



**WRITTEN SCHEME OF
INVESTIGATION
FOR AN
ARCHAEOLOGICAL
WATCHING BRIEF**

**LAND SOUTH OF
KENAVON DRIVE
READING
BERKSHIRE**

April 2019

**Local Planning Authority:
Reading Borough Council**

**Site centred at:
SU 7227 7357**

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1.0 INTRODUCTION

- 1.1 It is proposed to develop land south of Kenavon Drive, Reading (NGR SU 7227 7357) (Figs. 1 & 2). This Written Scheme of Investigation (WSI) is being produced to address condition 6 associated with the planning application. Condition 6 states:
- No development (including demolition) shall take place within the site until the applicant, or their agents or their successors in title, have secured and implemented a programme of archaeological work (which may comprise more than one phase of work) in accordance with a written scheme of investigation, which has been submitted to and approved in writing by the local planning authority. The development shall only take place in accordance with the detailed scheme approved pursuant to this condition.**
- 1.2 The geological, topographical, archaeological and historical background to the site is summarised in Section 2 and 3 below.
- 1.3 In terms of relevant designated heritage assets, no World Heritage Sites, Scheduled Monuments, Historic Battlefield or Historic Wreck Sites are located within the site.
- 1.4 An Archaeological Assessment for the site was produced by CgMs Heritage (2015) which indicated that the archaeological potential of the site is primarily associated with isolated prehistoric features, and surviving features associated with 19th & 20th century Huntley and Palmer Biscuit Factory.
- 1.5 A subsequent archaeological evaluation was undertaken in March 2019 in the form of a programme of trial trenching. The evaluation identified underlying truncated chalk deposits in the western part of the site, and alluvial deposits elsewhere on site. Surviving features were limited to deeper basements and foundations elements of the former 19th & 20th century Huntley and Palmer Biscuit Factory (PCA 2019).
- 1.6 The proposed development may potentially affect any archaeological remains which are known to be present. For this reason, and because of the site's perceived archaeological potential, an archaeological watching brief has been deemed appropriate in this particular instance.
- 1.7 This document therefore forms the Written Scheme of Investigation (WSI) for the proposed watching brief. It has been prepared in accordance with all relevant guidelines, including those set down by the Chartered Institute for Archaeologists (CIfA) to which the watching brief exercise will adhere (see Sources Consulted).

2.0 GEOLOGY AND TOPOGRAPHY

- 2.1 The British Geological Survey (2019) indicate that the solid geology of the site consists of Seaford and Newhaven Chalk Formation. Superficial deposits consist of Taplow Gravel in the western part of the site, with alluvium in the eastern part of the site.
- 2.2 Geotechnical investigations were undertaken immediately to the northeast of the site in 2005. The investigations recorded between 2m and 2.70m of Made Ground across the site. Below the Made Ground, the investigations recorded deposits of grey silty clay with varying amounts of gravel, interspersed with bands of organic material and shell. These deposits were underlain by sandy gravel at approximately 3m below ground level. Peat deposits were recorded in two of the boreholes (CgMs 2013).
- 2.3 In 2002, a programme of archaeological investigation was undertaken on the Former Bus Depot site, immediately to the southeast of the site. Underlying gravels were encountered at a depth of 4.45m below ground level, which were overlain by a horizon of alluvial deposits approximately 2m thick. The alluvial horizon was sealed by up to 2.70m of 19th and 20th century Made Ground. Assessment of the deposits overlying the gravel, were considered to be alluviation without peat formation (TVAS 2002a, 2002b).
- 2.4 Within the site itself, the surface of the Chalk rises sharply from east (32-33m OD) to west (ca. 36-37m OD). Shepperton Gravel is present in the southern and eastern areas of the site, and comprises the sands and gravels of a high-energy braided river system. Where the Shepperton Gravel was recorded its surface is relatively even, generally lying at between ca. 32.5 and 34m OD. The Upper Alluvium rests either on the Shepperton Gravel or the bedrock Chalk. The deposits of the Upper Alluvium are described as predominantly silty or clayey and is relatively even across the site, generally lying at between ca. 36 and 37m OD. The sediments of the Upper Alluvium are indicative of deposition within low energy fluvial and/or semi-aquatic conditions during the Holocene. The high mineral content of the sediments may reflect increased sediment loads resulting from intensification of agricultural land use from the later prehistoric period onward, combined with the effects of rising sea level. Between ca. 1 and 3m of made ground caps the alluvial sequence across the site. The made ground is generally thicker towards the centre and east of the site (2-3m), with less than 1m recorded towards the west (QUEST 2016).
- 2.5 The topography of the site is roughly level a height of 40m Above Ordnance Datum (AOD). The Post-Medieval and modern development of the site has obscured the natural topography of the site.

- 2.6 The course of the River Kennet bounds the site to the south. The course of the River Thames lies approximately 300m to the north of the site.

3.0 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 3.1 The following background material is derived from the Desk-Based Assessment for the site (CgMs 2015).

