS 2018, Section 9.7).
- 2.5 With regard to the current archaeological research framework, the following Research Aims may be the most applicable (Barber 2019), although others may also apply:

Bricks and tiles

• 'The morphology of production sites, from kiln technology to ancillary buildings needs further study.

Extractive industry

- *'Need more mine pits excavated and ore roasting/preparation areas to begin to understand the initial processes of the iron industry'.*
- 2.6 The following specific objectives have been identified:



- To provide information regarding the nature, character, date and extent of any remains associated with the early 20th century brick kiln in the north-western part of the development site;
- To assess the survival, quality, condition and significance of any remains associated with the brick kiln;
- To ensure the preservation by record of all remains revealed during the course of the archaeological investigation; and
- To prepare an appropriate archaeological archive including the treatment and preservation of any artefacts.
- 2.7 Any remains associated with the extraction of iron ore (such as mine pits) may represent the opportunity to recover information that could contribute to regional research objectives.



3 METHODOLOGY

Introduction

- 3.1 A programme of archaeological investigation and monitoring will be undertaken within the development site. One part of this will comprise reporting of the results of the 2021 investigation of the remains of the early 20th century Hoffman kiln in the north-west part of the development site, supplemented by research in appropriate archives and examination of other source material. A second part will comprise the archaeological monitoring of groundworks undertaken at the development site for the new buildings, services etc.
- 3.2 The programme of archaeological work will comprise:
 - Reporting of the results of the 2021 investigation of the remains of the early 20th century Hoffman kiln;
 - Research comprising searches in appropriate archives along with examination of other relevant source material;
 - Monitoring of groundworks (archaeological watching brief);
 - Analyses of material and samples recovered during the programme of archaeological investigation;
 - Preparation of a report for publication in a suitable format; and
 - Preparation of the archive for deposition at an appropriate recipient museum.
- 3.3 The programme of archaeological investigation will be undertaken in accordance with the guidance provided in the ClfA documents '*Standard and guidance for archaeological excavation*' (ClfA 2014a) and other appropriate ClfA guidance documents (ClfA 2104c, 2014d), and with the ClfA *Code of Conduct* (ClfA 2014e), and in accordance with the guidance provided in the document *Sussex Archaeological Standards 2019* (Chichester District Council *et al.* 2019).
- 3.4 The programme of archaeological work will be undertaken by a specialist archaeological contractor that will be a Registered Organisation with the Chartered Institute for Archaeologists (ClfA). The archaeologist in charge of the fieldwork will be a full Member or an Associate member of the ClfA.
- 3.5 All relevant and applicable health and safety legislation, regulations and approved codes of practice will be respected. Prior to the commencement of any works on site the contractor will submit a detailed Health and Safety Risk Assessment to the nominated RPS Archaeological Project Manager.
- 3.6 The recipient museum for the project archive will be identified and contacted prior to the commencement of any work so that a provisional accession number can be issued if this is a requirement of the museum.
- 3.7 Reasonable access to the development site will be made available to the Senior Archaeologist (Planning Services) at West Sussex County Council who may wish to be satisfied that the programme of archaeological work is being conducted in accordance with the methodologies described in this WSI. Access for the works will be arranged through RPS Heritage.

