

BUNK16



# BUNKERS FARM, BUNKERS LANE, HERTFORDSHIRE

ARCHAEOLOGICAL EVALUATION, HISTORIC BUILDING RECORDING,  
STRIP, MAP AND SAMPLE, AND WATCHING BRIEF

commissioned by Darren Andrews Homes Ltd.  
July 2017

v0.1

## PROJECT DETAILS

<b>Project Reference</b>	BFHD11 / BUNK16
<b>Project Name</b>	Archaeological Evaluation, Historic Building Recording, Strip, Map and Sample and Watching brief at Bunkers Farm, Bunkers Lane, Hemel Hempstead, Hertfordshire
<b>Client</b>	Darren Andrew Homes Ltd.
<b>National Grid Reference</b>	TL 08728 05724
<b>Address</b>	Bunkers Ln, Hemel Hempstead HP3 8SW, UK
<b>Parish:</b>	Nash Mills CP
<b>Local Authority</b>	Hertfordshire County Council
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<b>OASIS No</b>	Headland4-159100
<b>Project Manager</b>	Michael Tierney BA MA MCIfA
<b>Text</b>	Peter Spencer BA MA ACIfA
<b>Illustrations</b>	Mano Kapazoglou BA MSc MIMI, Beata Wieczorek-Oleksy MA PCIfA
<b>Fieldwork</b>	Joe Berry, Emmet Fennelly, Simon Mayes, Astrid Nathan

## PROJECT SUMMARY

Headland Archaeology was commissioned to undertake a programme of archaeological investigation at Bunkers Farm, Hertfordshire by the client, Darren Andrews Homes, comprising archaeological evaluation, historic building recording, excavation, and monitoring.

These works were in advance of the conversion, extension and refurbishment of the existing Bunkers Farm complex to provide ten residential dwellings, an underground car park and associated landscaping and infrastructure works.

Conducted from March 2013 to March 2017, the investigation confirmed the sites characterisation as a 19<sup>th</sup> century Model Farm incorporating a variety of architectural and stylistic elements typical of the period.

Excavation conducted within the former extent of the demolished SW wing confirmed the presence of in-situ foundations associated with three 19<sup>th</sup> century farm buildings, while archaeological monitoring activities centred upon the proposed underground carpark immediately to the south of the site confirmed there were no underlying archaeological remains present.

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# BUNKERS FARM, HERTFORDSHIRE

## ARCHAEOLOGICAL EVALUATION, HISTORIC BUILDING RECORDING, STRIP, MAP AND SAMPLE, AND WATCHING BRIEF

### 1. INTRODUCTION

Headland Archaeology (UK) Ltd was commissioned by the client, Darren Andrews Homes Ltd, to undertake a programme of targeted archaeological evaluation, Historic Building Recording (HBR), Strip, Map and Sample (SMS) and monitoring works in advance of groundworks associated with the development of Bunkers Farm and associated land situated at Bunkers Lane, Hemel Hempstead, Hertfordshire, HP3 8SW (development area or DA – Illus 1 and 2).

The proposed development scheme comprises the redevelopment of the DA to provide 10 residential units consisting of apartments and houses, an underground carpark and associated infrastructure and landscaping.

Headland Archaeology staff undertook the fieldwork component of the project in accordance to the WSI (Headland 2013) and approved by Alison Tinniswood, Historic Environment Advisor (HEA) for Hertfordshire Council. Fieldwork was undertaken in two phases between 2013 and 2017:

Table 1: Schedule of work

DESCRIPTION	DATE
Archaeological Evaluation	09/09/2013 – 20/09/2013
Historic Building Recording	09/09/2013 – 20/09/2013
Strip Map and Sample	09/02/2017 – 10/02/2017
Watching Brief	21/02/2017 – 03/03/2017

#### 1.1 PLANNING BACKGROUND

The client was given planning permission for the creation of ten residential units within the historic footprint of Bunkers Farm and its associated curtilage (planning reference 4/01524/09/FUL). The scheme involved the refurbishment and restoration of the Grade II listed buildings to provide seven residential units, the construction of three additional new dwellings, and associated infrastructure including, an underground car park, relocation of the site entrance and re-alignment of the adjacent road.

The Historic Environment Advisor (HEA) was consulted in regards to the proposed development with the following response:

*'The site of the proposed development is an historic farmstead. A curvilinear boundary SE of the farm is indicative of medieval origins. A number of the extant buildings are Listed Grade II. Evidence of prehistoric, Roman and Medieval occupation has been identified from the wider vicinity. I believe that the position and scale of the proposed development is such that it should be regarded as likely to have an impact on significant archaeological remains'*

Outline planning permission for the development was granted by Dacorum Borough Council (4/01524/09/FUL) with the following provisions:

**Condition 5:**

*'No development shall take place within the proposed development site until the applicant, or their agents, or their successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation, which has been submitted to the planning authority and approved in writing. This condition will not be discharged before the planning authority has received and approved an archaeological report of the archaeological investigations'*

**Reason:** To ensure that reasonable facilities are made available to record archaeological evidence.

**Condition 6:**

*'If archaeological remains are identified during the course of construction, which are, in the opinion of the local planning authority, of sufficient quality and importance to merit preservation in situ, development shall immediately cease and shall not recommence until an application has been submitted and approved in writing by the local planning authority for the repositioning or redesign of the underground car park'*

**Reason:** To ensure that reasonable facilities are made available to record archaeological evidence.

Prior to the commencement of archaeological investigation Headland Archaeology (UK) Ltd submitted and had approved a Written Scheme of Investigation (WSI) in accordance with the scope and objectives outlined by the HEA in a letter to Dacorum Borough Council Planning Department.



## 1.2 SITE DESCRIPTION

The DA is located within the existing property boundary of Bunkers Farm, a Grade II listed building (NGR SU 0805 7074, Bunkers Lane, Hemel Hempstead, HP3 8SW – Illus 1), situated adjacent to the existing route of Bunker's Lane, approximately 1.9km north of the village of Bedmond.

The DA extends approximately 0.8ha (358 m<sup>2</sup>) and was bounded to the south and west by agricultural land, to the east by residential housing, agricultural land and isolated farmsteads, and to the north by Bunker's Lane and Bunker's Park Open Space.

Topographically the DA is situated on a gentle southwestern facing slope at a height of approximately 135m AOD. British Geological Survey (BGS) 1:50,000 mapping records the underlying bedrock geology as lying upon the interface between the Lewes Nodular Chalk Formation - A chalk sedimentary bedrock formed approximately 84-94 million BP and the Lambeth group clay sands and gravel – a complex of vertically and laterally varying gravels, sands, silts and clays deposited between 56-55 million years BP. Overlying superficial deposits are recorded as un-bedded and heterogeneous Neogene clay and flint (NERC 2017).

## 1.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The following section provides a summary of the readily available archaeological and historical background to the development site and its immediate environs compiled with information from the Hertfordshire Historic Environment Record (HER) and existing documentary sources, the section concludes with a historic map regression of the site (AD 1836-1956).

The DA (Bunkers Farm) is recorded in Hertfordshire and St. Albans HER (15333) as a Model Farm (an experimental farm used for researching and demonstrating agricultural techniques). It is possible that it has some research potential related to the paper industry, as described in the HER record:

*'Bunkers Farm belonged to the Chambersbury estate until 1844-50, when the estate was bought by John Dickinson of Nash Mills, whose house, Abbots Hill, was close by. Dickinson then demolished the farm buildings and built a new model farmstead as part of the Abbots Hill estate. The new farmstead (without farmhouse) survives largely intact, around a pair of yards on Bunker Lane; the SW building has gone. No evidence of animal rearing is present, so the buildings were presumably designed for grain processing. They consist of a long two-storey threshing barn of brick with flint panels and cast iron ventilation grilles (and some high quality dressed stones which may have been re-used); a red brick stable block; a second barn, L-plan and in vernacular style in red brick with weatherboarding, and some flint panels to match the larger barn; and an open cart shed in brick and flint. There is also a brick and flint enclosure wall. Much of the original machinery and internal detail survive. It is possible that the farm has a research function in connection with the paper-making industry, as it is known that in the mid 19C the mills owned by John Dickinson & Co were experimenting with the use of field crops in the paper-making process'*

It is possible the farm may have medieval origins, the HER records that the sites name is documented in 1452 AD as being associated with the family of William Bunker, similarly Bunker's Lane is documented in the 16<sup>th</sup> century (Gover et al. 1938) and 18<sup>th</sup> century mapping (Drury and Andrews 1766) identifies a farmstead upon the site preceding the later 19<sup>th</sup> century farm.