Prehistoric

- 3.2 The alluvial deposits associated with the River Kennet which underlie the site are of Holocene date. Therefore, these deposits are considered to have no potential for in-situ of Lower and Middle Palaeolithic date. In the Upper Palaeolithic, hunter-gathers exploited valley floor locations.
- 3.3 Within the study area, no Mesolithic finds are recorded. Here, as elsewhere in lowland Britain, sites tend to occur close to rivers or other water sources. However, the valley floor would have been avoided by settlement activity because of the risk of flooding.
- 3.4 During the Neolithic and Bronze Ages, the pace of woodland clearance to create arable and pasture-based agricultural land varied regionally and locally, depending on a wide variety of climatic, topographic, social and other factors. The trend was one of a slow, but gradually increasing pace of forest clearance. Within the Thames Valley, it is likely that the first farmers initially cleared areas along the valley floor and adjacent terraces, where lighter, gravel-based soils occur.
- 3.5 Geoarchaeological boreholes taken on the site immediately to the northeast of Kenavon Drive identified a possible north-south aligned palaeochannel, the base of which was recorded at a depth of 33m AOD. Within the palaeochannel was a horizon of peat which was radiocarbon dated to the Neolithic, with the upper horizon recorded at a depth of 33.2m AOD (QUEST 2013; MRM17508, SU 7248 7358).
- 3.6 Contemporary evidence from nearby comprises a rolled and chipped flint axe of Neolithic date found at the Gasworks approximately 400m to the east (MDR11180, SU 72900 73700), and Early Neolithic flakes and pottery and flints of late Neolithic - Bronze Age date were found at the Abbey Church approximately 200m to the west (MDR11355, MDR3901, SU 72020 73600).
- 3.7 Excavations at Crane Wharf, approximately 250m to the southwest of the site, found fragments of worked wood, with tool marks suggesting that they were Neolithic in origin (MRD7396, SU 71950 73350).

- 3.8 By the 1st millennium, i.e. 1000 BC, the Thames Valley was probably a mix of woodland, tracts of open farmland, punctuated by farmstead settlements and burial monuments, although this floodplain location may have been avoided due to seasonal flooding.
- 3.9 A small assemblage of worked flint, attributable to the Prehistoric period in general, was found during archaeological investigations at Forbury Gardens, approximately 350m west of the site (MRM15881, SU 71877 73581).

Iron Age & Roman

- 3.10 The Iron Age is characterised in this region by increasing settlement stability and the large-scale organisation of the landscape, developments that began in the Late Bronze Age. Settlement evidence in the wider Thames Valley is plentiful and diverse, ranging from individual farmsteads occupied by a single household, to hillforts and enclosed settlements holding much larger communities.
- 3.11 However, within Reading Borough there is little evidence for large-scale Iron Age settlement. Within a 400m radius of the study site, the Berkshire HER records the discovery of a netting needle, associated with Roman artefacts, but of late Iron Age date found in the River Kennet/Gasworks site approximately 75m to the south of the site (MDR3890, SU 7238 7347).
- 3.12 The significance of Reading in the Roman period is dwarfed by the Roman town of Calleva at Silchester, approximately 16km to the south. Indeed, Calleva was the focus of the Roman road system in the area, but many goods must have been transported by river and it is possible that Reading could have been a port serving Calleva. Archaeological investigations within the town have recorded enclosure ditches containing quantities of Roman pottery suggesting settlement nearby.
- 3.13 Within a 400m radius of the study site the Berkshire HER also records the discovery of a burial at Crane Wharf, approximately 250m to the southwest of the site, thought to be Iron Age or Roman in date (MRD7402, SU 71950 73350). Flood defences and stakes associated with this general period were also recorded on site (MRD7399, MRD7400, SU 71950 73350).
- 3.14 Fragments of residual Iron Age pottery have also been recovered from the site at Crane Wharf (MRD15595, SU 71890 73351) and a short distance to the north within the Scheduled area (MRD11345, SU 71900 73520) of Reading Abbey.

- 3.15 A limited scatter of Roman finds have been recorded within the study area. The closest record finds relates to the discovery of Roman pottery, a 2nd century coin and antler implement during bridging works over the Kennet for the Gasworks approximately 75m to the south of the site (MDR3890, SU 7238 7347).
- 3.16 Fragments of pottery and other domestic finds have been recovered in the western part of the study area, either within, or in close proximity to the Scheduled Monument (MRD3898, SU 72000 73600; MRM16077, SU 71895 73460; MRD15596, SU 71966 73427).

Anglo-Saxon

- 3.17 In 871 the Anglo-Saxon Chronicles record that the Danes entered Wessex at Reading. Sometime after this invasion, a rampart was built on the western edge of the settlement, the side not defended by the Thames and Kennet. The HER point data locates the records approximately 250m northeast of the site (MRD3907, MRD3908, SU 72500 73700).
- 3.18 Archaeological investigations within, and immediately adjacent to Reading Abbey, have identified a small number of finds and features dating to the Anglo-Saxon period. The most significant of these discoveries relates to the excavation of 40 burials thought to be Anglo-Saxon in date (MRD1378, SU 72000 73550). Finds from this period in this area consist of a spearhead (MRD11363, SU 72000 73550) and a scatter of pottery sherds (MRD3902, SU 72020 73600; MRD11362, SU 71900 73510; MRD11364, SU 71900 73520; MRD15554, SU 72022 73598; MRD15596, SU 71966 73427; MRM15882, SU 71885 73589). This evidence is indicative of small scale Anglo-Saxon activity taking place on the site of Reading Abbey prior to its establishment following the Norman Conquest.