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



Fieldwork

Archaeological Watching Brief

- 3.8 The mine pits recorded to the south of the development site are within an east-west aligned band of sandstone (Horsham Stone), and the primary source (Worssam 1972) describes how the mine pits were found within an ironstone horizon some 2 m below the Horsham Stone. This band of sandstone does not extend into the development site, which is underlain entirely by clay and mudstone of the Weald Clay Formation (**Figure 2**).
- 3.9 Within parts of the development site, the clay has been extracted for brickmaking and indeed the presence of this clay is the main locational factor for the establishment of brickworks in the area. The British Geological Survey (BGS) mapping indicated on Figure 2 records 'Worked Ground' in the north-eastern part of the development site, however the historic maps (*cf.* Figures 4 and 5) shows that the extraction was more widespread than just the area indicated on the BGS mapping. In essence, the geographical extent and depth of extraction within the development site remains unknown, as does the nature of the material placed within the extracted areas in order to restore the ground level to the current position.
- 3.10 If mine pits were excavated within the development site then they are likely to have been open only briefly (as it would have quickly been realised that no ironstone was present within the Weald Clay Formation which underlies the development site), and would almost certainly have been backfilled with the excavated material. As such they will be difficult to recognise even if any are present.
- 3.11 An archaeological watching brief will be maintained during all groundworks within the southern part of the development site that have the potential to physically impact on buried archaeological remains, particularly those associated with exploration for iron ore (i.e. mine pits). Principally such groundworks comprise works associated with the road system, weighbridges and new services including drainage. The location of the watching brief area is indicated on **Figure 1**.
- 3.12 Arrangements will be put in place to ensure appropriate attendance of an archaeologist during such groundworks. These arrangements will be established through communication between the archaeological contractor and the main works contractor, with oversight from RPS and the client.
- 3.13 If archaeological remains are identified during the watching brief, these will be investigated and recorded in line with the procedures identified below. Additional procedures may need to be agreed between RPS, the Senior Archaeologist (Planning Services) at West Sussex County Council and the archaeological contractor, depending on the nature of the identified archaeological remains.
- 3.14 The programme of monitoring of ground works will be kept under review. If it becomes clear that the groundworks are only encountering recently made ground (i.e. backfill within previously extracted areas), or that no mine pits or other archaeological remains are present (and unlikely to be present), then a request will be made to the Senior Archaeologist (Planning Services) at West Sussex County Council that the archaeological watching brief should be terminated.

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



Recording

- 3.15 A context-based recording system acceptable to the Senior Archaeologist (Planning Services) at West Sussex County Council will be used to record all structures, deposits, features etc. Pro-forma sheets will be used to record all relevant information.
- 3.16 A location plan will be produced that show the position of the area of archaeological investigation; this will be tied into the Ordnance Survey National Grid to a minimum accuracy of ± 1.0m. Feature plans and sections will be drawn at appropriate scales; all site drawings will include relevant information including site name, number and/or code, scale, drawing number, orientation, date and name of compiler. Drawings will also show absolute heights derived from Ordnance Datum (Newlyn).
- 3.17 In the event of the discovery of human remains, these will be initially be left in situ and not further examined. The nominated RPS Archaeology Project Manager and the client will be informed immediately, also the Senior Archaeologist (Planning Services) at West Sussex County Council. Following discussions between the client, the nominated RPS Archaeology Project Manager, the Senior Archaeologist (Planning Services) at West Sussex County Council and the archaeological contractor's osteoarchaeologist, a decision will be taken as to whether to exhume the remains.
- 3.18 If removal of human remains is necessary, a license will be obtained from the appropriate authorities (currently the Ministry of Justice) by the contractor and all conditions attached to that license will be complied with. All excavation and post-excavation work regarding human remains will be undertaken in line with the appropriate standards (McKinley and Roberts 1993, Historic England 2017).
- 3.19 The photographic record of the programme of archaeological work will be in digital format, resulting in high resolution TIFF (uncompressed) images. Photographs will illustrate both the detail and context of the principal archaeological features discovered. All photographic records will include information detailing: site name and number/code, date, context, scale and orientation. The monochrome negatives and contact prints will be filed in appropriate media, and the transparencies will be mounted in appropriate hard cases. All photographs will be cross-referenced onto the context and trench records.
- 3.20 Environmental sampling (of mine pits or similar) will be targeted upon potentially significant archaeological deposits or features, and will predominantly examine sealed and well-dated contexts. Sample size will take into account the frequency with which material appropriate for sampling will occur, but bulk samples will normally be a minimum of 30 litres. Sampling strategy (on- and off-site) will principally derive from the document *Environmental Archaeology: A guide to the theory and practice of methods from sampling and recovery to post excavation* (English Heritage 2011) and will be broadly consistent with guidance expressed in *The Management of Archaeological Projects* (English Heritage 1991) and *Management of Research Projects in the Historic Environment* (English Heritage 2006).
- 3.21 If archaeological deposits are found to have significant potential for the presence of palaeoenvironmental material, advice will also be taken from the Senior Archaeologist (Planning Services) at West Sussex County Council and, if necessary, the appropriate Historic England Science Advisor on the need to extract, process and further examine environmental

