

WRITTEN SCHEME OF INVESTIGATION FOR AN ARCHAEOLOGICAL WATCHING BRIEF

Gravesend RFC Bowls Club, Gravesend, Kent

Planning Ref: 20221328

Ref:00613
April 2024

Contents

1	INTRODUCTION	1
1.1	Project and planning background.....	1
1.2	Scope of document.....	1
1.3	Location, topography and geology	2
2	ARCHAEOLOGICAL AND HISTORICAL BACKGROUND.....	2
2.1	Introduction.....	2
2.2	Archaeological and historical context.....	2
3	AIMS AND OBJECTIVES.....	3
3.1	Aims	3
3.2	General objectives	3
4	FIELDWORK METHODS	4
4.1	Introduction.....	4
4.2	Service location and other constraints	4
4.3	Watching brief methods	4
4.4	Recording	5
4.5	Survey	5
4.6	Monitoring.....	5
4.7	Finds.....	5
4.8	Environmental sampling.....	6
5	POST-EXCAVATION METHODS AND REPORTING	7
5.1	Stratigraphic evidence	7
5.2	Finds evidence	7
5.3	Environmental evidence.....	7
5.4	Reporting.....	8
6	ARCHIVE STORAGE AND CURATION.....	8
6.1	Museum.....	8
6.2	Transfer of title.....	9
6.3	Preparation of archive.....	9
6.4	Selection strategy	9
6.5	Security copy	9
7	COPYRIGHT	9
7.1	Archive and report copyright	9
7.2	Third party data copyright	10
8	WESSEX ARCHAEOLOGY PROCEDURES.....	10
8.1	External quality standards.....	10
8.2	Personnel	10
8.3	Internal quality standards.....	11
8.4	Health and safety.....	11
8.5	Insurance.....	12
	REFERENCES	13
	APPENDICES	15
	Appendix 1 Finds and environmental specialists.....	15
	Appendix 2 Kent County Council <i>Specification for an Archaeological Watching Brief in Kent</i>	

List of Figures

Figure 1 Site location

Gravesend RFC Bowls Club Gravesend, Kent

Written Scheme of Investigation for Archaeological Watching Brief

1 INTRODUCTION

1.1 Project and planning background

- 1.1.1 Wessex Archaeology has been commissioned by RPS Consulting Services Ltd ('the client'), to produce a written scheme of investigation (WSI) for a proposed archaeological watching brief during groundworks associated with the proposed development. The works to be monitored are centred on NGR 565733 173777, at Gravesend RFC Bowls Club, Milton Road, Gravesend, Kent (Fig. 1).

- 1.1.2 The proposed development comprises the demolition of the existing bowls pavilion and the erection of a 4-storey building to provide a Class C2 retirement complex, with new access from Ellerslie, parking, landscaping and associated works.

- 1.1.3 A planning application (20221328) submitted to Gravesham Borough Council, was granted on 12 January 2024, subject to conditions. The following conditions relate to archaeology:

Condition 6 No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of an archaeological watching brief to be undertaken by an archaeologist approved by the Local Planning Authority so that groundworks are observed and items of interest and finds are recorded. The watching brief shall be in accordance with a Written Scheme of Investigation, which has been submitted to and approved in writing by the Local Planning Authority

Reason: To ensure that features of archaeological interest are properly examined and recorded.

and Condition 7 No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of building recording in accordance with a written specification and timetable which has been submitted to and approved in writing by the Local Planning Authority

Reason: To ensure that historic building features are properly examined and recorded.

- 1.1.4 This watching brief part of a programme of archaeological works, which has included a Heritage Statement (Bidwells 2022) and an Archaeological Desk-Based Assessment (RPS 2022). This WSI relates to Condition 6 of the planning decision, with Condition 7 addressed by a separate WSI.

1.2 Scope of document

- 1.2.1 This WSI sets out the aims and objectives of the watching brief, and the methods and standards that will be employed. It conforms to current best practice, as well as the Chartered Institute for Archaeologists' relevant standards and guidance (CIfA 2023a–b), the guidance in *Management of Research Projects in the Historic Environment* (MoRPHE;

Historic England 2015a) and the Kent County Council (KCC) *Specification for an Archaeological Watching Brief in Kent* (Appendix 2).

- 1.2.2 This document will be submitted to the County Archaeologist for KCC, archaeological advisor to the Local Planning Authority (LPA), for approval prior to the fieldwork.

1.3 Location, topography and geology

- 1.3.1 The works to be monitored are located at Gravesend RFC Bowls Club, Milton Road, Gravesend, Kent, 550m south of the Thames Estuary and 1.1km east of Gravesend Train Station. The site is currently occupied by undeveloped land in the western half of the site and a Pavilion and bows green in the eastern half of the site. The site is bounded by Milton Road to the north, Church Walk and residential development to the east, a cricket green to the south and Ellirslie and residential development to the west.
- 1.3.2 Existing ground levels are relatively flat at between 11 and 13m OD, with a slight rise from east to west.
- 1.3.3 The bedrock geology is mapped as Chalk of the Lewes Nodular, Seaford and Newhaven Chalk Formations, with superficial deposits of Head (clay, silt, sand and gravel) (British Geological Survey 2024).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

- 2.1.1 The archaeological and historical background was assessed in a prior desk-based assessment (DBA; RPS 2022), which considered the recorded historic environment resource within a 0.75 km study area of the development. A summary of the results is presented below, with relevant entry numbers from the Kent Historic Environment Record (HER) and the National Heritage List for England (NHLE) included. Additional sources of information are referenced, as appropriate.

2.2 Archaeological and historical context

Prehistoric and Romano-British

- 2.2.1 Evidence dating to the prehistoric period within the study area comprise three worked flints of possible Mesolithic/Neolithic date and residual prehistoric material from a later possible Romano-British feature (HER: EWX6628).
- 2.2.2 Romano-British settlement activity within the wider area is well recorded, with a Romano-British settlement at Springhead (Vagniacae) 4km to the southwest of the site. Within the study area evidence of Romano-British activity is limited to the aforementioned possible Romano-British feature recorded during an evaluation at Denton Relief Road to the northeast of the site (HER: EWX6628).