Late Medieval

- 3.19 The Domesday survey of 1086 records two manors at Reading, one belonging to Battle Abbey and the other to the King. During this period the study site lay within the Kings estate, which included a church, 29 dwellings and 12 acres of meadows (Open Domesday 2015). In view of the study site's location on the floodplain, it is likely that at the time of the Domesday Survey the site was classed as meadow.
- 3.20 In 1121 the King founded Reading Abbey on behalf of the Clunic Order. By the mid-13th century, control of the Abbey had passed to the Benedictine Order. Within a hundred years Reading Abbey had become one of the ten wealthiest Abbey's in the

country, only to ransacked and the land sold off following the Dissolution of 1539. The majority of HER records listed within the Scheduled area relate to key buildings and structural elements associated with the Abbey identified during the extensive archaeological excavations which have taken place on site, including the Chancel, Treasury, Chapter House, Infirmary, Cloisters and Church (MRD15552, SU 72002 7359; MRD15561, SU 72008 73578; MRD15556, SU 72017 73604; MRD15553, SU 72020 73598; MRD15562, SU 72003 73548; MRD15565, SU 72104 73578; MRD15560, SU 71985 73555).

- 3.21 A plan drawn up in 1901 depicts the layout of the Abbey buildings and grounds, all of which is located to the west of Forbury Road. The Abbey's precinct wall known as the 'Plummary Wall' follows the line of Forbury Road, located immediately to the west of the site boundary. The wall took its name from the Abbey's Lead Workshops known as plummeries which were built up against it (Philips 1980). Remains of the precinct wall was discovered at the junction of Kenavon Drive and Forbury Road approximately 300m (MRD1384 & ERM492, SU 72062 73649). During the late 20th century Forbury Road was widened from a single carriageway road into a dual carriageway. During these works elements of the Plummary Wall were identified retaining the eastern side of the original single carriageway road. Elements of the wall were relocated and installed along the central reservation, while the remaining elements were subsequently sealed beneath the dual carriageway extension (Paul Chadwick *pers. comm.*).
- 3.22 Recent excavation on the north bank of the River Kennet, a short distance to the south of the Scheduled area, have revealed remains of wharfs, revetments, warehouses, buildings, and smaller discrete features thought to be associated with the Abbey complex (MRD1407, SU 71980 73450; MRD7406, SU 71950 73350; MRD7407, SU 71950 73350; MRD15577, SU 71970 73404; MRD15585, SU 71976 73447; MRD15588, SU 71970 73404).
- 3.23 The remains of a possible motte, constructed within the Abbey precinct in 1150 is thought to be present within Forbury Gardens, to the west of the Abbey remains. It is likely that the earthwork was subsequently modified during the Civil War and by later landscaping (MRD3934, SU 71900 73640).
- 3.24 Later cartographic (1611 Speed's map of Reading) shows the study site located outside the Abbey precinct wall, to the east of the line of the road which will subsequently become Forbury Road. The site is located within flood meadow.

Post-Medieval & Modern

- 3.25 Speed's map of 1611 depicts the site within flood meadow immediately to the north of the River Kennet.
- 3.26 By 1643 Reading had become a strategic location during the Civil War, resulting in Royalist forces creating a significant circuit of earthwork defences to protect the town. The HER depicts the line of the defences as following higher ground following the alignment of Forbury Road outside the boundary of the site (MRD15703, SU 71058 73227). It is probable that the Royalists utilised the remains of the Abbey precinct wall as part of their defences in this location.
- 3.27 Roque's map of 1761 shows the site occupied by flood meadow and gardens associated with properties fronting onto Forbury Road.
- 3.28 Tomkin's map of 1802 depicts the western part of the site which contains a number of detached buildings associated with 'Blakes Wharf' and 'The Grange'. The buildings are most likely to facilitate the storage and movement of goods via the River Kennet.
- 3.29 The Plan of Reading Borough of 1807 is less detailed only showing the key roadside buildings belonging to 'Grange Wharf', while the eastern part of the site is still shown as field plots. The layout of the site remains unaltered in 1813, although the western part of the site is now called 'Blake's Wharf'.
- 3.30 The 1848 St. Lawrence Reading Tithe Map and associated Apportionment records that the developed area of the site has increased with the 'House, Cottages and wharf' now extending into the central part of the site. 'Grange Close House and premises' have also been extended to the east, while the remaining areas are recorded as meadow.
- 3.31 The Estate Map of John Belgrave and a general Map of Reading of approximately the same date, indicate that several buildings in the north of the site have been demolished, while two detached buildings are present in the southwest corner of the site, and several buildings of various sizes are present in the eastern part of the site.
- 3.32 In 1846, The Huntley and Palmer Biscuit Factory was opened on a land to the east of Forbury Road, on land now occupied by the site (MRD15661, SU 72347 73544). The factory was soon expanded with an additional number of buildings constructed. The opening of the Kings Road factory pioneered the first continuously running and integrated machinery for biscuit manufacture. The location of the factory by the Kennet and Avon Canal (MRD5764, SU 72300 73520) allowed Huntley and Palmers biscuits to be transported to the West Country. The railway at Reading was also used

to transport the biscuits and the company constructed its own private sidings within the factory. Surviving elements of this manufacturing complex was found during excavations on the site immediately to the southeast of the site identifying elements of a smithy, fitting shop and engine house. The remains were recorded at approximately 0.60m below existing ground level (TVAS 2002b).