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



samples. Bulk sampling may also be used to collect charcoal for C14 dating where appropriate.

- 3.22 Conservation advice may be necessary on site prior to lifting of and initial treatment of fragile objects. All finds and samples will be exposed, lifted, cleaned, conserved, marked, bagged and boxed according to the appropriate guidance documents (IFA 1992, UKIC 1983, Watkinson and Neal 2001). Iron finds may require X-rays prior to conservation and similarly residues on pottery may require study ahead of any conservation, which may be appropriate.
- 3.23 In the event of the discovery of waterlogged wood and other organic material, this material will be dealt with in accordance with the relevant guidance documents (English Heritage 2010, 2012).
- 3.24 Where there is evidence for industrial activity, macroscopic technical residues (or a sample of them) will be collected by hand. Separate samples (c. 10ml) will be collected for micro-slags (hammerscale and spherical droplets). Collection and treatment will be in accordance with the relevant guidance (Historic England 2015). If applicable, X-radiography of a sample of metallic industrial debris will be carried out during the post-fieldwork stage of the work.
- 3.25 In the event of the discovery of an artefact that may fall within the remit of the Treasure Act 1996, the nominated RPS Archaeology Project Manager, the client, the Senior Archaeologist (Planning Services) at West Sussex County Council and the Coroner will be informed immediately. All finds of potential treasure will be removed to a safe place. The definition of treasure is provided in the Code of Practice of the above act and primarily refers to items of gold or silver.

Reporting

- 3.26 The archaeological contractor will produce a draft report on the results of the 2021 investigations in respect of the early 20th century Hoffman kiln in the north-west part of the development site. This will include descriptions of the remains exposed in the initial exploratory trench as well as those subsequently exposed within and west of the large steel-sheeted portal frame building.
- 3.27 The report will also incorporate the results of the additional research to be undertaken in appropriate archives, and through the examination of other relevant source material. The report should identify the archive searches carried out with regard to this part of the investigation, including those searches with negative results.
- 3.28 Following review by the nominated RPS Project Manager, the draft report will be submitted to the Senior Archaeologist (Planning Services) at West Sussex County Council. Following agreement of the draft report, a digital copy (in pdf format) will be supplied to the Senior Archaeologist (Planning Services) at West Sussex County Council for verification and assessment. When the report has been agreed a digital final copy will be provided to the Senior Archaeologist (Planning Services) at West Sussex County Council. A hard copy will be provided to the Senior Archaeologist (Planning Services) at West Sussex County Council. A hard copy will be provided to the Senior Archaeologist (Planning Services) at West Sussex County Council. A hard copy will be provided to the West Sussex Historic Environment Record (HER) on the understanding that it will become a public document after an appropriate period of time (generally not exceeding six months), and a further hard copy will be provided to the West Sussex Record Office.