Anglo-Saxon and medieval

- 2.2.3 Both Gravesend and Milton are recorded in the Domesday book of 1086, and the church of St Mary the Virgin, recorded in the Domesday Book, was identified at the junction of Pelham Road and Old Dover Road to the southwest of the site. Riverside settlement is believed to have existed at Gravesend during the Anglo-Saxon period (KCC/EH 2004).
- 2.2.4 The lone Anglo-Saxon record on the HER comprises four inhumation burials at St Mary's Roman Catholic church to the east of the site (HER: TQ67SE100).

2.2.5 Gravesend was an established settlement in the medieval period, with the first fair dates recorded in 1366 (KCC/English Heritage 2004) and a recorded attack by the French in 1380 (English Heritage 2013). The church of St Peter and St Paul to the northeast (HER: TQ67SE1132) and the original church of St George to the northwest of the site (HER: TQ67SW1096) date to the 14th and 15th centuries respectively.

2.2.6 A deserted medieval settlement is recorded in the Denton area, although the precise location is unclear (HER: MKE1581).

Post-medieval and modern

2.2.7 The majority of the HER records within the study area date to the post-medieval and modern period and relate specifically to findspots and references to wrecked boats in the Thames. These are not discussed in detail as they are not deemed relevant to the site itself.

2.2.8 Other HER records relate to the Milton Blockhouse to the northwest of the site, which was a short lived artillery fort constructed in 1539 and demolished in 1557-8, along with associated remains identified during archaeological works in the 1970s (HER: MKE1558 & EKE8102), and New Tavern Fort to the northwest of the site, built in 1780 and designed to create a crossfire with Tilbury Fort on the other side of the Thames

2.2.9 The site was in an area of open land from at least 1768 (Andrews & Drury Map of Kent) until 1909, with the 1840 Milton next Gravesend Tithe Map and Ordnance Survey (OS) maps showing the site under arable cultivation. The 1909 OS map shows the road to the north of the site embanked to a higher level, with further alterations along the northern boundary in the 1932 OS map, which also shows the bowling green and pavilion established, with minimal changes in the subsequent years other than the establishment of the current northern border between the site and the road.

3 AIMS AND OBJECTIVES

3.1 Aims

3.1.1 The aims of the investigation are to:

- allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of the development or other works;
- provide an opportunity, if needed, to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the allocated resources are not sufficient to support treatment to a satisfactory and proper standard; and
- guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

3.2 General objectives

3.2.1 In order to achieve the above aims, the general objectives are to:

- determine the presence or absence of archaeological features, deposits, structures, artefacts or ecofacts within the specified works area;
- record and establish, within the constraints of the works, the extent, character, date, condition and quality of any surviving archaeological remains (a preservation by record);

- place any identified archaeological remains within a wider historical and archaeological context in order to assess their significance; and
- make available information about the archaeological resource on the site by preparing a report on the results.

4 FIELDWORK METHODS

4.1 Introduction

- 4.1.1 Compliance with health and safety regulations and requirements will take priority over archaeological considerations in all works.
- 4.1.2 All works will be undertaken in accordance with the detailed methods set out within this WSI and in accordance with the KCC *Specification for an Archaeological Watching Brief in Kent* (Appendix 2). Any significant variations to these methods will be agreed in writing with the County Archaeologist and the client prior to being implemented.
- 4.1.3 The works to be monitored comprise below ground excavations associated with the proposed development.

4.2 Service location and other constraints

- 4.2.1 The client and/or their principal contactor will be responsible for the identification and protection of any above- and below-ground services within the watching brief area/s. The client and/or their principal contactor will also be responsible for informing Wessex Archaeology of, and delimiting, any other areas of environmental, ecological or other constraints.

4.3 Watching brief methods

- 4.3.1 The watching brief will be undertaken by at least one archaeologist, subject to the number of site operations being carried out at any one time. All mechanical excavation will, where possible, be undertaken using a toothless ditching bucket and will be constantly monitored by the attending archaeologist.
- 4.3.2 Without causing unnecessary delay to the groundwork programme, the archaeologist may ask for the groundwork to be temporarily halted whilst investigations are carried out. If appropriate, areas of archaeological interest will be defined and suitably protected in advance of their investigation and recording.
- 4.3.3 Where necessary, the surface of archaeological deposits will be cleaned by hand. A sample of the archaeological features and deposits identified will be hand-excavated and recorded, sufficient to address the project aims. Spoil from machine stripping and hand-excavation will be visually scanned for the purposes of finds retrieval and, where appropriate, will also be metal-detected by trained archaeologists. Finds will be collected and bagged by context.
- 4.3.4 If extensive, complex or well-preserved archaeological remains are identified, for which the scope of the approved strategy is insufficient, the monitoring archaeologist will halt the groundwork, delimit the area of archaeological interest, and report immediately to the Wessex Archaeology project manager. Wessex Archaeology will then inform the groundwork contractor, the client and the County Archaeologist, as a contingent excavation or revised strategy may be required. The programme, and additional resources, for any contingent excavation will be agreed with the client. Accordingly, this WSI will need revising

before any further fieldwork proceeds – the revised WSI will need the approval of the County Archaeologist, on behalf of the LPA.

- 4.3.5 If human remains are uncovered, the specific methods outlined below (section 4.7) will be followed.

4.4 Recording

- 4.4.1 All exposed archaeological deposits and features will be recorded using Wessex Archaeology's pro forma recording system.
- 4.4.2 A complete record of excavated archaeological features and deposits will be made. This will include plans and sections, drawn to appropriate scales (generally 1:20 or 1:50 for plans, 1:10 for sections) and tied to the Ordnance Survey (OS) National Grid.
- 4.4.3 A full photographic record will be made using digital cameras equipped with an image sensor of not less than 10 megapixels. This will record the detail and general context of the principal features and the site. Digital images will be subject to managed quality control and curation processes, which will embed appropriate metadata within the image and ensure long term accessibility of the image set.

4.5 Survey

- 4.5.1 The real time kinematic (RTK) survey of all archaeological features will be carried out using a Leica Global Navigation Satellite System (GNSS) connected to Leica's SmartNet service. All survey data will be recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.
- 4.5.2 If, due to unforeseen circumstances, it is not possible to survey using survey equipment prior to the destruction of the material, archaeological features will be located to client plans that are related to OS mapping or structures/features that appear on OS mapping. This will be achieved using hand-held measuring tapes and the basic principles of triangulation.

4.6 Monitoring

- 4.6.1 The client will inform the County Archaeologist of the start of the watching brief and its progress. Reasonable access will be arranged for the County Archaeologist to make site visits to inspect and monitor progress. Any variations to the WSI, if required to better address the project aims, will be agreed in advance with the client and the County Archaeologist.