- 3.33 The 1879 Ordnance Survey map is the first map to depict the Huntley and Palmer Biscuit Factory. The greatest concentration of buildings is located in the western part of the site adjacent to Forbury Road, with a scatter of small industrial buildings in the central and eastern parts of the site. Railway spurs from the main London to Reading railway lead into the site from the north. The factory also occupies land on the south bank of the River Kennet.
- 3.34 The GOAD Insurance Plan of 1895 provides a detailed picture of the extensive complex dominated by the 'New Biscuit Factory' in the west of the site, as well as flour stores, machine shops, a smithy, wharf buildings, and the 'New Cake Bakery' in the eastern part of the site. Only minor alterations to the layout of the site occur between 1899 and 1962.
- 3.35 In 1979 the area adjacent to Forbury Road has been cleared. This is at a similar time to the closure of the factory. The factory complex was ultimately demolished during the 1990's (MRD15661, SU 72347 73544).
- 3.36 The site was subsequently redeveloped by the early 2000s, represented by the commercial properties currently present within the site.

Previous Archaeological Investigation

- 3.37 In March 2019, ten evaluation trenches were excavated across the site (Fig. 2; PCA 2019) reaching depths of up to 4.50m below current ground level. Natural chalk bedrock was identified in the western part of the site, while alluvium was encountered across the remaining area. One feature was seen that predated the Huntley and Palmer Biscuit Factory was a singular 19th century pit that contained possible industrial waste. Remains of the Huntley and Palmer Biscuit Factory were seen within all trenches with the exception of one. Ground raising activity prior to the construction of the factory was seen, but across the site the construction of the factory appears to have had a significant impact upon the potential for earlier archaeological remains. The evaluation trenches suggest that the late 20th century clearance and

redevelopment has removed all but the basements and foundation structures of the
Huntley and Palmer Biscuit Factory.

4.0 WATCHING BRIEF

- 4.1 A watching brief has been required to target key areas of the proposed foundation plan where sound foundations co-inside with the footprint of the former Biscuit Factory as shown on the historical mapping, or the presence of chalk horizons (Fig. 2). The watching brief will be undertaken pro-actively, prior to the foundation groundworks taking place, in order to record any remains present within the selected area prior to development impacts. The areas selected for investigation in this manner comprise eight trenches varying in size between 10m by 10m and 12m by 24m in plan.
- 4.2 The watching brief trenches will be either excavated down to the top of the surviving remains of the 19th & 20th century Biscuit Factory, or to the top of the underlying chalk, gravel or alluvium, whichever is encountered first. The exception to this will Trench 11, where the top 0.5m of the alluvial horizon will be investigated to establish the context of previous finds recovered from such deposits during the evaluation stage of the project.
- 4.3 The watching brief trenches maybe opened in sections, or in full, dependant on the discretion of the Supervisory Archaeologist and the ground conditions encountered.
- 4.4 If the initial area of the watching brief trench is opened and it is clear that modern (late 20th century) development impacts are likely to have substantially removed any remains of interest, the remainder of the trench need not be opened. Equally, if a watching brief trench is opened and archaeological remains of significant interest are identified extending beyond the limit of investigation, the watching brief trench should be extended to exposed such remains.
- 4.5 Once the deposits/features identified in each watching brief trench have been recorded, each trench will be fully backfilled at the earliest opportunity.

5.0 OBJECTIVES AND RATIONALE OF THE WATCHING BRIEF

- 5.1 To record and excavate any features encountered during the course of the groundworks, and determine the character, quality and date of each feature or group of features.
- 5.2 Within these parameters, the watching brief of this site presents an opportunity to address the following objectives:
- 1) To determine the presence of any activity pre-dating the Post-Medieval/Modern period.
 - 2) To determine the presence of any Late Post-Medieval/Modern activity within the site associated with the Huntley and Palmer Biscuit Factory. How do the remains identify compare with the documentary sources detailing the layout of the factory? What can these remains tell us about the operations taking place within the Biscuit Factory?
 - 3) Establish the likely impact of past land use and development.

6.0 WATCHING BRIEF – DETAILED SPECIFICATION

- 6.1 The overall objectives of this watching brief are set out in Section 5. This section details the on site methodologies, report format and other related details.
- 6.2 As defined in Section 4, the watching brief will be undertaken in a pro-active targeted manner, focused on investigating the remains present in seven trenches located across the site as set out in Figure 2.