A search was conducted using the local resources at Hertfordshire Archives and Local Studies centre (HALS), as well as online sources in order to outline a brief history of Bunkers Farm:

## Bunker's Farm

The site of Bunkers farm lies within the parish of Abbot's Langley, known variously as Langleia (11<sup>th</sup> century). Abbots Langeleie (14<sup>th</sup> century). Lees Langley (16<sup>th</sup> century).

In the 11<sup>th</sup> century the site lay within lands held by the Saxon Æthelwine the Swart who subsequently gave Langleia, as the area was then known, to the monastery of St. Albans. During this period a Hide (an English unit of land measurement originally intended to represent the amount of land sufficient to support a household., approx. 120 acres) comprising the wooded slopes and part of the level ground of the Gade valley had been claimed from the north-western extent of the parish (in which the site of Bunkers Farm lay) by Herbet Fitz Ivo. In 1086 it was said that this hide 'belongs and belonged' to the church of St. Albans, and was then held by the count of Mortain. It is Likely this Hide was the origin of the manor of Hyde (Hide Comitisse, 13<sup>th</sup> century; La Hide, la Cumtasse Hyde, 14<sup>th</sup> century).

Few records have survived in relation to the Manor, however it is likely the early history of the site is connected to that of Hyde Manor.

During the following centuries the manor of Hyde was passed from family to family. By 1514 Hyde manor was in the possession of Thomas Howard, earl of Surrey, Duke of Norfolk who subsequently conveyed the property to Sir Ralph Rowlatt in 1539 from whom it passed seven years later by sale to William Igrave the king's (Henry VIII) embroiderer.

Another period of tumultuous ownership followed until in 1858 the property was sold to the British Land Company, who subsequently sold the manor and 125 acres of land to Mr. John Dickinson.

In 1811 Mr. Dickinson (1782-1869) had acquired the paper mill at Nash Mills, which lies in the valley below Bunkers Farm. He had patented a mechanical means of manufacturing paper and become a leading figure in England's paper manufacturing industry. During the period 1850-1860 he demolished the old buildings at Bunkers Farm and built a new model farmstead, as part of the Abbots Hill Estate.

A model farm was an 18th/19th century experiment to advancing farming from the peasant occupation of previous generations. The model farm philosophy promoted research into efficiency and functional; design which consequently implemented improvements in agricultural techniques, through the application of a scientific philosophy, that involved the more rational use of buildings and the interaction between them as a whole unit; the implementation of mechanisation within the farming environment, such as steam power for working threshing and other equipment, was implemented in an attempt to raise farming into a more production and business based ethos rather than a cottage industry.

## Historic Map Regression

Mapping for the surrounding landscape of Bunker's Farm exists from at least the late 18<sup>th</sup> century onwards (Drury and Andrews 1766), however it is not until the late 19<sup>th</sup> century that the mapping achieves a resolution and detail suitable to examine the development of the farmstead itself (Illus 3).

### *A Topographical Map of Hertfordshire (Surveyed 1766)*

1:63,360 scale mid-18th century mapping of the county indicates the presence of a three winged building, bordered to the south by a formal garden labelled as '*Bunchers Farm*' (Drury and Andrews 1766). Its geospatial relationship with the current 19<sup>th</sup> century farmstead is currently unknown.

*Hertfordshire XXXIV (Surveyed 1872 – 1878)*

Late 19<sup>th</sup> century mapping indicates that by at least 1878 Buildings A-J (with the exception of C) had been constructed forming the enclosed double-courtyard plan of Bunkers Farm that was to change little over the next 139 years. It should be noted that:

- Building D – an addition to Buildings E and F, which has been noted as possibly containing mechanised equipment and acting as a lunch room for farm hands, had been constructed by this point indicating an early adoption / incorporation of mechanisation into the overall farm design.
- To the east of the junction of building H and the south of the building A there is a protrusion on the map indicating that a fourth building once stood within the east yard, this may indicate a lost engine house or boiler house that relates to the redundant chimney noted in southern elevation of the building A.

*Hertfordshire XXXIV.9 and Hertfordshire XXXIV.SW (Surveyed 1897)*

By 1897 Buildings K and L had also been constructed, as well as an orchard to the south of the farmstead and two pumps within the eastern courtyard and next to Bunkers lane.

*Hertfordshire XXXIV.9 and Hertfordshire XXXIV.SW (Surveyed 1923)*

By the early 20<sup>th</sup> century little of the overall plan of the farmstead had changed, with the exception of the partial demolition of Building H and the construction of Building C an elevated water tank constructed to feed a steam engine housed within either building H or a small square structure adjacent to building C.

*Hertfordshire XXXIV.SW and TL00 (Surveyed 1938-1956)*

Late 20<sup>th</sup> century mapping indicates no change in the external layout of the farmstead until at least 1956, however, satellite imagery indicates that by 1999 Buildings H-L had been demolished and the pumps removed.

As stated within the HER, none of the historic OS maps show that a farm house was either built outside of, or incorporated into the redeveloped complex at Bunkers Farm, this has been used to indicate the farm's link with Abbots Hill House and Nash Mills; however the row of cottages to the east of bunkers farm may possible represent more than just a row of farm works cottages and could conceivable conceal the principle dwelling associated with the control of the everyday activities at Bunkers Farm.

## Previous Archaeological Work

The DA has not been subjected to any prior archaeological investigation beyond that conducted during the initial listing process in 2009.

## 2. AIMS AND OBJECTIVES

In general, the purpose of the investigation was to identify and assess the particular significance of any element of the historic environment that may be affected by the relevant proposal (PPS 5 *Planning for the Historic Environment*, Policy HE7.1).

This was achieved by determining and understanding the nature, function and character of any remains on the site within their cultural and environmental setting.

Extent or in-situ archaeological remains within the DA were judged to primarily comprise medieval/post-medieval remains. Historic building recording focused on post-medieval remains, particularly those relating to the Model Farm. The below ground investigations aimed to record remains from all periods.

As such the specific aims relating to the project were:

- To undertake appropriate levels of historic building recording as defined by the brief for the work.
- To establish the location, extent, nature, integrity, state of preservation and date of any archaeological features present.
- To secure where appropriate the assessment, analysis, conservation and long term storage of any artefactual / ecofactual material from the site and deposit an archive for the work with Dacorum Heritage Trust (accession number: DACTH 3777/3778).

Key objectives described in the WSI were:

- Historic building recording, the archaeological recording of structures in their present form to Historic England Level 3 standard (Historic England 2016), including the recording of any original features / equipment to be altered / removed / demolished during the course of the development.
- Evaluation of the impact on the potential for archaeology within the area of the underground car park.
- Strip, Map and Sample to be undertaken within the footprint of the proposed new buildings.

The local and regional research contexts are provided by the Regional Framework for the Eastern Region (Glazebrook 1997, Brown & Glazebrook 2000 and Medlycott & Brown 2008). Any evidence retrieved during the works were be analysed in light of the objectives contained in these frameworks.

It was judged the DA had a high potential to contain sub-surface remains of medieval land boundaries and it was known to contain post-medieval structures, some of which are Grade II listed. As such the objectives set out in *Medieval Rural Settlements – A policy on their Research, Survey, Conservation and Excavation* (Coleman 1996) and *Research and Archaeology: a Framework for the Eastern Counties, 2. Research Agenda and Strategy* (Gilman, Gould and Green 2000) had particular relevance and are summarised thus:

**Objective 1)** Medieval. Increase our knowledge of boundary types present on medieval farms along with increasing knowledge of the materials used in the construction of buildings and walls. Opportunities should be taken to investigate yard and garden areas and to increase the quantity of environmental (plant/insect) samples from these sites.