4.7 Finds

General

- 4.7.1 All archaeological finds will be retained, although those of clearly very recent origin with negligible potential to provide information relevant to the project aims and objectives may be recorded on site and not retained. Where appropriate, soil samples may be taken and sieved to aid in finds recovery. Any finds requiring conservation or specific storage conditions will be dealt with immediately in line with *First Aid for Finds* (Watkinson and Neal 1998).

Human remains

- 4.7.2 In the event of discovery of any human remains (articulated or disarticulated, cremated or unburnt), all excavation of the deposit(s) will cease pending Wessex Archaeology obtaining a Ministry of Justice licence (this includes cases where remains are to be left *in situ*).
- 4.7.3 Initially the remains will be left *in situ*, covered and protected, pending discussions between the client, Wessex Archaeology's osteoarchaeologist and the County Archaeologist regarding the need for excavation/removal or sampling. Where this is deemed appropriate, the human remains will be fully recorded, excavated and removed from site in compliance with the Ministry of Justice licence.
- 4.7.4 Excavation and post-excavation processing of human remains will be in accordance with Wessex Archaeology protocols and in-line with current guidance documents (e.g., McKinley 2013) and the standards set out in ClfA Technical Paper 13 (McKinley and Roberts 1993). Appropriate specialist guidance/site visits will be undertaken if required.
- 4.7.5 The final deposition of human remains subsequent to the appropriate level of osteological analysis and other specialist sampling/examinations will follow the requirements set out in the Ministry of Justice licence.

Treasure

- 4.7.6 Wessex Archaeology will immediately notify the client and the County Archaeologist on discovery of any material covered, or potentially covered, by the *Treasure Act 1996*. All information required by the Act (i.e., finder, location, material, date, associated items etc.) will be reported to the Coroner within 14 days.

4.8 Environmental sampling

- 4.8.1 All sampling will be undertaken following Wessex Archaeology's in-house guidance, which adheres to the principles outlined in Historic England's guidance (English Heritage 2011; Historic England 2015b).
- 4.8.2 Bulk environmental soil samples, for the recovery of plant macrofossils, wood charcoal, small animal bones and other small artefacts, will be taken as appropriate from well-sealed and dateable contexts. In general, features directly associated with particular activities (e.g., pits, latrines, cesspits, hearths, ovens, kilns and crop driers) should be prioritised for sampling over features, such as ditches or postholes, that are likely to contain reworked and residual material.
- 4.8.3 If waterlogged or mineralised deposits are encountered, an appropriate environmental sampling strategy will be agreed with the County Archaeologist. Specialist guidance will be provided by Wessex Archaeology's geoarchaeological and environmental team, with site visits undertaken if required.
- 4.8.4 Any samples will be of an appropriate size – typically 40 litres for the recovery of environmental evidence from dry contexts, and 10 litres from waterlogged deposits.
- 4.8.5 Following specialist advice, other sampling methods such as monolith, Kubiena or contiguous small bulk (column) samples may be employed to enable investigation of deposits with regard to microfossils (e.g., pollen, diatoms) and macrofossils (e.g., molluscs, insects), soil micromorphological or soil chemical analyses.

5 POST-EXCAVATION METHODS AND REPORTING

5.1 Stratigraphic evidence

- 5.1.1 All written and drawn records, and surveyed data from the watching brief will be collated and checked. Key data will usually be transcribed into a database, which can be updated during any further analysis. The preliminary phasing of archaeological features and deposits will be undertaken using stratigraphic relationships and the spot dating from finds, particularly pottery, and any other relevant information.
- 5.1.2 A written description will be made of all archaeologically significant features and deposits that were exposed and excavated, ordered by period/phase and/or feature group as appropriate.

5.2 Finds evidence

- 5.2.1 All retained finds will, as a minimum, be cleaned, weighed, counted and identified. They will then be recorded to a level appropriate to the aims and objectives of the project. Recording and reporting will conform to the Type 1 (Description) level according to the ClfA (n.d. a) *Toolkit for Specialist Reporting*, to include appropriate quantification and characterisation. The report will include a table of finds by feature/context.
- 5.2.2 Metalwork from stratified contexts will be X-rayed and, along with other fragile and delicate materials, stored in a stable environment. The X-raying of objects and other conservation needs will be undertaken by Wessex Archaeology's conservation staff or another approved conservation centre.
- 5.2.3 Finds will be suitably bagged and boxed in accordance with the guidance given by the relevant museum and ClfA (2014b).

5.3 Environmental evidence

- 5.3.1 Bulk environmental soil samples will be processed by standard flotation methods. The residues will be fractionated into 5.6/4 mm and 1 mm and dried if necessary. The coarse residue fraction (>5.6/4 mm), and the fine fraction when appropriate, will be sorted and discarded, with any finds recovered given to the appropriate specialist. The flot will be retained on a 0.25 mm mesh and scanned to assess the range of environmental remains present and their preservation. Unsorted fine residues will be retained until after any analyses and discarded following final reporting (in accordance with the Selection policy, below).
- 5.3.2 In the case of samples from cremation-related deposits the flots will be retained on a 0.25 mm mesh, with residues fractionated into 4 mm, 2 mm and 1 mm. In the case of samples from inhumation burial deposits, the sample will be wet-sieved through 9.5 mm and 1 mm mesh sizes. The coarse fractions (9.5 mm) will be sorted with any finds recovered given to the appropriate specialist together with the finer residues.
- 5.3.3 Any waterlogged samples will be processed by standard waterlogged flotation methods.
- 5.3.4 Recording and reporting will conform to the Type 1 (Description) level according to the ClfA (n.d. a) *Toolkit for Specialist Reporting*, to include appropriate quantification and characterisation.

5.4 Reporting

5.4.1 Following completion of the fieldwork and the assessment of the stratigraphic, finds and environmental evidence, a draft report will be prepared in general accordance with relevant guidance (ClfA 2023b). The draft report will be submitted for approval to the client and the County Archaeologist for comment. Once approved, a final version will be submitted.

5.4.2 The report will include the following elements:

- Non-technical summary;
- Project background;
- Archaeological and historical context;
- Aims and objectives;
- Methods;
- Results – stratigraphic, finds and environmental;
- Conclusions in relation to the project aims and objectives, and discussion in relation to the wider local, regional or other archaeological contexts and research frameworks etc;
- Archive preparation and deposition arrangements;
- Appendices;
- Illustrations; and
- References.