Watching Brief Techniques

- 1) The ground reduction will be undertaken by mechanical excavator, with removal of all undifferentiated soil horizons down to the formation horizon. The machine should remove a level spit of no more than 0.25m depth. Successive spits may be similarly removed until the first significant archaeological horizon is reached. That level should be cleaned in plan using a wide blade, ditching bucket or similar, with no teeth. If the machine has to re-enter the trench care should be taken to ensure that it does not damage underlying remains, particularly in soft conditions. *The machine must not be used to cut arbitrary trial trenches down to natural deposits, without regard to the archaeological stratification and leaving a section record only.* All machine work must be under archaeological supervision and should cease immediately if significant evidence is revealed.
- 2) Examination of all archaeological deposits should be by hand with cleaning, examination and recording both in plan and section.
- 3) Archaeological excavation may require work by pick and shovel or occasionally further use of the machine. *Such techniques are only appropriate for the removal of homogeneous or low-grade deposits which may give a 'window' into underlying levels. They must not be used on complex stratigraphy and the deposits to be removed must have been properly recorded first.*
- 4) If significant remains are encountered an appropriate mitigation strategy will be developed, with sufficient time and resources made available to excavate and record such remains appropriately. Such evidence would normally include deep or complex stratification settlement evidence and structures. The Local Planning Authority and Berkshire Archaeological Officer must be informed immediately if remains likely to be of national significance are encountered.

- 5) Any human remains must also be left *in situ*, covered and protected. If removal is essential it can only take place under appropriate Ministry of Justice and environmental health regulations. Such removal must be in compliance with the Disused Burial Grounds Amendment Act 1981. Prior written notice is also to be given to the Local Planning Authority.

Access and Safety

- 6) Reasonable access to the site is to be arranged for representatives of the Local Planning Authority and the Berkshire Archaeological Officer who may wish to make site inspections to ensure that the archaeological investigations are progressing satisfactorily.
- 7) *All relevant health and safety regulations determined by the on site Principal Contractor must be followed.* A general health and safety policy must be provided by the Archaeological Contractor and a detailed risk assessment and management strategy for this site prepared. In particular the machine should be kept away from unsupported trench edges and public access routes should be supervised and controlled. Barriers, hoardings and warning notices should be installed as appropriate. Safety helmets are to be used by all personnel. Appropriate toilet and washing facilities for site staff will be provided by the Primary Contractor.
- 8) *No personnel are to work in deep unsupported excavations.* Trenches deeper than 1.2m will have to be stepped or battered back.
- 9) *The archaeological organisation must be satisfied that the applicant or developer has provided all information reasonably obtainable on contamination and the location of live services before any site work takes place.*

Recording Systems

- 10) The recording system must be fully compatible with that most widely used elsewhere in Berkshire. Context sheets should include all relevant stratigraphic relationships and for complex stratigraphy a separate matrix diagram should be employed. This matrix should be fully checked during the course of the watching brief. If there is any doubt over recording techniques the guidance of the Berkshire Archaeological Officer will be sought.

- 11) It will be the responsibility of the archaeological contractor to obtain a site code from the appropriate museum, which will subsequently be used as the site identifier on all documents.
- 12) The relevant museum will be contacted in advance of the work taking place, and to establish arrangements for archiving.
- 13) The site archive will be so organised as to be compatible with other archaeological archives produced in Berkshire. Individual descriptions of all archaeological strata and features excavated or exposed will be entered onto prepared pro-forma recording sheets. Sample recording sheets, sample registers, finds recording sheets, access catalogues, and photo record cards will also be used. This requirement for archival compatibility extends to the use of computerised database.
- 14) The following sampling strategy will be adhered to:
 - 50% of each intrusive feature (pits, postholes).
 - 25% of each linear feature, including all terminals and intersections.
 - 50% of earth-cut structural features (beamslots, ring ditches).
 - Surviving structural elements (walls, collapse/debris fields) and domestic/industrial features (hearths, ovens), will be exposed, cleaned and left in-situ.
 - A single hand excavated slot will be excavated through the known enclosure ditch where encountered crossing the alignment of the proposed haul road.
- 15) Site location plan required; general plan (e.g. OS 1:1250) showing investigation area and development site in relation to surrounding locality and street pattern.
- 16) This will be supplemented by trench plans at 1:500 (or 1:200), which will show the location of the areas investigated in relationship to the investigation area, OS grid and site grid (if any). The locations of the OS bench marks used and site TBMs will also be identified. All trenches will be located using a total station or appropriate GPS equipment.
- 17) Archaeological plans; some record of the full extent in plan of all archaeological deposits must be made. All significant deposits that significantly affect the interpretation of the site and relate to the watching brief objectives should be

formally planned in relation to the trench and OS grid and be at a scale of 1:10 or 1:20. Single context planning is required on deeply stratified sites.

- 18) Sections containing significant deposits, including half sections, should be drawn as appropriate.
- 19) All archaeological plans and sections should be on drawing film at a scale of 1:10 or 1:20 and should include context numbers and OD spot heights for all principal strata and features.
- 20) An adequate photographic record of any significant archaeological remains is required, in both plan and section, illustrating in both detail and general context the principal features and finds discovered. This will consist of digital photography supported by black & white 35mm film where appropriate. The photographic record will also include working shots to illustrate more generally the nature of the archaeological operation mounted. The transparencies will be mounted in suitable frames. Where appropriate a photogrammetric record will be made of complex structures, features and horizons liable to be damaged in the course of the watching brief.
- 21) A Harris Matrix stratification diagram will be compiled and fully checked during the course of the excavations.