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



- 3.29 Copies of the final report will be provided to the Historic England Archive within 12 months of the completion of the fieldwork, unless a revised timescale is agreed in writing with the Senior Archaeologist (Planning Services) at West Sussex County Council.
- 3.30 The archaeological contractor will produce a brief summary report within 10 days of the completion of the archaeological watching brief. This will include plans showing the locations of all structures, features and deposits that were examined during the course of the fieldwork. Following review by the nominated RPS Project Manager, the summary report will be submitted to the Senior Archaeologist (Planning Services) at West Sussex County Council.
- 3.31 The archaeological contractor will then produce a detailed a report which will include, as a minimum:
 - A front sheet (setting out the project/site name, National Grid References to minimum eight figures, description of task(s) undertaken, date and duration of the fieldwork, site code/number);
 - A non-technical summary of the work (100-200 words) including the results;
 - Identity of the organisation and individuals carrying out the work (in particular the names of the project director, site supervisor and any specialists);
 - Identity of the developer and agent who commissioned the work;
 - A general introduction to the project including the planning history, archaeological and historical background and site description;
 - Aims and objectives;
 - Methodologies employed to undertake the works;
 - Descriptive text presenting the results of the work including finds and environmental data where appropriate;
 - Quantifications of the finds recovered and environmental samples taken;
 - Interpretation and discussion of the results;
 - Assessment of the significance of any archaeological remains identified by the watching brief;
 - Assessment of the potential of any data for further analysis;
 - Proposals for publication of the further analysis in an appropriate format;
 - Details of the scale, nature and location of the archive and the intended place of deposition;
 - Report bibliography; and

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



- Sufficient illustrations to support the text including figures to show the location of the scheme in a regional and local context, locations of all works undertaken, detailed plans and sections as appropriate.
- 3.32 A draft report will be produced within six weeks of the completion of all fieldwork. Following agreement of the draft report with the nominated RPS Archaeological Project Manager and the client, a digital copy (in pdf format) will be supplied to the Senior Archaeologist (Planning Services) at West Sussex County Council for verification and assessment. When the report has been agreed a digital final copy will be provided to the Senior Archaeologist (Planning Services) at West Sussex County Council. A hard copy will be provided to the West Sussex Historic Environment Record (HER) on the understanding that it will become a public document after an appropriate period of time (generally not exceeding six months), and a further hard copy will be provided to the West Sussex Record Office.
- 3.33 Copies of the report will be provided to the Historic England Archive within 12 months of the completion of the fieldwork, unless a revised timescale is agreed in writing with the Senior Archaeologist (Planning Services) at West Sussex County Council.
- 3.34 If publication of the results of any part of the programme of works described in this WSI is considered to be appropriate, this would be subject to further discussion with the Senior Archaeologist (Planning Services) at West Sussex County Council regarding the appropriate publication vehicle and the nature/extent of the report.
- 3.35 The information regarding the results of the programme of archaeological work will be entered onto the relevant Online Access to the Index of Archaeological Investigations (OASIS) form and submitted to the OASIS database by the archaeological contractor. Electronic copies of any reports generated will be attached to the form.
- 3.36 The involvement of the client and the Senior Archaeologist (Planning Services) at West Sussex County Council will be acknowledged in any report or publication generated by the programme of archaeological work associated with the development.
- 3.37 Copyright of all reports prepared by the archaeological contractor will be retained by the archaeological contractor under the terms of the Copyright, Designs and Patents Act (1988) with all rights reserved, excepting that the archaeological contractor provides an exclusive licence to the client for the use of the reports in all matters relating to the development and to the local planning authority with regard to the provision of planning advice and public awareness of the historic environment.

Archive

- 3.38 The project archive consists of the records relating to the programme of archaeological work, including written records, photographs, drawings and artefacts. The archaeological contractor will ensure that the archive is fully catalogued, indexed, cross-referenced and checked for consistency.
- 3.39 The artefacts will be prepared in accordance with procedures outlined in relevant standards and guidance documents (*cf.* ClfA 2014b; MGC 1992; UKIC 1984) and any procedures adopted by the recipient museum. The archaeological contractor will ensure that the archive is deposited with the recipient museum and that a storage grant is provided in line with the requirements of the recipient museum.