5.4.3 A copy of the final report will be deposited with the HER, along with surveyed spatial digital data (.dxf or shapefile format).

Publication

5.4.4 If no further excavation works are undertaken, a short report on the results will be prepared for publication in a suitable journal, if considered appropriate and agreed with the client and the County Archaeologist.

OASIS

5.4.5 An OASIS (online access to the index of archaeological investigations) record (<http://oasis.ac.uk>) will be created, with key fields completed, and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service (ADS) ArchSearch catalogue.

6 ARCHIVE STORAGE AND CURATION

6.1 Museum

6.1.1 The site falls within an area where there is currently no collecting museum. Every effort will be made to identify a suitable repository for the archive resulting from the fieldwork, and if this is not possible, Wessex Archaeology will initiate discussions with the local planning authority in an attempt to resolve the issue. If no suitable repository is identified, Wessex Archaeology will continue to store the archive, but may institute a charge to the client for ongoing storage beyond a set period.

6.2 Transfer of title

- 6.2.1 The legal owner of any finds recovered (i.e., the landowner), with the exception of human remains and any objects covered by the *Treasure Act 1996*, will be contacted to request transfer of their ownership to the museum via a written agreement.

6.3 Preparation of archive

Physical archive

- 6.3.1 The physical archive will be prepared following nationally recommended guidelines (Brown 2011; ClfA 2014b; SMA 1995). The archive will usually be deposited within one year of completion of the project, with the agreement of the client.

Digital archive

- 6.3.2 The digital archive will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by metadata.

6.4 Selection strategy

- 6.4.1 It is widely accepted that not all records and materials (artefacts and ecofacts) collected or created during an archaeological project require preservation in perpetuity. These records and materials will be subject to selection in order to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected to be retained are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities, i.e., the retained archive should fulfil the requirements of future researchers and the receiving museum.
- 6.4.2 The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown 2011, section 4) and generic selection policies (SMA 1993; Wessex Archaeology's internal selection policy) and follows ClfA's (n.d. b) *Toolkit for Selecting Archaeological Archives*. It should be agreed by all stakeholders (Wessex Archaeology's specialists, external specialists, local authority, museum) and fully documented in the project archive.
- 6.4.3 In this instance, given that the level of finds recovery is expected to be relatively low, decisions on selection will be deferred until after the fieldwork, and no detailed strategy is presented here. Any material not selected for retention may be used for teaching or reference collections by the museum, or by Wessex Archaeology.

6.5 Security copy

- 6.5.1 In line with current best practice (e.g., Brown 2011), on completion of the project a security copy of the written records will be prepared in the form of a digital PDF/A file.

7 COPYRIGHT

7.1 Archive and report copyright

- 7.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes,

including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*.

- 7.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research, or development control within the planning process.

7.2 Third party data copyright

- 7.2.1 This document, the report and the project archive may contain material that is non-Wessex Archaeology copyright (e.g., Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.

8 WESSEX ARCHAEOLOGY PROCEDURES

8.1 External quality standards

- 8.1.1 Wessex Archaeology is registered as an archaeological organisation with the Chartered Institute for Archaeologists (CIfA) and fully endorses its *Code of Conduct* (CIfA 2014c) and *Regulations for Professional Conduct* (CIfA 2019). All staff directly employed or subcontracted by Wessex Archaeology will be of a standard approved by Wessex Archaeology, and archaeological staff will be employed in line with the CIfA codes of practice, and will normally be members of the CIfA.

8.2 Personnel

- 8.2.1 The fieldwork will be directed and supervised by an experienced archaeologist from Wessex Archaeology's core staff. The overall responsibility for the conduct and management of the project will be held by one of Wessex Archaeology's project managers, who will visit the fieldwork as appropriate to monitor progress and to ensure that the scope of works is adhered to. Where required, monitoring visits may also be undertaken by Wessex Archaeology's Health and Safety manager.
- 8.2.2 The assessment of any finds and environmental data will be undertaken by Wessex Archaeology core staff or external specialists, using Wessex Archaeology's standard methods, under the supervision of the departmental managers and the overall direction of the project manager. A complete list of finds and environmental specialists is provided in Appendix 1.
- 8.2.3 The following key staff are proposed:
- Project Manager Rob De'Athe
 - Fieldwork Director TBC
- 8.2.4 Wessex Archaeology reserves the right, where necessary due to unforeseen circumstances, to replace nominated personnel with alternative members of staff of comparable expertise and experience.

8.3 Internal quality standards

- 8.3.1 Wessex Archaeology is an ISO 9001 accredited organisation (certificate number FS 606559), confirming the operation of a Quality Management System which complies with the requirements of ISO 9001:2015 – covering professional archaeological and heritage advice and services. The award of the ISO 9001 certificate, independently audited by the British Standards Institution (BSI), demonstrates Wessex Archaeology's commitment to providing quality heritage services to our clients.
- 8.3.2 Wessex Archaeology assigns responsibility to individual managers for the successful completion of all aspects of a project, including reporting. This includes monitoring progress and quality; controlling the budget from inception to completion; and all aspects of health and safety for the project. At all stages, the project manager will carefully assess and monitor performance of staff and adherence to objectives, timetables and budgets, while the manager's own performance is monitored by the team leader or regional director. The technical managers in the Graphics, Research, GeoServices and IT sections provide additional assistance and advice.
- 8.3.3 All staff are responsible for following Wessex Archaeology's quality standards but the overall adherence to and setting of these standards is the responsibility of the senior management team who, in consultation with the team leaders/regional directors, also ensure projects are adequately programmed and resourced within Wessex Archaeology's portfolio of project commitments.