Finds and Samples

- 22) A high priority should be given to dating any remains and so all artefacts and finds are to be retained. Consideration should also be given to the recovery of specialist samples for scientific analysis, particularly samples for absolute dating, structural materials and cultural/environmental evidence. Different sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation. Minimum levels of data acquisition should be defined according to the "information recovery levels" summarised by Carver (1987). The default data acquisition level for all pre-modern assemblages is level D. Close attention will be given to sampling for date, structure and environment.
- 23) The strategy for sampling archaeological and environmental deposits and structures (which can include soils timbers, animal bone and human burials) will

be developed in consultation with the Berkshire Archaeological Officer and the Historic England Scientific Advisor for the region. Their will be sought at the project planning stage and a visit arranged to determine the importance and sampling requirements for all deposits exposed during the investigation. Consideration will be given to bulk samples of material for C14 dating, as appropriate, and samples of any other inclusions such as wood should also be taken.

- 24) A high priority will be given to the sampling of river and other anaerobic deposits (such as peat) where organic materials may be preserved.
- 25) Organic samples will be subject to appropriate specialist analysis. There may be a requirement to submit timbers to dendrochronological analysis and to process some samples to provide C14 dating. Other forms of specialist analysis may also be appropriate.
- 26) The finds retrieval policies of the Historic England archaeological guidance papers will be adopted. All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained. No finds will, however, be discarded without the prior approval of Berkshire Archaeological Officer.
- 27) All finds and samples will be treated in a proper manner and to the standards of the UK Institute of Conservators Guidelines. They will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in the UK Institute for Conservation "Conservation Guideline No 2". Appropriate guidelines set out in the Museums and Galleries Commissions "Standards in the Museum Care of Archaeological Collections (1991)" will also be followed.
- 28) Any finds covered by the provisions of the Treasure Act (1996, amended 2003) and Treasure (Designation) Order 2002, including gold and silver, will be moved to a safe place and reported to the coroner's office according to the procedures determined by the Act. They will also be reported to the local finds liaison officer from the Portable Antiquities Scheme. Where removal cannot be effected on the same working day as the discovery, suitable security measures will be taken to protect the artefacts from theft or damage.

- 29) The pottery specialist employed by the archaeological contractor will be familiar with local wares with a record of publications in the region.

Reports and Archives

Watching Brief Report

- 30) Within four weeks of completion of the work the archaeological contractor will produce a report, copies of which are to be provided to the Developer, Reading Borough Council, and the Berkshire Archaeological Officer. An interim report will be available within 10 working days.

The report is to include, as a minimum, the following:

- a. a site location plan at an appropriate scale; a copy of the trench location plan at 1:1250 together with a plan of the main archaeological features at 1:100 and more detailed plans and relevant section drawings as appropriate. Particular note should be made of any variations in the depth of overburden covering any archaeological deposits revealed;
- b. a descriptive description and interpretation of the archaeology of the site;
- c. a table showing, per area, the features, classes and numbers of artefacts located and their interpretation;
- d. a consideration of the methodology used, including a confidence rating;
- e. A summary report to be included in the Berkshire annual archaeological round up.

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 Berkshire Archaeological Officer or any designated representative of Reading Borough Council.

Archives and Published Reports

- 31) The integrity of the site archive should be maintained. The archive of all records and finds must be prepared consistent with the principles set out in the Management of Archaeological Projects (Historic England 1991), particularly Appendix 3.1 and Appendix 4.1, together with subsequent MoRPHE guidance (see Sources Consulted).
- 32) The minimum acceptable standard for the archival report is defined in the "Management of Archaeological Projects" 5.4 and Appendix 3. It will include all materials recovered (or the comprehensive record of such materials) and all written, drawn and photographic records relating directly to the investigations undertaken. It will be quantified, ordered, indexed and internally consistent. It will also contain a site matrix, a site summary and brief written observations on the artefactual and environmental data.
- 33) United Kingdom Institute for Conservation guidelines for the preparation of excavation archives for long term storage (1990) will be followed. Arrangements for the curation of the site archive will be agreed in writing with the recipient Museum and details of such arrangements will be made by the archaeological contractor.
- 34) The site archive is to be deposited with the appropriate local museum within 3 months of the completion of work. It will then become publicly accessible. The museum should be contact in advance to arrange deposition of the archive.
- 35) In addition, at the start of work (immediately before fieldwork commences) an OASIS online record <http://ads.ahds.ac.uk/projects/oasis/> must be initiated and key fields completed on Details, Location and Creators Forms. All appropriate parts of the OASIS online form must be completed for submission to the Berkshire HER. This should include an uploaded .pdf version of the entire report (a paper copy should also be included with the archive). The OASIS process will be completed by the appointed archaeological fieldwork contractor.

Archaeological Contractor

- 36) The field team deployed by the Archaeological Contractor will include only full time professional archaeological staff. All staff should be experienced on similar sites.

Notification of Start Date

- 37) The Berkshire Archaeological Officer will be notified in advance of the commencement of fieldwork, and will be kept informed of progress on site with a view to arranging site monitoring meetings as appropriate.