**Objective 2)** Post-Medieval. Increase our understanding of the development of post-medieval farmsteads in this region. Through the study of individual farmsteads

which are undergoing modern change (such as Bunkers Farm) we may create an opportunity to record the story of that farmstead up to that point. Specifically, focus should be placed on the buildings of the farm, regional character of the farmstead and the influence of contemporary models on the design of the farm (Wade-Martins 2002).

**Objective 3)** Post-medieval. Potentially increase our understanding of the farm buildings and land in connection with the *John Dickinson & Co* paper making industry.

### 3. METHODOLOGY

#### 3.1 DOCUMENTARY RESEARCH

Documentary work involved a search of the Hertfordshire Historic Environment Record (HER) and a visit to the local records office. The resultant records are referred to throughout the text.

#### 3.2 HISTORIC BUILDING RECORDING

Historic Building Recording (HBR) was undertaken of the structures affected by the development (altered or demolished) between 09/09/2013 – 20/09/2013 (Illus 2). This included the recording of any original features/equipment to be altered/removed/demolished during the course of the proposed development.

The objective of the Historic Building Recording (HBR) survey was to record the extant buildings in their current form, prior to any changes taking place. The HEA has stipulated that:

- Post-World War II buildings should be subject to an English Heritage (EH) Level 1 survey.
- Pre-World War II buildings should be subject to an EH Level 3 survey.

The surveys followed guidelines in *Understanding Historic Buildings: A Guide to Good Recording Practice* (Historic England 2016). These state that:

**Level 1** *is essentially a basic visual record, supplemented by the minimum of information needed to identify the building's location, age and type. This is the simplest record, and it will not normally be an end in itself, but will be contributory to a wider study. Typically it will be undertaken when the objective is to gather basic information about a large number of buildings – for statistical sampling, for area assessments to identify buildings for planning purposes, and whenever resources are limited and much ground has to be covered in a short time. It may also serve to identify buildings requiring more detailed attention at a later date.*

*Level 1 surveys will generally be of exteriors only, though the interior of a building may sometimes be seen in order to make a superficial inspection and to note significant features. Only if circumstances and objectives allow will any drawings be produced, and these are likely to take the form of sketches.*

**Level 3** *is an analytical record, and will comprise an introductory description followed by a systematic account of the building's origins, development and use. The record will include an account of the evidence on which the analysis has been based, allowing the validity of the record to be re-examined in detail. It will also include all drawn and photographic records that may be required to illustrate the building's appearance and structure and to support an historical analysis.*

*The information contained in the record will for the most part have been obtained through an examination of the building itself. The documentary sources used are likely to be those which are most readily accessible, such as historic Ordnance Survey maps, trade directories and other published sources. The record may contain some discussion the building's broader stylistic or historical context and importance. It may form part of a wider survey of a number of buildings which will aim at an overall synthesis, such as a thematic or regional publication, when the use of additional source material may be necessary as well as a broader historical and architectural discussion of the buildings as a group. A Level 3 record may also be appropriate when the fabric of a building is under threat, but time or resources are*

*insufficient to allow for detailed documentary research, or where the scope for such research is limited.*

The Bunkers Farm complex primarily comprised 19<sup>th</sup> century structures which were subsequently subjected to level 3 HBR survey, a single late 20<sup>th</sup> century structure present on site at the time of the original listing in 2009, was subsequently demolished prior to the survey and as such has not been recorded.

### 3.3 EXCAVATION

All excavation followed the guidance laid down by the Chartered Institute for Archaeologists (CIfA 2014a, 2014b) and was in line with the approved WSI (Headland Archaeology 2013).

A mechanical excavator equipped with a toothless ditching bucket was used to remove the overburden under direct archaeological supervision. Potential archaeological features were excavated by hand.

Investigation of archaeological remains was undertaken through hand excavation. A representative sample, sufficient to meet the objectives of the evaluation, of identified archaeological or potentially archaeological remains were investigated and recorded. A representative sample (1m) of the general stratigraphy of each trench was recorded.

Trial trenching was carried out between 09/09/2013 – 20/09/2013. In total 3 trenches were excavated within the DA, located within the extent of the proposed underground carpark (Illus 2). All were 12m in length by 1.6m in width - each covering an area of 19.2m<sup>2</sup> (57.6m<sup>2</sup> in total). All trenches were set out using a Trimble GNSS device.

Strip, map and sampling was carried out between 09/02/2017 – 10/02/2017. A total area of 0.4ha (4000m<sup>2</sup>) was excavated centred on NGR TL 08693 05731, immediately to the southwest of the existing buildings associated with Bunker's Farm (Illus 2).

The watching brief element of the project was undertaken between 21/02/2017 – 03/03/2017, and focused upon the 0.6ha (6000m<sup>2</sup>) footprint of the underground carpark centred upon NGR TL 08712 05716 (Illus 2).

### 3.4 RECORDING

All recording followed the guidance laid down by the Chartered Institute for Archaeologists (CIfA 2014a, 2014b) and was in line with the approved WSI (Headland Archaeology 2013). All trenches and contexts were given a unique number. All recording was undertaken on pro forma recording sheets which conform to archaeological standards. All stratigraphic relationships were recorded.

A plan of the trenches and features across the entire site was recorded digitally using a GNSS device.

A full photographic record was taken using digital photography and black and white print photographs (where appropriate). A metric scale was clearly visible in all record photographs.

## 4. RESULTS

### 4.1 INTRODUCTION

Full context and trench descriptions, including dimensions, depths and orientations, are presented in the Appendices I and II. Contexts are identified numerically by trench and / or area (i.e. Trench 1: (101), Trench 2: (201), SMS Area 1: (1001) etc).

### 4.2 HISTORIC BUILDING RECORDING

Constructed in the late 19<sup>th</sup> century (1856-1878 AD), Bunkers Farm is organised around a loose courtyard plan with double yards. Covering an area approximately 0.23ha (2,2273m<sup>2</sup>) the farm originally consisted of eleven buildings, nine of which formed the double courtyard plan with outlying cart shed to the west (adjacent to Bunkers Lane) and a probable pig-pen / loose boxes to the east (Illus 4).

Courtyard plans are the most common forms of farmstead layout and Bunkers Farm represents a variant of the E / multi-yard plan (Historic England 2013, 2014), where working buildings are arranged around two cattle yards. Though Bunkers Farm would have been enclosed on all sides, the HBR survey indicated some phasing of the structures suggesting it was originally intended as a E shaped plan which was later expanded into closed yards. The buildings are primarily constructed of machine-made red brick with flint panels and stone dressings, with indication of the partial re-use of older timber framing. Today six of the original eleven buildings remain, their internal and external appearance and condition are discussed below, where appropriate illustrations of specific architectural elements are referenced and a location map of all photos included (Illus 5).

#### Building A

Comprising a two storey L-shaped brick-built structure formed of an East-West wing, 52m in length by 8m in width, and with an N-S return wing situated at its western end measuring 7m in length by 7m in width, building A formed the primary focus of the 19<sup>th</sup> century farmstead at Bunkers Farm.

#### *East -West Wing (processing barn)*

The E-W wing formed the back bone of, and the northern extent of the courtyard complex, abutting Bunkers Lane (Illus 6), the existing entry on the National Heritage List (NHL) identifies the structure as a grain processing building.

The E-W wing was constructed from red brick with coursed flint work panels pierced by cast iron ventilation grills. The gables were constructed entirely from red brick, bonded with a white mortar and coursed in a typical English bond.

The northern external elevation, facing Bunkers Lane, contained five ground-level doorways. The first floor incorporated six regularly-spaced large openings, all with brick surrounds and shuttered doors. Dressed stones were variously used as quoins, plinths, and jambs for four of the doorways on the north facing elevation, with a later inserted door noticeable through the use of brick surrounds. Within the doorways evidence remains for the use of raised wooden thresholds intended to stop grains from spilling onto the road.

The southern external elevation, facing inwards towards the eastern and western courtyards, contained four ground-level doorways, six regularly spaced small square windows, and two larger openings situated immediately beneath a 20<sup>th</sup> century water tank (building C). The first floor contained two large opening similar to those of the northern elevation and a third smaller opening



situated slightly higher immediately above the water tank. All the windows and doors in the processing barn were boarded up and some of the openings bricked up.