8.4 Health and safety

- 8.4.1 All works will be undertaken in accordance with the *Health and Safety at Work Act 1974*; the *Management of Health and Safety at Work Regulations 1999* and all other applicable health and safety legislation.
- 8.4.2 Wessex Archaeology is an ISO 45001 accredited organisation (certificate number OHS 744383), confirming the operation of an Occupational Health and Safety Management System that complies with the requirements of ISO 45001:2018. The award of the ISO 45001 certificate, independently audited by the British Standards Institution (BSI), demonstrates Wessex Archaeology's commitment to delivering effective risk management across all its activities.
- 8.4.3 Wessex Archaeology will, for all projects, produce one or more task and site-specific risk assessments and method statements (RAMS), which will ensure our staff can work safely on the site. A copy of the RAMS and our Health and Safety Policy can be provided to the client. All staff on our sites will be made fully familiar with the RAMS before work commences.
- 8.4.4 We aim to work collaboratively on health and safety with clients and, where separately appointed, with principal contractors. We expect clients to provide in good time all the necessary risk information about a site that may affect the archaeological work, such as locations of utilities or any known ground contamination. We will comply with the project specific Personal Protective Equipment (PPE) requirements, and any other specific additional requirements of the Principal Contractor.
- 8.4.5 All fieldwork staff are certified through the Construction Skills Certification Scheme (CSCS) and have undergone UKATA Asbestos Awareness Training. Staff who carry out specific tasks are suitably trained and competent to do so through training accredited by the

Construction Industry Training Board (CITB), Institution of Occupational Safety & Health (IOSH) and the National Plant Operators Recognitions Scheme (NPORS).

8.5 Insurance

- 8.5.1 Wessex Archaeology holds Employers Liability (£15,000,000), Public Liability (£15,000,000) and Professional Indemnity (£10,000,000) policies.

REFERENCES

- ADS 2013. *Caring for Digital Data in Archaeology: a guide to good practice*. Archaeology Data Service & Digital Antiquity Guides to Good Practice.
- Bidwells 2022 *Heritage Statement: GRFC Bowls Club, Gravesend*
- British Geological Survey 2024 *BGS Geology Viewer* <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> (accessed 19/04/2024).
- Brown, D. H. 2011. *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (revised edition). Archaeological Archives Forum.
- Chartered Institute for Archaeologists [ClfA] 2014a (revised October 2020). *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*. Reading: ClfA.
- ClfA 2014b (revised October 2020). *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. Reading: ClfA.
- ClfA 2014c (revised October 2022). *Code of Conduct*. Reading: ClfA.
- ClfA 2019 (revised July 2021). *Regulations for Professional Conduct*. Reading: ClfA.
- ClfA 2023a. *Standard for Archaeological Monitoring and Recording*. Reading: ClfA.
- ClfA 2023b. *Universal Guidance for Archaeological Monitoring and Recording*. Reading: ClfA.
- ClfA n.d. a. *Toolkit for Specialist Reporting* <https://www.archaeologists.net/reporting-toolkit> (accessed 10/12/2023).
- ClfA n.d. b. *Toolkit for Selecting Archaeological Archives* <https://www.archaeologists.net/selection-toolkit> (accessed 10/12/2023).
- English Heritage 2011. *Environmental Archaeology. A Guide to the Theory, Practice of Methods, from Sampling and Recovery to Post-excavation* (2nd edition). Portsmouth: English Heritage.
- English Heritage 2013 *Hoo Peninsula Kent, Hoo Peninsula Historic Landscape Characterisation Project Research Report Series no 21*
- Historic England 2015a. *Management of Research Projects in the Historic Environment: The MoRPHE project managers' guide*. Swindon: Historic England.
- Historic England 2015b. *Geoarchaeology. Using Earth Sciences to Understand the Archaeological Record*. Swindon: Historic England.
- Kent County Council/English Heritage 2004 *Kent Historic Towns Survey Gravesend - Kent Archaeological Assessment Document*
- McKinley, J. I. 2013. 'Cremation: excavation, analysis and interpretation of material from cremation-related contexts', in Tarlow, S. and Nilsson Stutz, L. (eds), *The Oxford Handbook of the Archaeology of Death and Burial*, 147–71. Oxford: Oxford University Press.

- McKinley, J. I. and Roberts, C. 1993. *Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains*. Reading: ClfA Technical Paper 13.
- RPS 2022 *Archaeological Desk-Based Assessment: Gravesend RFC Bowls Club, corner of Milton Road and Ellersie, Gravesend, Kent, DA12 2QU*
- SMA 1993. *Selection, Retention and Dispersal of Archaeological Collections*. London: Society of Museum Archaeologists.
- SMA 1995. *Towards an Accessible Archaeological Archive*. London: Society of Museum Archaeologists.
- Watkinson, D. and Neal, V. 1998. *First Aid for Finds: practical guide for archaeologists*. United Kingdom Institute for Conservation of Historic & Artistic Works.

APPENDICES

Appendix 1 Finds and environmental specialists

Name	Qualifications	Specialism
Sander Aerts	BA, MSc	Archaeoentomological remains, animal bone, marine shell and archaeobotanical remains (carbonised)
Phil Andrews	BSc; FSA; MCIfA	Slag and metal working debris
Richard Bradley	BA; MA; MCIfA	Battlefield artefacts, particularly Civil War period lead shot
Ceridwen Boston	BSocSc; MA; MSc; DPhil	Osteoarchaeology; funerary archaeology
Elina Brook	BA; MA; PCIfA	Later prehistoric and Romano-British pottery, and small finds
Alex Brown	BA; MSc; PhD	Geoarchaeology, palynology
Liz Chambers	BA; MSc	Geoarchaeology
Fiona Eaglesham	BSc; MSc	Archaeobotanical remains
Erica Gittins	BA; MA; PhD	Prehistoric flint
Phil Harding	PhD	Prehistoric flint, particularly Palaeolithic flint
Lorrain Higbee	BSc; MSc; MCIfA	Animal bone
Jessica Irwin	BSc	Post-medieval finds
Matt Leivers	BA; PhD; ACIfA	Prehistoric pottery and flint
Inés López-Dóriga	BA; MA; PhD	Archaeobotanical remains
Erica Macey-Bracken	BA; ACIfA	Post-medieval finds, ceramic building material and worked wood
Katie Marsden	BSc	Pottery from prehistoric to post-medieval/modern. Metalwork of all periods, including coins. Small and bulk finds including fired clay, ceramic building material, worked bone
Jacqueline McKinley	BTech; FSA	Human remains (inhumations and cremations)
Nicki Mulhall		Geoarchaeology and archaeobotanical remains
Emma Robertson	BA; MSc	Human remains (inhumations)
Megan Scantlebury	BA, MSc	Archaeobotanical remains
Rachael Seager Smith	BA; MCIfA	Pottery with particular emphasis on Roman ceramics; and metalwork, fired clay, ceramic building material, stone, worked bone, shale, glass, and wall plaster
Andrew Shaw	BA; MA; PhD	Palaeolithic lithic artefacts and Pleistocene geoarchaeology
Mark Stewart	BA; MPhil	Prehistoric flint. Worked stone, ceramic building material, glass, fired clay
Amy Thorp	BA; MA	Pottery with emphasis on Roman ceramics, small finds
Ed Treasure	BSc; MRes; PhD	Archaeobotanical remains, including plant remains and charcoal/wood
Kevin Trott	BA	Pottery from the Iron Age to early modern period, with emphasis on later Iron Age/Romano-British and medieval to post-medieval periods. Ceramic building material, fired clay/briquetage, metalwork/small finds, clay tobacco pipes, worked bone, stone artefacts, shale, glass, wall plaster, leather, marine shell
Thomas Wicks	BA; MA	Conservation of objects