SOURCES CONSULTED

National Guidance:

Department of Communities and Local Government *National Planning Policy Framework* 2012

Department of Communities and Local Government/Department of Culture Media and Sport/English Heritage *PPS5 Planning for the Historic Environment: Historic Environment Planning Practice Guide* 2010

English Heritage *Comparison of PPS5 Policies with Historic Environment-Related Policies in the NPPF – Part 1* 5 April 2012 unpublished document

English Heritage *Comparison of PPS5 Policies with Historic Environment-Related Policies in the NPPF – Part 2* 5 April 2012 unpublished document

Chartered Institute for Archaeologists Guidelines:

http://www.archaeologists.net/sites/default/files/node-files/code_conduct.pdf

http://www.archaeologists.net/sites/default/files/node-files/ifa_code_practice.pdf

English Heritage Guidelines:

MAP2 Management of Archaeological Projects (Second Edition) 1991

MoRPHE Management of Research Projects in the Historic Environment The MoRPHE Project Managers' Guide 2009

MoRPHE Management of Research Projects in the Historic Environment PPN 3: Archaeological Excavation January 2008

Guidelines for archiving:

Archaeological Archives Forum (Duncan H. Brown), *Archaeological Archives: a guide to best practice in creation, completion, transfer and collection* 2007

Museum and Galleries Commission *Standards in the Museum Care of Archaeological Collections* 1992

Society of Museum Archaeologists *Selection and Retention and Dispersal of Archaeological Collections* draft 1992

Society of Museum Archaeologists *Towards an Accessible Archaeological Archive. The Transfer of Archaeological Archives to Museums: Guidelines for Use in England, Northern Ireland Scotland and Wales* 1995.

Site Specific

British Geological Survey *Geology of Britain Viewer* <http://www.bgs.ac.uk/> 2019

CgMs Consulting 2013 *Archaeological Desk-Based Assessment, Kenavon Drive, Reading, Berkshire*

Hey, G. & Hind, J. (eds) 2014 *Solent-Thames Research Framework for the Historic Environment. Resource Assessments and Research Agendas.*

Open Domesday <http://opendomesday.org/> 2018

Philips, D. 1980 *The Story of Reading*

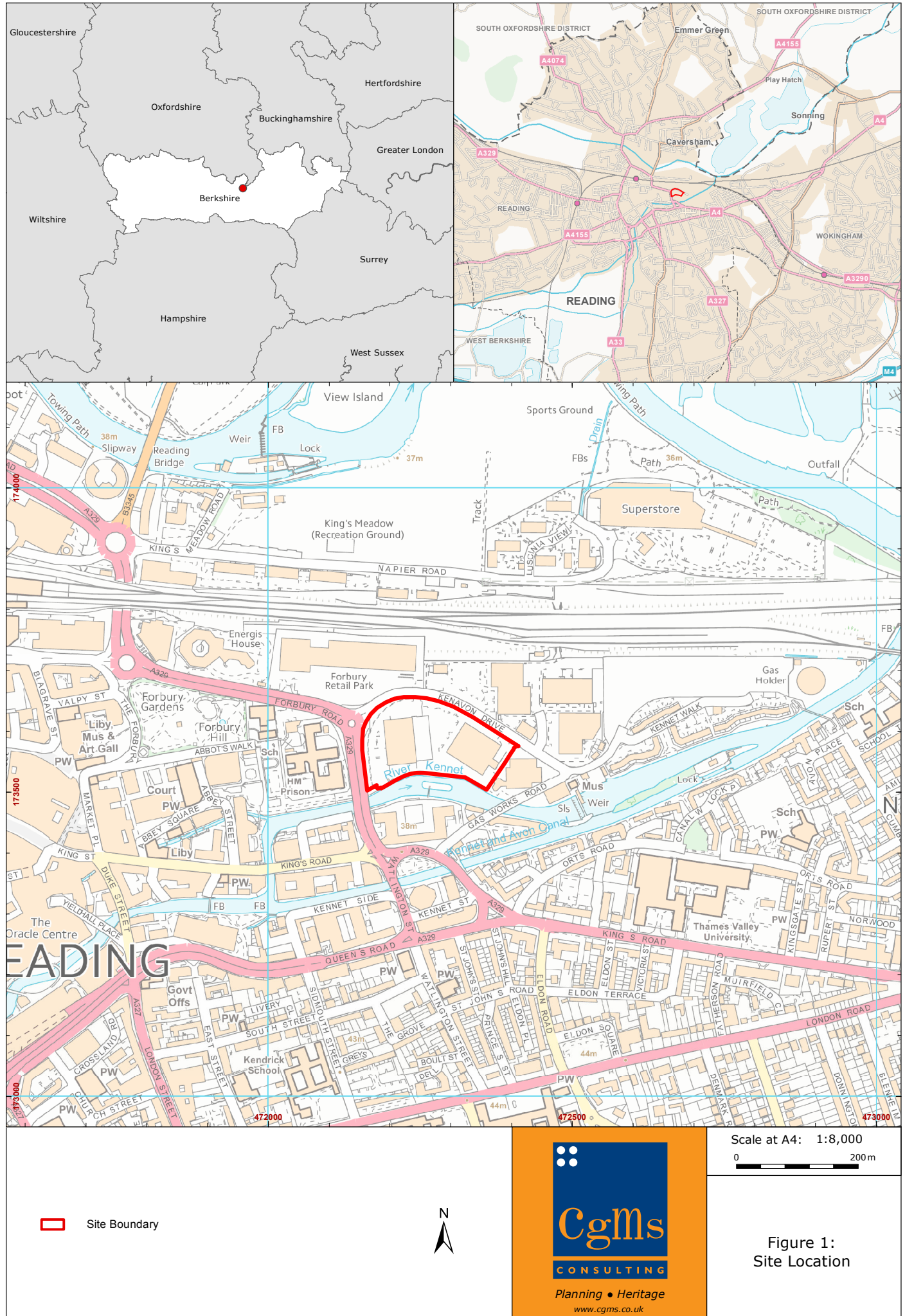
Pre-Construct Archaeology 2019 *Kenavon Drive, Reading, Berkshire. An Archaeological Evaluation* unpublished report