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



- 3.40 The archaeological contractor will ensure that the recipient museum is given written permission to make reproductions of specific categories of material from the archive for educational or research purposes, with due acknowledgement regarding copyright.
- 3.41 The retained artefacts remain the property of the landowner with the exception of human remains and any artefacts that fall within the remit of the *Treasure Act* 1996. Subject to obtaining written consent from the landowner, the artefacts will be deposited along with the rest of the archive. Arrangements for the finds to be viewed by the landowner will be made on request.
- 3.42 No recovered finds will be discarded without the written consent of the recipient body. Selection and retention policy will be guided by the relevant standards and guidance documents (*cf.* ClfA 2014c, SMA 1993).
- 3.43 The archaeological contractor will ensure that the archive is copied on microfiche to the standard required by the Historic England Archive and one copy will be deposited with the Historic England Archive.
- 3.44 GIS files will be submitted to the West Sussex HER in an appropriate format (such as ESRI, shapefile or MapInfo Tab). The files will include the areas of investigation and monitoring and will accurately depict archaeological features (where present). These will be accurately tied to the British National Grid using the OSGB36 projected coordinate system.

General

- 3.45 A programme of monitoring of the archaeological investigations in the field shall be agreed in advance between the archaeological contractor, the nominated RPS Archaeological Project Manager and the Senior Archaeologist (Planning Services) at West Sussex County Council. The timing and frequency of each monitoring visit will be agreed in advance with all parties.
- 3.46 Any variation or modification to the assessment methodologies (including the reporting) will be fully discussed in advance and agreed by the archaeological contractor, the nominated RPS Archaeological Project Manager and the Senior Archaeologist (Planning Services) at West Sussex County Council.
- 3.47 The programme of archaeological assessment will be monitored on behalf of the client by Mick Rawlings MCIfA (RPS), who is the primary contact for all archaeological works at the proposed development site (i.e. the nominated RPS Archaeological Project Manager).
- 3.48 Enquiries or releases through the media on archaeological finds and material found during the evaluation will, in the first instance, be directed through the client. Whilst RPS support media coverage on archaeological finds and will be happy to co-ordinate such coverage, it is recommended that relevant information is released after completion of all stages of archaeological fieldwork in order to ensure that the integrity of the resource is maintained.

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



4 REFERENCES AND DOCUMENTS CONSULTED

Barber, L, 2019, South East Research Framework Resource Assessment and Research Agenda for Post-medieval, Modern and Industrial periods, 2013 with revisions in 2019).

Beswick, M, 1993, *Brickmaking in Sussex: A History and Gazetteer*, Sussex Industrial Archaeology Society, Midhurst: Middleton Press.

Chichester District Council, East Sussex County Council and West Sussex County Council, 2019, *Sussex Archaeological Standards*.

ClfA, 2014a, *Standard and guidance for archaeological excavation*, Chartered Institute for Archaeologists, December 2014.

ClfA, 2014b, *Standard and guidance for an archaeological watching brief*, Chartered Institute for Archaeologists, December 2014.

ClfA, 2014c, Standard and guidance for the collection, documentation, conservation and research of archaeological materials, Chartered Institute for Archaeologists, December 2014.

ClfA, 2014d, Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives, Chartered Institute for Archaeologists, December 2014.

ClfA, 2014e, Code of Conduct, Chartered Institute for Archaeologists, December 2014.

English Heritage, 2010, *Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of waterlogged wood*, English Heritage 2010.

English Heritage, 2011, *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation*, 2nd Edition, English Heritage August 2011.

English Heritage, 2012, *Waterlogged Organic Artefacts: Guidelines on their recovery, analysis and conservation*, English Heritage 2012.

Historic England, 2015, *Archaeometallurgy: Guidelines for Best Practice*, Historic England 2015.

Historic England, 2017, *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England*, 2nd Edition, Historic England, February 2017.

IFA, 1992, Guidelines for Finds Work, Institute of Field Archaeologists, 1992.

Martin, R G, 2003, A report on the structures at the former Wealden Brickworks, North Horsham, West Sussex, Sussex Industrial Archaeology Society.

McKinley, J and Roberts, C, 1993, *Excavation and post-excavation treatment of cremated and inhumed remains*, IfA Technical Paper No. 13.