Appendix 2 Kent County Council *Specification for an Archaeological Watching Brief in Kent*

SPECIFICATION FOR AN ARCHAEOLOGICAL WATCHING BRIEF IN KENT

Introduction

- 1.1 This specification is concerned with an archaeological watching brief to be maintained by a recognised archaeologist.
- 1.2 The site has planning permission for some minor redevelopment works. More details on the development can be found on the Local Planning Authority web site.
- 1.3 The Local Planning Authority has placed the following condition on the planning consent:

No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a watching brief to be undertaken by an archaeologist approved by the Local Planning Authority so that the excavation is observed and items of interest and finds are recorded. The watching brief shall be in accordance with a written programme and specification, which has been submitted to and approved by the Local Planning Authority.

Reason: To ensure that features of archaeological interest are properly examined and recorded.

- 1.4 This will involve archaeological monitoring of the groundworks connected with the development and recording of any features revealed, by an archaeological contractor.
- 1.5 **The watching brief should be maintained throughout the programme of ground excavation. The archaeological contractor will confirm the extent of proposed ground excavations in advance with the site developer and inform the County Archaeological Officer that arrangements are in place for appropriate monitoring.**

2. The Archaeological Potential

- 2.1 The archaeological potential is based on the proximity of archaeological remains presently recorded in the HER.
- 2.2 Further information on the above is provided in the County Historic Environment Record held in the Heritage, Environment and Planning, Enterprise and Environment, Invicta House, County Hall, Maidstone, ME14 1XX (telephone 01622 221543).

3. Objectives

- 3.1 The objectives of the archaeological watching brief are to contribute to heritage knowledge of the area through the recording of the archaeological remains exposed as a result of excavations in connection with the groundworks

4. Proposed Groundworks

- 4.1 The groundworks are fairly minor but may include any associated access or service works.

- 4.2 No details of groundworks have been submitted and the archaeological contractor should clarify the extent of the works with the developer before work begins.

5. Method

- 5.1 The archaeological contractor will monitor the excavations for all groundworks. Excavation should be undertaken using a flat bladed bucket and preferably in a single direction to enable archaeological remains to be recorded prior to disturbance from being driven over. **If possible archaeological remains are encountered, machine excavation will cease to allow the remains to be investigated further.**
- 5.2 The archaeologist will inspect the surfaces revealed. Any archaeological structures or features revealed will be recorded in plan and section as appropriate according to Section 6 below. **The main contractor will allow the archaeological contractor reasonable time and resources to undertake any inspection or recording required.**
- 5.3 Further limited excavation may be necessary to clarify the extent and nature of some archaeological deposits. In this case, the archaeological contractor will undertake the excavation by hand.
- 5.4 If significant remains are unexpectedly encountered the archaeological contractor will inform the County Archaeological Officer and the developer immediately and further mitigation measures will be agreed.

6. Recording

- 6.1 All structures, deposits and finds are to be recorded according to accepted professional standards.
- 6.2 All recording points used should be accurately tied into the National Grid, preferably by theodolite, and located on to the 1:1250 map of the area.
- 6.3 Plans indicating the location of all archaeological features encountered are to be drawn at an appropriate scale, located on the site plan and levelled with respect to OD. An overall site plan is to be maintained at a scale of 1:100.
- 6.4 All plans are to be accurately tied in to the site grid. All plans and sections are to be drawn on polyester based drafting film and clearly labelled.
- 6.5 All archaeological contexts are to be recorded individually on context record sheets. A further more general record of the work comprising a description and discussion of the archaeology is to be maintained as appropriate.
- 6.6 A full black and white and colour (35mm transparency) photographic record of the work is to be kept. The photographic record is to be regarded as part of the site archive. The archaeological contractor is to provide the County Archaeological Officer with a selection of photographic images which reflect the archaeological findings and investigations undertaken on this site.

- 6.7 All artefacts recovered during the excavations on the site are the property of the Landowner. They are to be suitably bagged, boxed and marked in accordance with the United Kingdom Institute for Conservation, Conservation Guidelines nos. 2 and on completion of the archaeological post-excavation programme the landowner will arrange for them to be deposited in a museum or similar repository agreed with the County Archaeological Officer and the Local Planning Authority.
- 6.8 The site archive, to include all project records and cultural material produced by the project, is to be prepared in accordance with *Guidelines for the preparation of excavation archives for long-term storage (UKIC 1990)*. On completion of the project the Applicant will arrange for the archive to be deposited in a suitable museum or similar repository to be agreed with the County Archaeological Officer and the Local Planning Authority.

7. Reporting

- 7.1 On completion of the archaeological watching brief the archaeological contractor will agree with the County Archaeologist a programme for the reporting of the results of the work. The reporting of the watching brief will be commensurate with the results but as a minimum must stand as a sufficiently detailed report on the archaeological monitoring to serve both future research and inform future planning decisions taken on the site.
- 7.2 Where the watching brief is being undertaken following an earlier evaluation, the results of the evaluation should be fully integrated within the report of the watching brief.

Report circulation

- 7.3 Copies of all reports are to be provided to:
- the Developer
 - the County Archaeologist
 - the Local Planning Authority
 - Local Historical Society
 - the project archive.
- 7.4 When submitting the report to the County Archaeologist the archaeological contractor should provide written confirmation that the report has been submitted to the above parties.
- 7.5 If the archaeological contractor is required, contractually, to only submit reports directly to the developer or their agent, the archaeological contractor must inform the County Archaeologist in writing that they have completed the report and to whom it has been forwarded to. The archaeological contractor must ensure that the developer is made aware of the need to circulate the report as in 7.3 above.

Reporting of watching briefs with limited remains

- 7.6 If the watching brief has resulted in limited archaeological remains being recorded then the archaeological contractor will complete the necessary post excavation works and produce a '**Watching Brief Report**' within 4 weeks of the completion of the watching brief (see sections 7.8 to 7.12 below).