QUEST 2013 *A Report on the Geoarchaeological Borehole Investigations and Deposit Modelling on land at Kenavon Drive, Reading, Berkshire* unpublished report

QUEST 2016 *Land South of Kenavon Drive, Reading, Berkshire. Geoarchaeological Deposit Model Report* unpublished report

Thames Valley Archaeological Services 2002a *Former Bus Depot, Gasworks Road, Reading, Berkshire* unpublished report

Thames Valley Archaeological Services 2002b *Former Bus Depot and Huntley and Palmers Biscuit Factory, Gasworks Road, Reading* unpublished report



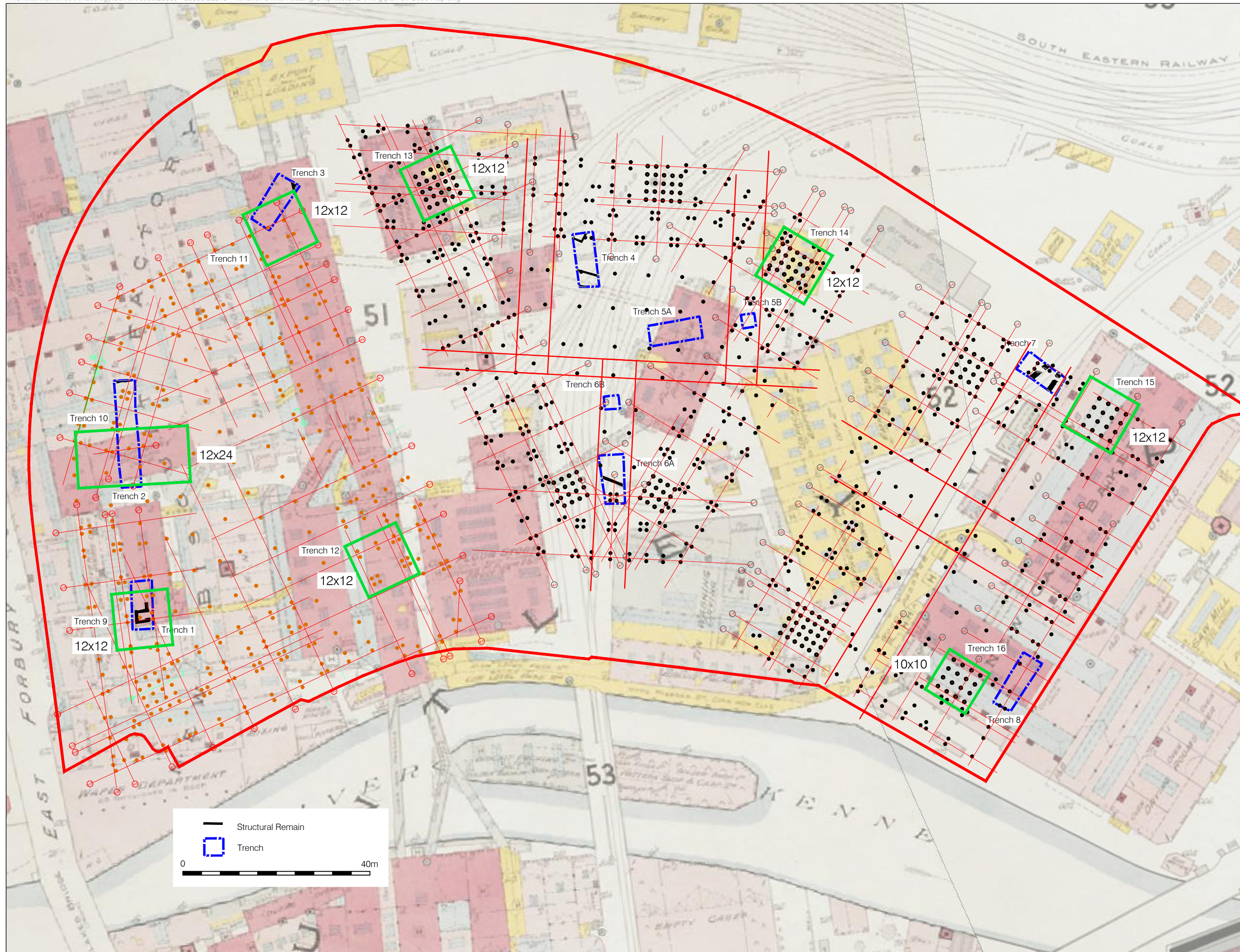


- Site Boundary
- Trench



Scale @ A3:
1:750
0 20 m

Figure 2:
Watching Brief Location
Plan



Cgms

www.cgms.co.uk