MGC, 1992, *Standards in the Museum Care of Archaeological Collections*, Museums and Galleries Commission 1992.

RPS, 2018, *Wealden Recycling, Recovery and Renewable Energy Facility: Environmental Statement*, RPS, March 2018.

WSI for a Programme of Archaeological Work | Wealden 3Rs Facility, Horsham, West Sussex | Final | 18th November 2021



SLR, 2015, *Historic building record for stock belonging to the Wealden Brickworks, Langhurstwood Road, Horsham, West Sussex*, SLR Consulting, November 2015.

- SMA, 1993, Selection, Retention and Dispersal of Archaeological Collections; Guidelines for Use in England, Wales and Northern Ireland, Society of Museum Archaeologists, 1993.
- UKIC 1983, Conservation Guidelines No.2: Packaging and storage of freshly excavated artefacts from archaeological sites, United Kingdom Institute for Conservation, 1983.
- UKIC 1984, Conservation Guidelines No.3: Environmental standards for the permanent storage of excavated material from archaeological sites, United Kingdom Institute for Conservation, 1984.
- URS, 2012, Former Wealden Brickworks, Brookhurst Wood, Horsham: Cultural Heritage Assessment, URS, November 2012.

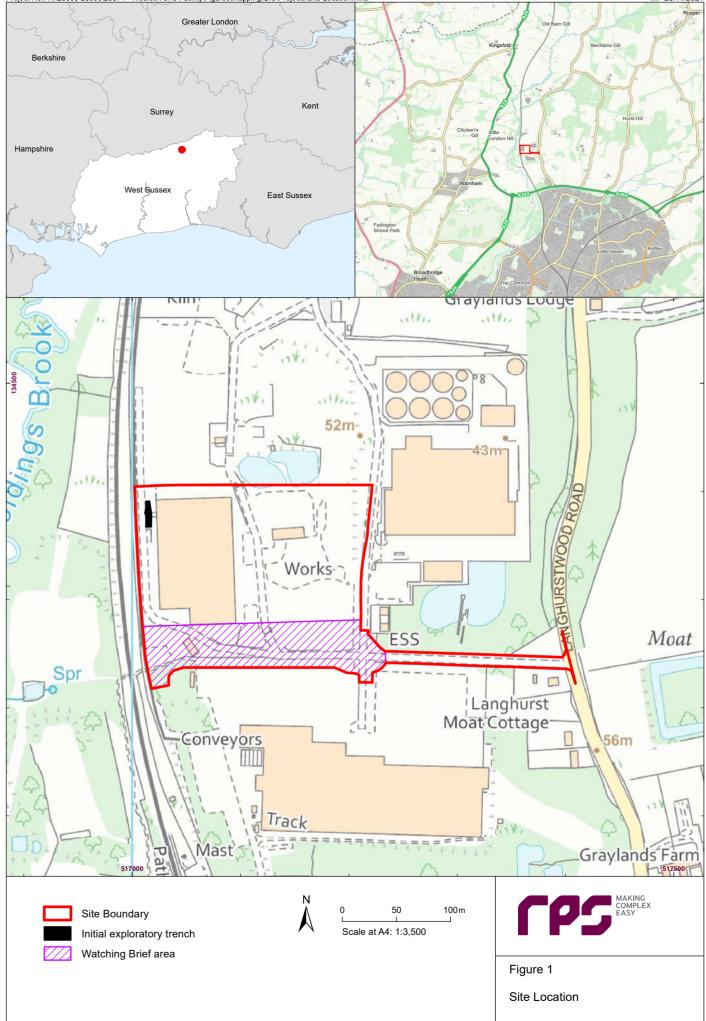
Watkinson, D and Neal, V, 2001, First Aid for Finds, RESCUE/UKIC, revised edition.