Reporting of watching briefs with significant archaeological remains

- 7.7 If significant archaeological remains are recorded then within 3 months of completion of the watching brief the archaeological contractor will undertake an assessment of the results and produce a MAP2 '**Post-excavation Assessment Report**'. This report will set out a programme of post excavation works through to completion of a '**Full Report**' and '**Publication**' of the findings (see sections 7.13 to 7.17 below).

Contents of a 'Watching Brief Report'

- 7.8 The archaeological contractor may determine the general style and format of the Watching Brief Report but it must be completed in accordance with this specification. The report must provide sufficient information and assessment to enable the County Archaeologist and the Local Planning Authority to stand as a detailed report on the archaeological fieldwork for future research and to inform on any future planning decisions for the site.
- 7.9 Reports that do not provide sufficient information or that have not been compiled in accordance with the relevant sections of this specification will be returned to the archaeological contractor for revision and resubmission.
- 7.10 The report is to include as a minimum:
- 7.10.1 An **Abstract** summarising the scope and results of the archaeological watching brief.
- 7.10.2 An **Introduction** including:
- the location of the site including National Grid Reference;
 - an account of the background and circumstances of the work;
 - a description of the development proposals, planning history and planning reference together with the planning condition (where appropriate);
 - the scope and date of the fieldwork, the personnel involved and who commissioned it;
 - the nature of potential impacts arising from the proposals;
- 7.10.3 An account of the **Archaeological Background** of the development site including:
- geology, soils and topography;
 - any known existing disturbances on the site;
 - background archaeological potential of the site. This should include a summary of the known Sites and Monuments Record entries generally within a 500m radius of the boundaries of the site. The SMR entries should be quoted with their full KSMR identifier (e.g TR36NW 12);

- summary of any previous phases of archaeological investigation at the development site;
- any constraints on the archaeological monitoring.

7.10.4 The **Methodology** employed during the watching brief must be detailed in the report. Simply referring to the methodology outlined in the specification is not acceptable. Any aims and objectives specified in the specification should be included as should any further objectives identified during the course of the watching brief. The frequency of monitoring visits, ground works observed and any constraints experienced while carrying out the monitoring should be detailed.

7.10.5 The report should include a quantification of the archive contents, their state and future location.

7.10.6 A description of the **Results** of the archaeological monitoring. This description must include for each area observed:

- the dimensions of the area observed;
- the nature and depth of overburden soils encountered;
- description of all archaeological features and finds encountered in each area observed, their dimensions, states of preservation and interpretation;
- a description of the geological subsoil encountered across the site;
- heights related to Ordnance Datum should be provided for each feature and deposit.
- for complex remains a Harris Matrix diagram should be provided.

7.10.7 The **Finds** recovered during the course of the watching brief should be described, quantified and assessed by artefact type within the report. The report should also provide an indication of the potential of each category of artefact for further analysis and research. For each category of artefact the report should describe the method of processing, any sub-sampling, conservation and assessment undertaken. Where appropriate local reference collections will be referred to for descriptive and analytical consistency. Any implications for future archive, conservation or discard of the artefacts should also be detailed.

7.10.8 The report should include a table showing the contexts, classes and quantity of artefacts recovered, together with their date and interpretation.

7.10.9 The report must include an assessment of the **Environmental** potential of the site. Details should be provided of any environmental sampling undertaken in connection with the fieldwork and the results of any processing and assessment of the samples. The report should describe the method of processing, any sub-sampling and assessment. Any potential for future analysis of the samples or environmental remains recovered from the evaluation should be described. Implications for future archive, conservation or discard of environmental samples or remains should be detailed.

7.10.10 The report should include, as appropriate, tables summarising environmental samples taken, together with the results of processing and assessment.

7.10.11 Any results from the watching brief involving the application of archaeological scientific techniques e.g. specialist dating should be included in the watching brief report.

7.10.12 An **Interpretation** of the archaeology of the site, including its location, extent, date, condition, significance and importance. This should include, even if no archaeology is identified as present on the site, description of areas of disturbance, non-archaeological deposits and changes in geological subsoil where appropriate.

7.10.13 A **Conclusion** with a summary of the archaeological results and how any archaeology observed relates to the development site. The effects of the development works on the archaeological remains should also be described. The report should highlight any areas of significant archaeological deposits that remain preserved within the development site. Particular note should be made of any variations in the depth of overburden covering any archaeological deposits revealed.

7.10.14 The report should include comments on the effectiveness of the methodology employed and the confidence of the results and interpretation.

7.10.15 Figures / illustrations – The report should include sufficient illustrations to support descriptions and interpretations within the report text. Figures are to be fully cross-referenced within the document text. As a minimum the report should include the following figures:

- a site location plan tied into the Ordnance Survey at 1:1250 or in the case of larger sites at 1:2500. The plan should also include at least two National Grid points and show the site boundary;
- a plan at 1:100 or 1:200 showing the layout of the development groundworks clearly indicating the areas observed. The plan should show significant archaeological features, coloured by phases or period as related to the development site. Where possible, projection of archaeological features outside of the areas observed should be included on the plan. This plan should also include two National grid points;
- plans of the features revealed in each of the excavation areas at a larger scale e.g. 1:20 or 1:50; such plans are to also illustrate areas of disturbance, change in subsoil and location of sections; The location of significant finds and samples taken should also be indicated;
- relevant section drawings and soil trench profiles as appropriate;
- illustrations and/or photographs of significant finds should be included where appropriate.

7.10.16 All report illustrations must be fully captioned and scale drawings must include a bar scale. Standard archaeological drawing conventions must be used. Plan and section illustrations must include the numbers of all contexts illustrated. North must be included on all plans and should be consistent. Sections must indicate the orientation of the section and the Ordnance Datum height of the section datum.

7.10.17 Black & White or Colour photographs should be included where appropriate to illustrate the archaeology of the site, the development operations or the range of soil profiles encountered. All photographs should be appropriately captioned.

7.11 The report will be submitted to the County Archaeologist in a bound hard-copy and in digital format. The digital copy will be supplied for preference in .pdf format or alternatively in .rtf format accompanied by digital copies of images, plans and maps in .bmp, .tif or .jpg format. The medium should be either on a PC-formatted floppy disk, on a PC CD-ROM (CD-R format only). Whichever software is used the digital files must be supplied in a PC readable format.