The interior of the processing barn was divided into twenty-four bays, and was almost entirely open on the first and ground floors (Illus 7 and 8). The western 3 bays had been partitioned off by a floor to roof high wooden planked wall and form part of the return wing.

The first floor had cast iron roof trusses with decorative diminishing circular moulded openings, supporting a timber and iron tie rod roof that had some skylights inserted.

Within the upper floor a 20<sup>th</sup> century square, wooden, grain conveying pipe was mounted beneath the iron trusses and ran the entire length of the building. The conveyer was a later addition to the building and was fed from a galvanised Archimedes screw feed, which took processed grain from the ground floor at the western end of the building.

A three-headed Tudor style stone mullion window with leaded lights has been included within the west gable (Illus 9).

Within the ground floor there was the remains of a winnowing machine (Illus 10). Unfortunately the manufactures plates had been removed as well as some of the internal workings. A series of line shafting belt drives remained on the first floor (Illus 11), further evidence use of mechanised power in the building.

#### *North-South Return Wing*

Towards the western end of the main processing barn a small return wing projected southwards to create the northwest corner of the courtyard complex, measuring approximately 7.75m in length with a width of 7.0m. The return wing gable and elevations reflect the construction methods used throughout the main building. This building retained the original flat red clay tile roof, unlike the main building that had been recovered in slate. The internal construction of the roof differed greatly from the main building with wooden raking king post trusses being used in preference to the stylised cast iron trusses within the main building.

#### Building B

Attached to the eastern gable of building A, building B measures approximately 15m in length by 7m in width and forms the northern extent of the eastern courtyard. Comprising a single story structure, building B is constructed of machine made red brick held in an English bond with a white mortar (Illus 12 and 13). A sloping roof covers the building, constructed of flat red clay tiles with cast iron rain water furniture. The southern elevation contains three evenly spaced semi-flat chambered square windows interspersed with two narrow doorways. The northern elevation contains no openings other than four cast-iron grill vents.

The building does not reflect the flint and brick pierced panel style seen throughout the other courtyard buildings, however the design of the semi flat brick chambered window and door arches reflect the main building (A), as do the pierced iron vents.

At the time of the survey Building B was inaccessible and an internal inspection was not made.

#### Building C

Extending southwards from the southern elevation of building A, building C comprised a raised platform of open and blind redbrick arcading, supporting a large iron water tank of 20<sup>th</sup> century origin, approximately 6.5m in length by 5.5m in width (Illus 14 and 15). Immediately to the west of the tank, abutting buildings A and C was situated a square engine house chimney.

A modern 20<sup>th</sup> century wall originally extended southwards from the south-western corner of building C to the north-eastern corner of building G, the foundations of which were identified during the strip, map and sample exercise. The water tank appears to be a relatively late addition to the development of the farm complex and considering that the redundant stack on the south wall of building B is capped, the water tank may have only been used to provide a header tank, the water being sourced from the extremely deep well (30m+) located in building B.

Though building C and the former 20<sup>th</sup> century wall are a later additions to the farm their footprint is a reminder of the original division between the two courtyards of Bunkers Farm. Historic mapping indicates Building C partially replaced an earlier 19<sup>th</sup> century structure during the early 20<sup>th</sup> century, the foundations of which were identified during excavation (building H).

### Building D

Building D forms an "L" shaped lean-to in the inner angle of buildings E and F approximately 4m in width (Illus 16). The building is timber framed with external wooden cladding, a modern pantile roof, and raised wooden floor. The building functions to extend the floor area of the threshing floor within building E. A plank door with strap hinges provides access from building E to an ancillary room containing a single plank bench, possibly used as a mess room originally (Illus 17). Access from Building F leads to a small room with timber rails indicative of the use of portable machinery.

It is probable that building D post-dates the construction of E and F, with entrances to/from these buildings having been inserted, however it is unclear as to whether the current internal layout reflects the original design of the building.

### Building E and F

The south east corner of the complex is defined by two adjacent buildings - E and F (L-shape arrangement). The southern gable of building E forms part of the northern wall of building F, indicating the construction of Building E pre-dates that of F. Building D is situated within the inner angle of building E and F, the extension has resulted in the western opening of E being moved, resulting in a larger central bay and the provision of some ancillary rooms to both buildings.

### *Building E*

Building E has a footprint of approximately 14.5m in length by 6.25m in width and comprises a north-south aligned timber clad barn (Illus 18). The north gable is constructed of flint and machine made red brick panels with integrated pierced iron vents. The southern gable is constructed of machine made red brick. The eastern and western walls are constructed of weatherboarding over a timber frame supported on a waist high sleeper wall constructed from red brick with white mortar, in an English bond. The north gable contains a single doorway while the west and eastern elevations contain large ground-level, double-width doorways (the eastern elevation also contains a raised opening situated over the northernmost bay).

The clay tile roof is supported upon a combination of both king posts and raking queen struts (constructed of older re-used timbers) both mounted and jointed with iron fixings (Illus 19).

Internally the building is divided into three bays, the central area, being raised and accessed through both the east and west openings, provides a central area for grain threshing (the opposing doorways enabling the grain to be separated from the chaff in a cross-draught). The north and south bays are isolated from the central bay by a series of wooden boards known colloquially as *mowsteads*, which still remain intact within the fabric of the building (Illus 20).

### *Building F*

Building F has a footprint approximately 18.0m in length by 6.25m in width and comprises an east-west timber clad barn (Illus 21). The northern, southern and eastern walls are constructed of weatherboarding over a timber frame supported on a waist high sleeper wall constructed from red brick with white mortar, held in an English bond. The western wall is constructed of machine made red brick and flint panelling with several pierced iron vent grills.

The building has an off-set double width doorway in its eastern gable (Illus 22) with a single narrow-width doorway in the western gable (Illus 23). Both the eastern and southern elevations have several large square openings situated at shoulder height. Where building D intersects with building F a ground-ceiling opening has been inserted into building F's northern elevation with a floor-level between the two buildings of approximately 0.4m.

As with building E the clay tile roof is supported upon a combination of 19<sup>th</sup> century king posts and raking queen struts formed of older reused timbers, with both mounted and jointed with iron fixings.

The Sequence and location of Building F indicates that it was constructed later to that of E as it can be seen quite clearly that the eastern gable of building F butts up to the southern gable of building E. Within the building the roof trusses also reflect the combination of king posts with iron fixings and reused raking queen struts seen within Building E.

### *Building G*

Abutting the western elevation of building F, building G comprises an open sided structure approximately 15m in length by 6m wide. Situated at the southern extent of the eastern courtyard, its southern and western elevation are constructed of flint panelling and machine made red brick with white mortar held in an English bond (Illus 24).

Its northern elevation faces into the courtyard and is open, being separated into five bays by four round brick columns (Illus 25). The building is roofed in slate, supported by king post trusses with raking supports and an iron bolted main post, constructed in softwood, a number of Baltic shipping marks are still evident on the timbers (Illus 26 and 27). These markings appear on timbers throughout the farmstead but are most visible in building G. The southern elevation contains a single off-set square opening at shoulder height.

The building has previously been interpreted as a cart-shed, however existing OS mapping indicates a – now demolished – outlying structure to the east of the farm, adjacent to Bunkers Lane probably fulfilled this function. Building G's location, facing into the eastern courtyard indicates it possibly functioned as a shelter shed for livestock.

### *Buildings H, I, J, K, and L*

Historic OS mapping depicts a further five buildings as having originally existed within the Bunkers Farm complex. Cartographic evidence indicates these buildings were demolished sometime between the 1970s – 1990s. Excavation undertaken in 2017 as part of this investigation has confirmed the in-situ preservation of the foundations of buildings H, I, and J. Buildings K and L were not investigated as part of this project.

### *Building H*

Building H would originally have had a footprint 19m in length by 7m in width, extending south from the centre of the southern elevation of building A.

*Building I*

Building I would have originally abutted the western gable of Building G, orientated on a east-west axis it would have had a footprint 12.5m in length by 4.5m in width.