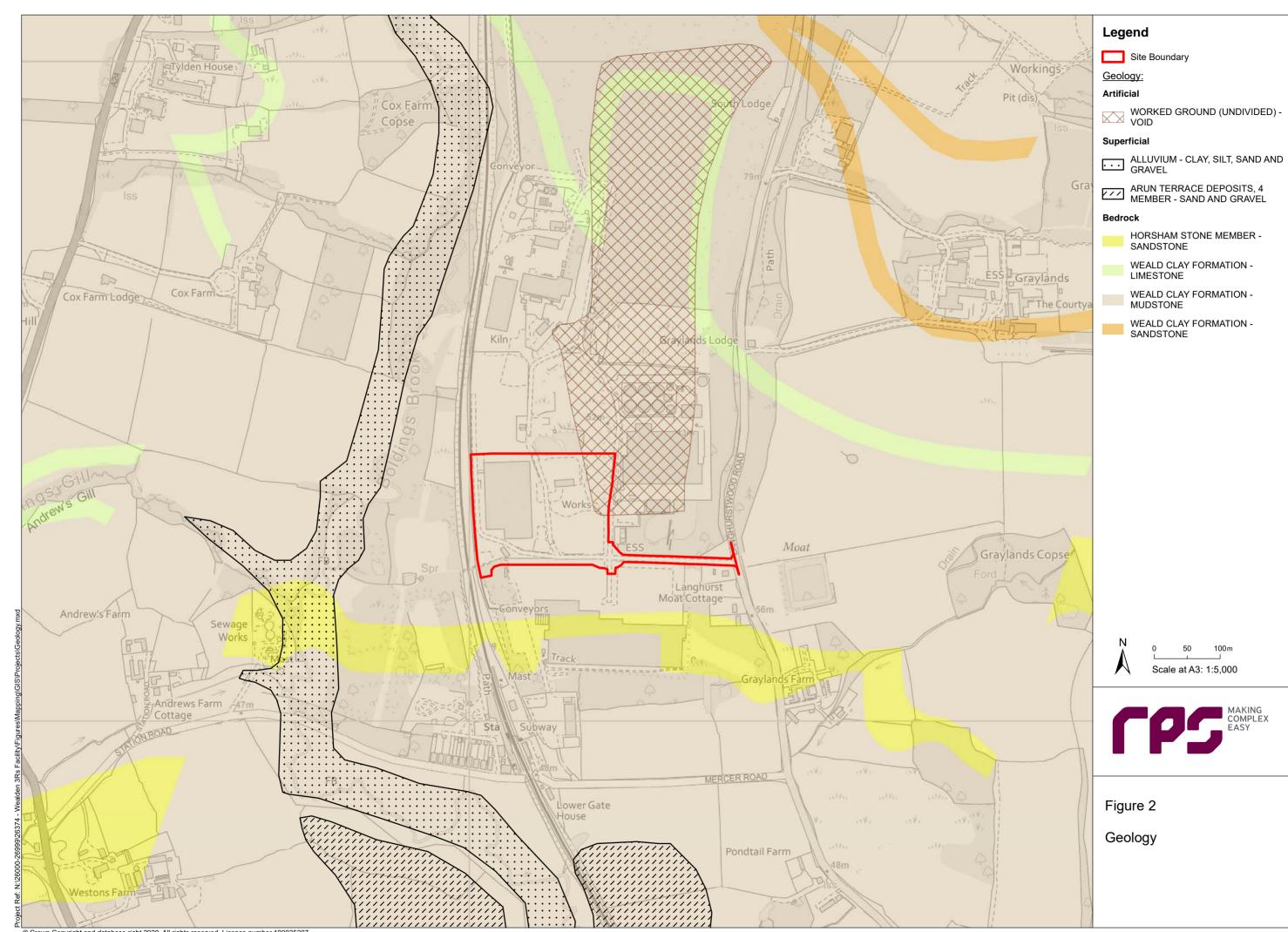
Worssam, B C, 1972, 'Iron ore workings near Horsham, Sussex, and the sedimentology of Wealden clay ironstone', *Proceedings of the Geologists' Association*, Vol. 83, Issue 1, 37-55.