Contents of a 'Watching Brief Assessment Report'

7.13 The 'Archaeological Watching Brief Assessment Report' will follow the format and requirements detailed in 7.8 to 7.12 above.

7.14 In addition the report will include an assessment of the results of the archaeological monitoring and their potential to address both the original research aims and objectives of the project and any further research objectives identified during the course of the on-site and post excavation works.

7.15 The report will detail any further analysis necessary on the project records, artefact and environmental assemblages to achieve the research potential identified in the assessment. A justification should be included for each analysis proposed.

7.16 The report will set out a timetable for completion of analysis and reporting, detailing all individual tasks to be completed, resources required and the key personnel involved. The proposal should set out arrangements for monitoring of the post excavation process.

7.17 The report should include a synopsis of the proposed '**Full report**' and '**Publication**' and identify the likely destination of the publication.

8. General

8.1 The archaeological contractor is to allow the site records to be inspected and examined at any reasonable time, during or after the watching brief, by the developer, the County Archaeological Officer or any designated representative of the Local Planning Authority.

8.2 In undertaking the work the archaeological contractor is to abide by :

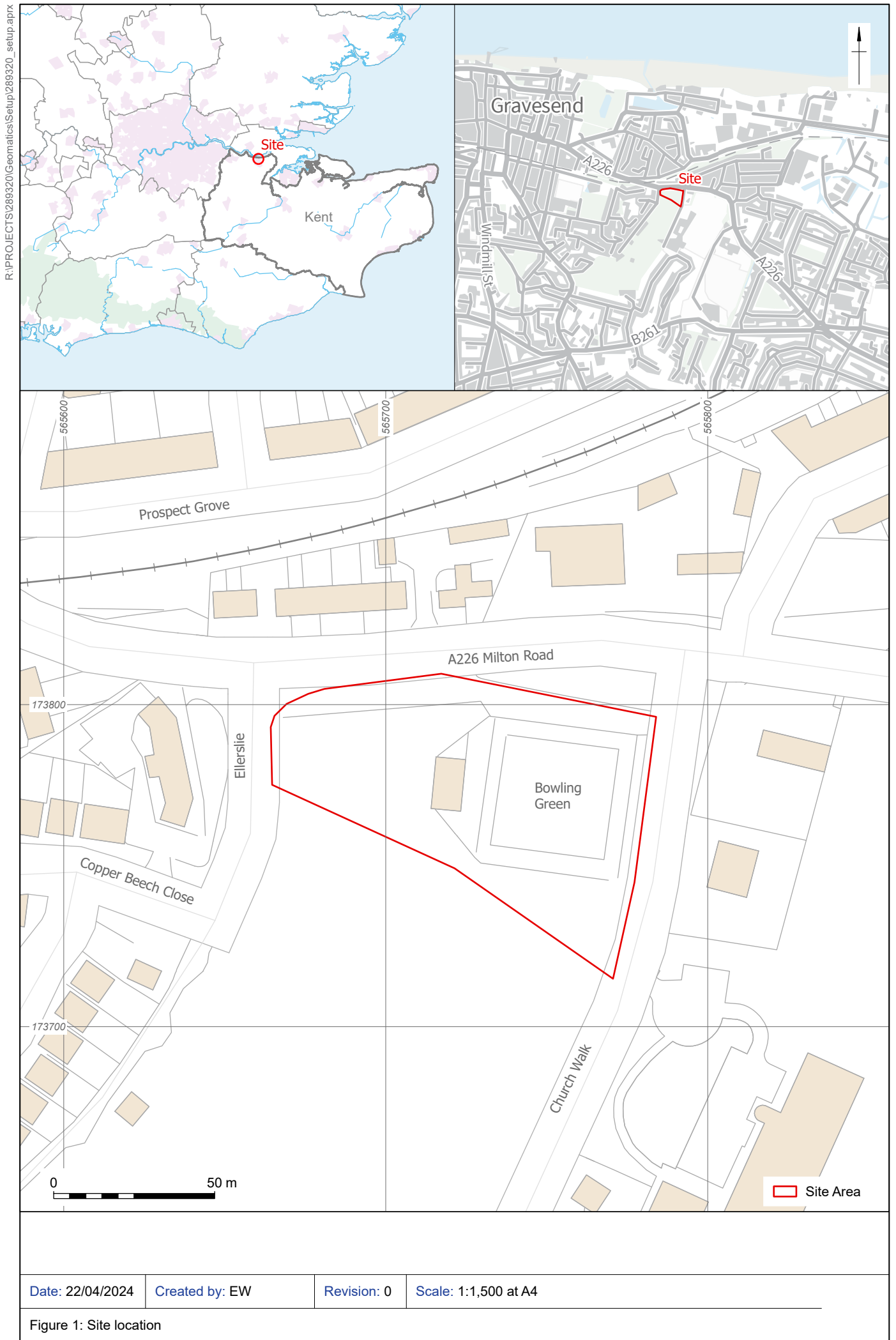
- all statutory provisions and by-laws relating to the work in question, especially the Health and Safety at Work *etc.* Act 1974;
- the Institute of Field Archaeologist's *Code of Conduct*;
- the Institute of Field Archaeologist's *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology*.

- 8.3 On completion of the watching brief the archaeological contractor will prepare a consideration of the methodology used, including a confidence rating.
- 8.4 The archaeological contractor is to include with their report a completed copy of the Kent County Sites and Monuments Report Form (see appendix 1)
- 8.5 The archaeological contractor is to provide the County Archaeological Officer with a representative selection of transparencies illustrating the archaeology of the site and the operations of the investigation. These will be deposited with the County SMR and will be used for presentations on aspects of the archaeology of Kent.

***Heritage Conservation Group, Kent County Council
2011***

APPENDIX 1**Kent County Council HER summary form**

Site Name:		
Site Address:		
Summary:		
District/Unitary:	Parish:	
Period(s):		
NGR (centre of site : 8 figures): (NB if large or linear site give multiple NGRs)		
Type of archaeological work (delete)		
Evaluation:	Watching Brief	Field Walking
Documentary study	Building recording	Earthwork survey
Excavation:	Geophysical Survey	Field Survey
Geoarchaeological investigation		
Date of Recording:		
Unit undertaking recording:		
Geology:		
Title and author of accompanying report:		
Summary of fieldwork results (begin with earliest period first, add NGRs where appropriate)		
(cont. on attached sheet)		
Location of archive/finds:		
Contact at Unit:	Date:	





rpsgroup.com