*Building J*

Building J would have originally occupied the south-western corner of the western courtyard, standing alone immediately to the south of the return wing of building A it was orientated on a north-south axis with a footprint 14m in length by 5m in width.

*Building K*

Building K was originally located approximately 7m to the east of Buildings E, F and B, situated within an ancillary courtyard surrounded by an enclosure wall connecting the farm complex to Bunkers Lane. OS mapping indicates its western elevation to be open with the buildings total footprint being 18m in length by 8m in width. It is probable that building K functioned as a cart shed and / or ancillary storage building.

*Building L*

Building L was originally located approximately 11m west of building A, situated within an ancillary yard / enclosure accessible from the western courtyard of Bunkers Farm. Its northern elevation abutting Bunkers Lane, the buildings footprint would have originally measured 12.5m in length by 3.5m in width. In respect to its morphology and position within a wider ancillary yard it is likely the building represented loose boxes, pig-pens or possibly workers accommodation.

*Enclosure wall, Western Courtyard*

The southern wall of Building G originally continued 28m towards the west before making a ninety degree turn to the north and connecting with the return wing of building A. The wall would have formed the southern elevation of building I, the western elevation of building J and the enclosure wall for the western courtyard. Extant in-part until 2017 the wall has now been demolished as part of the re-development of Bunkers Farm. Within the wall evidence for a doorway remained which would have originally been associated within building I.

### 4.3 ARCHAEOLOGICAL EVALUATION

This was conducted within the area of the proposed underground car park and comprised three machine excavated trenches 12m in length by 1.6m wide (Illus 2)

The general stratigraphic make up the of the site consisted of the present day turf line, overlaying a mixture of levelling deposits and dumps of demolition material, that subsequently overlay a previous soil horizon overlaying natural flint and clay deposits. Within the excavated trenches a slight variation to this sequence was noted, particularly within trench 1, where a large dump of modern material was noted.

#### Trench 1

Trench 1 (Illus28) was excavated to a depth of approximately 0.5m below present ground level. Within the area of the excavated trench no topsoil was present, a dump of yellow rubble and general building debris (101) formed a levelling deposit of approximately 0.15m in depth overlaying a mixed deposit of dark brown soil and rubble inclusions (102) with an average depth of 0.15m. Both deposits were the remains of recent activities associated with the clearance of the site. Beneath the levelling deposits a layer of dark brown soil (103) with infrequent inclusions of abraded red brick and a depth of 0.20m was observed. It overlay a geological deposit of hard yellow clay with frequent inclusions of flint nodules (104).

#### Trench 2

Trench 2 (Illus 29) was excavated to a depth of 0.60m below present ground level. Beneath the present topsoil (201) a cinder deposit and mixture of white mortar/plaster indicative of demolition waste (202; 203 respectively) formed a levelling dump of approximately 0.25m in depth. The levelling deposits overlay a dark brown/black silty clay soil with occasional inclusions of abraded red brick fragments and a depth of 0.25m in depth (204). It overlay a natural geological horizon of hard yellow clay with frequent inclusions of flint nodules.

#### Trench 3

Trench 3 (Illus 30) was excavated to a depth of approximately 0.60m below present ground level. The topsoil (301) overlay a 0.25m layer of cinder-type deposit (302) and mixture of white mortar/plaster waste (303) creating a levelling spread of approximately 0.25m in depth. The levelling deposits overlay a dark brownish black silty clay soil containing occasional inclusions of abraded red brick fragments, approximately 0.25m in depth (304). It overlay a geological horizon of hard yellow clay with frequent inclusions of flint nodules.

No archaeological features were found in any of the trenches, however 104, 204, and 304 possibly represent an intact soil horizon dating to the construction of the 19<sup>th</sup> century farmstead, if so the brick material identified within this may relate to the original demolition of the earlier farm buildings which stood here. Alternatively this material may relate to the demolition of buildings H, I, and J during the late 20<sup>th</sup> century.

#### 4.4 STRIP, MAP AND SAMPLE

Within the footprint of the new build dwellings area was stripped under archaeological supervision (Illus 2, 31 and 32).

In total 16 features of archaeological interest were identified, comprising the extant remains of the demolished 19<sup>th</sup> century structures (buildings H-J) consisting of in-situ brick foundations, levelling layers and brick flooring. These structures would have formed three separate buildings and an associated courtyard wall encompassing the southwestern extent of the western courtyard of the 19<sup>th</sup> century farm (Illus 32).

##### General stratigraphy

The basal geological stratigraphy of the site was identified at approximately 0.25m BGL and comprised yellowish-brown compact silty clay with occasional inclusions of flint and rounded pebble (1003). (1003) was only identified within Area 1, with the archaeological horizon in Areas 2 & 3 being identified within the underlying subsoil layer (1002).

(1003) was sealed by (1012) a 0.6m thick layer of loose yellowish-white chalk containing occasional fragments of brick and flint (1012). Visible within the internal divisions of Buildings H and J (see below) and immediately to the north of Building I, it is probable that (1012) represents a 19<sup>th</sup> century levelling / floor layer associated with the construction of the new farm buildings. The foundations of Buildings H, I and J were cut into (1012).

(1003) was sealed by (1002) a 0.25m thick layer of firm – plastic yellowish-brown silty clay mottled with areas of pale grey clays in its westernmost extent. (1002) contained regular inclusions of flint, bricks and 19<sup>th</sup> century rubble.

(1002) was sealed by (1001) a thin (0.6m) layer of heavily turbated dark greyish-brown sandy loam containing frequent inclusions of 19<sup>th</sup> century rubble and flint.

##### Area 1

Covering an area of approximately 71m<sup>2</sup>, centred on TL 08702 05739, excavation within Area 1 identified the structural remains of a 10m by 4.6m section of a former 19<sup>th</sup> century farm building (1005 - Building H, Illus 33). At least three phases of construction and use were identified (Phase A, B and C) relating to revisions of the internal layout of the former structure (Illus 34).

##### Phase A

(1005) comprised four sections (2 x 10m, 2 x 4m in length) of machine-moulded red brick held in an English bond supplemented with an additional row of parallel headers. Forming a partial northwest-southeast orientated rectangle, it is probable that (1005) represents the foundations for the external wall of building H.

##### Phase B

(1011 and 1013) comprised three 4m sections of machine-moulded red brick, two courses in width (0.3m) held in an English bond surviving in places to a height of five courses (approx. 0.5m). Each section was orientated on a northeast-southwest axis and spaced evenly apart by approximately 2.5-3m. It is probable that (1011 and 1012) represent the upper sections of 19<sup>th</sup> century brick foundations relating to a revision of the internal division of space within the Building H.

##### Phase C

(1012) was sealed by (1015) a 0.15-0.25m thick layer of loose dark brownish-grey turbated sandy silt and loam.

(1015) was in-turn sealed by (1004) a 10m long section of 0.1m thick 20<sup>th</sup> century concrete situated at the eastern extreme of Area 1.

(1015) post-dates the construction, and presumably demolition, of the 19<sup>th</sup> century farm buildings. Though the date of demolition is unknown satellite imagery indicates buildings H, J and I had been demolished by 1999. As such (1015) most likely represents a 20<sup>th</sup> century surface. Satellite imagery also indicates (1004) formed the footing for a wall present on site until at least 2009, stratigraphy indicates that this is of modern origin.

## Area 2

Covering an area of approximately 132m<sup>2</sup>, centred on TL 08699 05727, excavation within Area 2 identified the structural remains of a 10m by 3m former 19<sup>th</sup> century farm building (1008, 1010 - Building I, Illus 35).

(1007) comprises the external and internal brick-built foundations of building I, consisting of machine-moulded red brick held in an English bond. The 10m x 3m former building is subdivided into four internal spaces each approximately 8-10m<sup>2</sup> in size.

Of the four internal spaces, three were filled by modern 20<sup>th</sup> century concrete slabs / floors (1008) whilst the easternmost retained the original 19<sup>th</sup> century brick-built floor, comprising machine-moulded red brick arranged in an offset or running-bond pattern (1010 – Illus 35, foreground).