Figures

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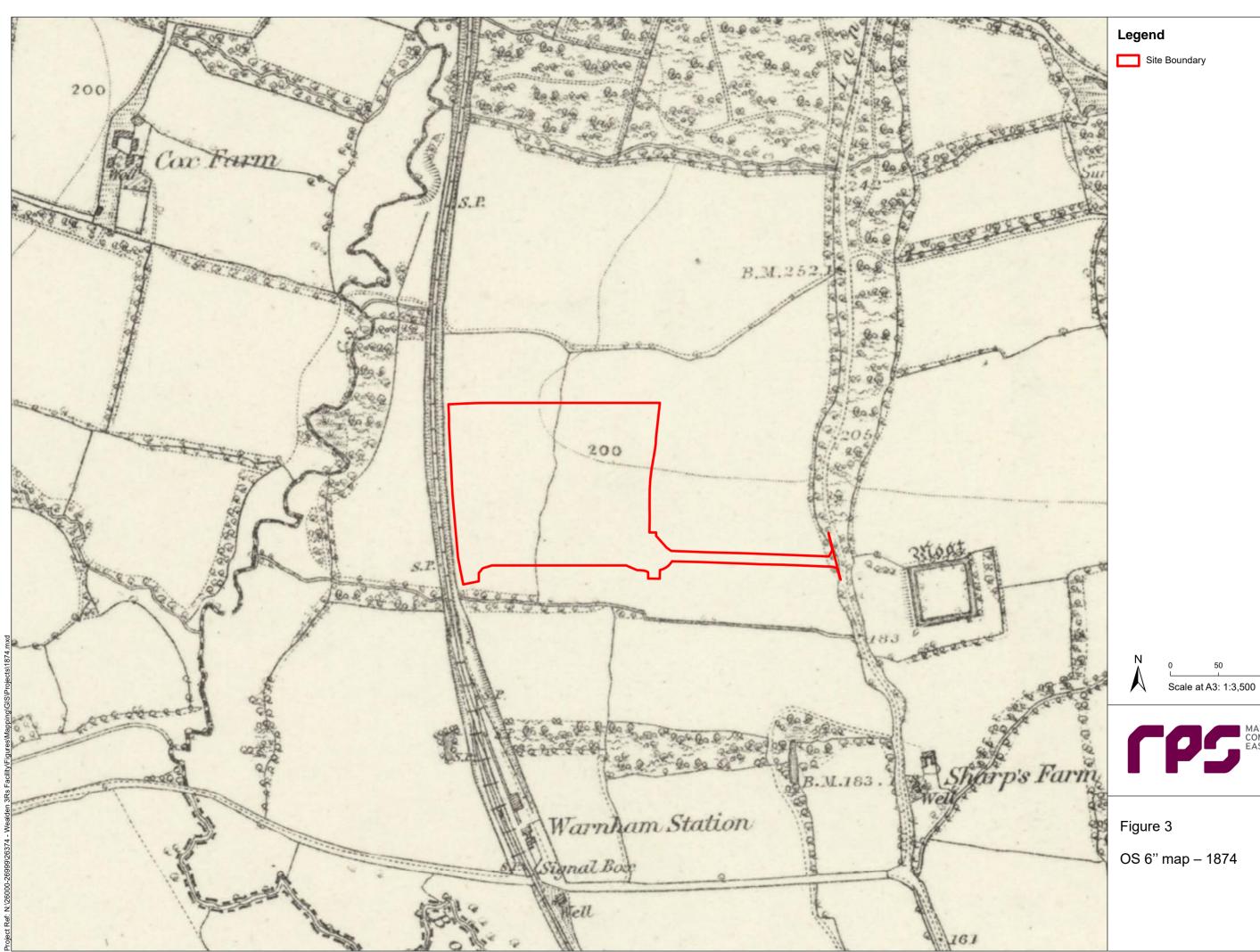
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