A linear cut feature [1023] was identified immediately to the west of Building I visible as a deposit of friable burnt material, demolition rubble and dark grey silt. Due to the presence of asbestos fragments within the deposit this was not investigated. It is of note that the feature corresponds with that of an unknown

## Area 3

Covering an area of approximately 123m<sup>2</sup>, centred on TL 08685 05728, excavation within Area 3 identified the structural remains of 12.8m by 6m section of a former 19<sup>th</sup> century farm building (1009 - Building J, Illus 36).

(1009) comprised six sections of machine-moulded red brick held in an English Bond with an additional row of headers running parallel (approximately 0.35m in width), subdividing Building J into two square structures approximately 24m<sup>2</sup> in size. Each was again subdivided by an internal cross-shaped section of machine-moulded red brick, possibly intended as support for a floor surface.

The general stratigraphy of area 3 differs slightly from that of areas 1 and 2 with the inclusion of several layers of redeposited natural, demolition material and charcoal between the interfaces of (1002) and (1001) – Illus 37:

(1002) was partially sealed by (1021) a thin spread (0.03m thick) of friable chalk possibly associated with (1012).

Both (1002) and (1021) were sealed by (1020), a very thin layer (0.02-0.03m thick) of loose charcoal and sandy-clay.

(1020) was sealed by (1019), a 0.13m thick layer greyish-orange compact clay interpreted as redeposited natural.

(1019) was sealed by (1017), a 0.1m thick layer of heavily turbated subsoil / topsoil and demolition rubble comprising bricks and concrete fragments. Aerial imagery indicates this is likely to correspond with the demolition of a 20<sup>th</sup> century courtyard wall erected following the demolition

of the original 19<sup>th</sup> century structure (Building J) that formed the western terminus of the southwestern courtyard.

(1017) was sealed by (1018), a 0.1m thick layer of friable chalk possibly originating from redeposited material.

(1018) was in-turn sealed by (1001).



#### 4.5 ARCHAEOLOGICAL MONITORING

All monitoring works were undertaken by a suitably qualified archaeologist. Works comprised the excavation of the underground car-park previously subjected to evaluation works (TL 08714 05717, 6000m<sup>2</sup>, as indicated by the client, Illus 38 and 39).

During groundworks no features, deposits or remains of archaeological interest were identified. As was noted during the evaluation works, the area had been subjected to a phase of prior demolition and levelling works probably originating in the 19<sup>th</sup> century, possibly associated with John Dickinson's demolition and remodelling of the original farm buildings. During the monitoring works it was noted this layer was most predominant in the northern-central section of the car-park gradually thinning in all directions to a total radius of approximately 3m.

While it is likely this material relates to the demolition of a former building, no foundations or soil shadows predating the demolition layer were identified.

#### 4.6 FINDS

No artefactual remains were identified during the course of the investigation.

#### 4.7 ENVIRONMENTAL REPORT

No environmental samples were taken during the course of the investigation.

#### 4.8 ANIMAL BONE REPORT

No animal bone was recovered during the course of the investigation.

## 5. DISCUSSION

### 5.1 QUALITY OF PRESERVATION

The investigation as a whole has demonstrated that substantial elements of the 19<sup>th</sup> century farmstead remain intact upon site both as extant structural remains and in-situ archaeological remains. The HBR survey identified a number of key external and internal architectural elements demonstrative of the sites identification as a model farmstead as well as existing machinery relating to the sites development as an early mechanised farm stead. Rather than denoting the construction of an entirely new farm, the HBR highlighted the potential incorporation of existing buildings and / or the subsequent expansion of the farm during its lifetime and development.

SMS within the western courtyard identified the extant foundations of 19<sup>th</sup> century buildings demolished in the late 20<sup>th</sup> century including internal divisions and floor surfaces. Such remains enable us to fully visualise the intended design and function of the farm, while also providing information as to its development.

As a whole the poor preservation of the extant buildings and demolition of Buildings H, I and J were noted due to neglect during the 20<sup>th</sup> century with little work having been undertaken since their listing in 2009 to restore their internal / external appearance.

### 5.2 SUMMARY OF REMAINS

#### Discussion of evaluation results

The evaluation within the area of the proposed carpark identified no archaeological features associated with the development of previous history of Bunkers Farm; However they did illustrate that the area has at one time been subject to a phase of levelling and that the original topsoil horizon contained traces abraded red brick may actually represent evidence for the demolition of previous buildings prior to the construction of the farm buildings that exist today.

#### Discussion of HBR results

The HBR survey successfully identified the key architectural and structural units of the Bunkers Farm Complex, placing them within the wider historical narrative of the farm and the development of such sites within the surrounding landscape. Of the 12 original 19<sup>th</sup> century buildings associated with the farm, 6 remain. Of these all show some degree of modification internally or externally during their 20<sup>th</sup> century usage. Of the 6 demolished structures, excavation has confirmed the sub-surface preservation of 3 (Buildings H-J) in the western courtyard, the status of the remaining 3 structures is currently unknown. Analysis of the existing historic mapping, identifies the presence of several ancillary features to the farm including enclosure walls, a trough and pumps, all of which have since been demolished.

The survey highlighted the sites development as a 'Model Farm' identifying several key architectural components typical of such farms including flint and brick panelling, use of king-post trusses and the introduction of mechanised farming practices. Examination of each structure identified the possibility, that while the farmstead as a whole conforms to the double courtyard plan typical of farms within the south-east region, Bunkers Farm may contain several phases of development dating from the 19<sup>th</sup>-20<sup>th</sup> centuries.

Despite this minor variation in development the HBR survey confirmed the prior interpretation of the farmstead as a 19<sup>th</sup> century model farm adding to the established body of knowledge concerning the farmstead accrued during its listing in 2009.

### Discussion of SMS results

The excavation of the new-build dwellings area, identified the in-situ remains of three former 19<sup>th</sup> century farm buildings which formed the western and southern extent of the southwestern courtyard visible in 19<sup>th</sup> century OS mapping of the area.

Structurally only the upper foundations of the buildings remained with the exception of Building I (Area 2) which partially retained the original 19<sup>th</sup> century brick-built floor surface. Evidence of made ground in the form of (1012), a layer of compacted chalk visible in areas 1, 2, and 3 is indicative of a phase of levelling having taken place prior to the construction of the 19<sup>th</sup> century buildings.

While existing cartographic sources indicate the morphology and extent of the former structures, they do not expound upon their function, we can however, draw tentative conclusions regarding function from the external morphology and potential internal divisions identified during excavation, while the existing cartographic sources supply an approximate timeline of development, use and eventual demolition.

The remains of Building H (Area 1) are indicative of at least one phase of modification to the existing structure with (1011 and 1013) implying the internal space within Building H was changed from two large square rooms to three rectangular smaller spaces, of course these primary divisions may have been further subdivided by temporary structures such as internal partitions which no longer survive within the archaeological record. It is possible this revision of space was associated with the construction of the 20<sup>th</sup> century water tank (immediately to the north) and implied mechanisation of the farmstead (OS mapping indicates the water tank present upon site by at least 1925 AD, existing contemporaneously with Building H).

The foundations of Building I (Area 2) are indicative of a series of sequential small square spaces, with the westernmost three measuring approximately 8m<sup>2</sup> (possibly covered pens or stalls for livestock) and the eastern most (brick floor intact) measuring 10m<sup>2</sup> (possibly for the storage of machinery and / or tools). It is of note that OS mapping indicates a sub-circular enclosure extending northwards from the western gable of Building H measuring approximately 64m<sup>2</sup>, it would seem likely that this was an external animal pen for livestock.

The remains of Building J (Area 3) are also of interest, OS mapping indicates a single contiguous structure, however the internal layout of the foundations are indicative of two substantial square spaces (32m<sup>2</sup>) divided by a short corridor. It is possible that this corridor denotes an entrance way with doors existing both within the western and eastern facades, facilitating entrance to and from the western courtyard for livestock and vehicles.

Overall the excavation did not exceed the depth of the made ground (1012) and as such it remains unclear as to whether there are surviving remains of the earlier farm buildings known to have existed on site from at least 1766 AD until 1856 AD from documentary and cartographic sources. Certainly cartographic sources indicate that Buildings H, I and J existed upon site until at least 1993, whilst existing satellite imagery indicates that by 1999 said structures had been demolished.

### Discussion of archaeological monitoring results

The archaeological monitoring of the underground carpark area identified no archaeological remains of interest, confirming the interpretation of the earlier evaluation that the area had been subjected to a phase of levelling activity.

## 6. CONCLUSION

The investigation as a whole has begun to uncover the rich and varied history of the site of Bunkers Farm within the 18<sup>th</sup> – 20<sup>th</sup> centuries AD. A prominent farmstead, Bunkers Farm would have formed one of several within the immediate area - closely associated with the rapidly developing settlements at Abbots Langley, Kings Langley, Leverstocks Green, Hemel Hempstead, and St Albans. Constructed during the period of 'High Farming' between 1856-1878 AD, the present Bunkers Farm would have been built during a period of agricultural innovation and increasing mechanisation, incorporating the latest developments in technology and agricultural theory.

Certainly the HBR survey and SMS excavations have uncovered evidence of a farmstead incorporating a number of features typical of the traditional 'model farm' of the period, with evidence of a variety of extant and demolished buildings serving the functions of a diverse agricultural economy. The presence of several structures possibly functioning as barns and / or threshing barns in addition to the formidable processing barn forming the northernmost extent of the farm are indicative of the high volumes of produce and / or livestock that may have passed through its gates. Existing cartographic sources indicate the presence of an orchard immediately to the south of the site, while excavation and survey have identified a number of possible animal pens and shelters in addition to the barns, however such assessments lack the fine detail required to really explore the function and development of the farmstead as a whole. Without a wider exploration of the lands associated with John Dickinson - the owner, and the farm itself it is difficult to provide accurate estimates as to the quantity and nature of produce and the farms role within the wider local economy.

Little is also understood of the earlier farmstead known to have stood on site, documentary sources closely link the land the farm sits within to that of Hunt Manor whilst 1:63,360 scale mid-18<sup>th</sup> century mapping of the county indicates the presence of a three winged building bordered to the south by a formal garden labelled as 'Bunchers Farm' (Andrews 1766).

While evaluation within the extent of the underground carpark associated with the present development of Bunkers Farm, failed to identify any archaeological remains, it did identify extensive layers of demolition rubble, clinker and burnt material likely originating from the 19<sup>th</sup> century demolition of the original farmstead and construction of the current farm. It should also be noted that excavation within the New Build areas did not go below the depth of demolition and levelling material associated with the 19<sup>th</sup> century farmstead and as such sub-surface in-situ remains of the earlier farmstead may well still exist on-site.

## 7. BIBLIOGRAPHY

### Publications

- Archaeological Archives Forum (AAF) 2011 **Archaeological Archives A guide to best practice in creation, compilation, transfer and curation** (2<sup>nd</sup> edn) [online document] Chartered Institute for Archaeologists (CIfA): Reading, available from [www.archaeologyuk.org/archives/aaf\\_archaeological\\_archives\\_2011.pdf](http://www.archaeologyuk.org/archives/aaf_archaeological_archives_2011.pdf)
- Brunskill, R.W 1987 **Traditional Farm Buildings of England and Wales**. Gollancz, London.
- Chartered Institute for Archaeologists (CIfA) 2014a **Code of Conduct** [online document] available from [www.archaeologists.net/sites/default/files/CodesofConduct.pdf](http://www.archaeologists.net/sites/default/files/CodesofConduct.pdf)
- Chartered Institute for Archaeologists (CIfA) 2014b **Standard and guidance for archaeological field evaluation** [online document] available from [www.archaeologists.net/sites/default/files/CIfAS&GFieldevaluation\\_1.pdf](http://www.archaeologists.net/sites/default/files/CIfAS&GFieldevaluation_1.pdf)
- Coleman, S. 1996 **Medieval Rural Settlements – A policy on their Research, Survey, Conservation and Excavation** (<http://www.archaeologyuk.org/msrg/policy.html>)
- DCLG 2012 **National Planning Policy Framework**. Department of Communities and Local Government. [online document] accessed from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/6077/2116950.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf)
- Gilman, P., Gould, S., and Green, S. 2000 Post-Medieval and Modern in Brown, N. and Glazebrook, G. eds. **Research and Archaeology: A Framework for the Eastern Counties, 2. Research Agenda and Strategy**. East Anglian Archaeology, Occasional Paper No. 8, The Scole Archaeological Committee [online document] available from <https://content.historicengland.org.uk/images-books/publications/eastern-counties-framework-agenda/eoe-research-agenda-strategy.pdf/>
- Gover, J E B, Mawer, A, & Stenton, F M. 1938. **The place-names of Hertfordshire**. - p76.
- Headland Archaeology 2013 **Written Scheme of Investigation - Archaeological Evaluation, Historic Building Recording, Strip, Map and Sample and Watching Brief at Bunkers Farm, Bunkers Lane, Hemel Hempstead, Hertfordshire**. Unpublished grey literature report.
- Historic England 2013 **National Farm Building Types**. Originally published by English Heritage, London.
- Historic England 2014 **South East Farmsteads Character Statement**. Originally published by English Heritage, London.
- Historic England 2016 **Understanding Historic Buildings, A Guide to Good Recording Practice**. [online document] available from: <https://content.historicengland.org.uk/images-books/publications/understanding-historic-buildings/heag099-understanding-historic-buildings.pdf/>
- Hunn, J. 1994 **Reconstruction and Measurement of Landscape Change: A Study of six parishes in the St. Albans Area**. British Archaeological Reports: British Series 236, Tempvs Reparatvm, Oxford 1994
- Kelly & Co (1850-1917) **Kelley's Directory of Hertfordshire**, 13 vols, 1850-1917. London: Kelly's Directories Limited. [online document] available from <http://specialcollections.le.ac.uk/cdm/search/collection/p16445coll4/searchterm/Hertfordshire/file/place/mode/exact/conn/and/order/nosort>

Medlycott, M and Brown, N (ed) 2008 **Revised Research Framework for the Eastern Region**. East Anglian Archaeology.

NERC 2017 **British Geological Survey**. Natural Environment Research Council. [online] accessed 30 June 2017 from [www.bgs.ac.uk/](http://www.bgs.ac.uk/)

Robinson, J.M 1983 **Georgian Model Farms: a study of decorative and model farm building in the era of improvement 1700-1846**. Clarendon Press, Oxford.

Wade-Martins, S. 2002. **The English Model Farm: Building the Agricultural Ideal, 1700-1914**. Windgather Press.

### Cartographic Sources

Dury, A. & Andrews, J. 1766 **A topographical map of Hertfordshire**. 1:63,360 William Faden, London. [online map] available from <http://www.duryandrewsmapofhertfordshire.co.uk/>

Ordnance Survey 1897 **2<sup>nd</sup> Revision, Hertfordshire, Sheet XXXIV.SW**. 1:2,500 Ordnance Survey County Series. [online map] available from <http://maps.nls.uk/view/101579613#zoom=5&lat=3657&lon=2450&layers=BT>

Ordnance Survey 1925 **3<sup>rd</sup> Revision, Hertfordshire, Sheet XXXIV.SW**. 1:2,500 Ordnance Survey County Series. [online map] available from <http://maps.nls.uk/view/101579610#zoom=4&lat=4019&lon=2445&layers=BT>

Ordnance Survey 1946 **Hertfordshire, Sheet XXXIV.SW**. 1:2,500 Ordnance Survey County Series. [online map] available from <http://maps.nls.uk/view/101579607#zoom=4&lat=3790&lon=2515&layers=BT>

Ordnance Survey 1948 **Hertfordshire, Sheet XXXIV.SW**. 1:2,500 Ordnance Survey County Series. [online map] available from <http://maps.nls.uk/view/101579604#zoom=4&lat=3791&lon=2453&layers=BT>

Ordnance Survey 1973 **Hertfordshire, Sheet XXXIV.SW**. 1:2,500 Ordnance Survey County Series.

Ordnance Survey 1976 **Hertfordshire, Sheet XXXIV.SW**. 1:2,500 Ordnance Survey County Series.

Ordnance Survey 1993 **Hertfordshire, Sheet XXXIV.SW**. 1:2,500 Ordnance Survey County Series.


### Historic Environment Record


Hertfordshire Historic Environment Record:

<http://www.heritagegateway.org.uk/gateway/chr/herdetail.aspx?crit=&ctid=95&id=4762>


## 8. APPENDIX I – CONTEXT SUMMARY

### Archaeological Evaluation


<b>Trench Number</b>	01				
<b>Length</b>	12m	<b>Width</b>	1.6m		
<b>Minimum Depth to Geological Deposit/level of archaeological significance</b>	N/A	<b>Maximum Depth to Geological Deposit/level of archaeological significance</b>	0.45m BGL		
<b>Context No</b>	<b>Description (Layer, Cut, Fill)</b>	<b>Dimensions (as appropriate)</b>			
		<b>Diameter</b>	<b>Length</b>	<b>Width</b>	<b>Depth</b>
(101)	Spread of yellow rubble and general building debris. Levelling dump	-	-	-	0-0.15m
(102)	Deposit of mixed soils, dark brown and rubble inclusions, Levelling dump	-	-	-	0.15-0.30m
(103)	Dark brown black , clay soil with infrequent red brick inclusion, (pervious topsoil horizon)	-	-	-	0.30-0.45m+
(104)	Yellow clay with naturally occurring flint nodules	-	-	-	0.45m+


<b>Trench Number</b>		02					
<b>Length</b>		12m					
<b>Minimum Depth to Geological Deposit/level of archaeological significance</b>		0.5m BGL		<b>Maximum Depth to Geological Deposit/level of archaeological significance</b>		0.65m BGL	
<b>Context No</b>	<b>Description (Layer, Cut, Fill)</b>	<b>Dimensions (as appropriate)</b>					
		<b>Diameter</b>	<b>Length</b>	<b>Width</b>	<b>Depth</b>		
(201)	Topsoil-Mid black brown loam. Slightly stony with sub-rounded medium sized stones.	-	-	-	0-0.15m		
(202)	Black cinder type deposits , dump (made up ground)	-	-	-	0.15-0.25m		
(203)	Mixture of white mortar and demolition waste, dump (made up ground)	-	-	-	0.25-0.40m		
(204)	Dark brown black , clay soil with abraded red brick inclusion, (pervious topsoil horizon)	-	-	-	0.40-0.65m		
(205)	Yellow clay with naturally occurring flint nodules	-	-	-	0.65m+		



<b>Trench Number</b>	03				
<b>Length</b>	12m	<b>Width</b>	1.6m		
<b>Minimum Depth to Geological Deposit/level of archaeological significance</b>	0.5m BGL	<b>Maximum Depth to Geological Deposit/level of archaeological significance</b>	0.55m BGL		
<b>Context No</b>	<b>Description (Layer, Cut, Fill)</b>	<b>Dimensions (as appropriate)</b>			
		<b>Diameter</b>	<b>Length</b>	<b>Width</b>	<b>Depth</b>
(301)	Topsoil-Mid black brown loam. Slightly stony with sub-rounded medium sized stones.	-	-	-	0-0.15m
(302)	Black cinder type deposits , levelling dump (made up ground)	-	-	-	0.15-0.25m
(303)	Mixture of white mortar and demolition waste, levelling dump (made up ground)	-	-	-	0.25-0.30m
(304)	Dark brown black , clay soil with occasional abraded red brick inclusion, (pervious topsoil horizon)	-	-	-	0.30-0.55m
(305)	Yellow clay with naturally occurring flint nodules	-	-	-	0.55m+

## Strip, Map and Sample

<b>Area Number</b>	01, 02, 03					
<b>Total Area</b>	4000m <sup>2</sup>					
<b>Minimum Depth to Geological Deposit/level of archaeological significance</b>	0.53M BGL		<b>Maximum Depth to Geological Deposit/level of archaeological significance</b>	0.55m BGL		
<b>Context No</b>	<b>Description (Layer, Cut, Fill)</b>	<b>Dimensions (as appropriate)</b>				
		<b>Diameter</b>	<b>Length</b>	<b>Width</b>	<b>Depth</b>	
1001	Topsoil	-	-	-	0-0.06m	
1002	Subsoil	-	-	-	0.06-0.31m	
1003	Natural geology	-	-	-	0.31-0.53m	
1004	20th century concrete footpath (Area 1, Phase C)	-	10.1m	1m	0.1m	
1005	19th century brick foundations (Area 1, Phase A)	-	10.5m	0.7-4.7m	0.5m	
1006	20th century concrete footpath (Area 2)	-	11m	0.9m	0.25-0.9m	
1007	19th century brick foundations (Area 2)	-	0.7m	3.15m	0.1m	
1008	20th century concrete slabs (Area 2)	-	-	-	-	
1009	19th century brick foundations (Area 3)	-	3m	2.6m	0.07m	
1010	19th century brick floor (Area 2)	-	2.4m	2.4m	0.1m	
1011	19th century brick foundations (Area 1, Phase B)	-	7.7m	2.4m	-	
1012	19th century made-ground, compact chalk	-	17.9 (vis)	6.7m (vis)	0.1-0.6m	
1013	19th century brick foundations (Area 1, Phase B)	-	3.88m	0.36m	0.07m	
1014	19th century brick foundations (Area 2)	-	2m	0.2-0.98m	0.07m	
1015	Buried soil horizon - former topsoil (Area 1)	-	-	-	0.15-0.25m	
1016	20th century concrete footpath (Area 3)	-	6.8m	0.72m	0.12m	
1017	Demolition rubble (Area 3)	-	-	-	-	
1018	Re-deposited chalk (Area 3)	-	1.15m	-	0.05-0.1m	

<b>Area Number</b>	01, 02, 03					
<b>Total Area</b>	4000m <sup>2</sup>					
<b>Minimum Depth to Geological Deposit/level of archaeological significance</b>	0.53M BGL		<b>Maximum Depth to Geological Deposit/level of archaeological significance</b>	0.55m BGL		
<b>Context No</b>	<b>Description (Layer, Cut, Fill)</b>	<b>Dimensions (as appropriate)</b>				
		<b>Diameter</b>	<b>Length</b>	<b>Width</b>	<b>Depth</b>	
1019	Re-deposited clay (Area 3)	-	1.15m (vis)	-	0.06-0.13m	
1020	Layer of charcoal / burnt material (Area 3)	-	2.3m	-	0.01m	
1021	Layer of chalk (Area 3)	-	1.05m	-	0.03m	
1022	Fill of [1023] - not excavated due to presence of asbestos	-	10.2m	3m	-	
1023	Linear feature (Area 2)	-	10.2m	3m	-	

## 9. APPENDIX II – PHOTOGRAPHIC REGISTER

Photo Number	B&W	Colour Slide	Digital	Direction facing	Description	B&W photo index number
001	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	General view across evaluation area, during clearance	7600001
002	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Section detail , trench 3	7600002
003	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	General view of trench 3	7600003
004	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Section detail of trench 2, showing made-up ground	7600004
005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	General view of trench 2	7600005
006	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Section detail of trench 3	7600006
007	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	General view of trench 3	7600007
008	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NE	View of changing roof lines and remaining building wall, now boundary wall to the court yard (G,F)	7600008
009	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	General view of main building and gable of return wing (A)	7600009
010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	General view of main building and gable of return wing (A)	7600010
011	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Blocked doorway within boundary wall, former building wall (G)	7600011
012	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	General view of Farm complex seen from the south	7600012
013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	View of the southern wall of the open sided cart shed, seen from outside the complex	7600013
014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	View of the timber clad barn (F)	7600014
015	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	View of the main building seen from across Bunkers Lane (A)	7600015
016	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	View of the main building seen from across Bunkers Lane (A)	7600016
017	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SW	View of small building and timber clad barn forming the north east corner of the yard area (D, E)	7600017
018	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SW	Gable of main building showing continuation of the punctuated iron grills in building fabric (A,B)	7600018
019	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NW	Detail , showing timber cladding of the south east corner barn (E)	7600019
020	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NW	Detail , showing timber cladding of the south east corner barn (E)	7600020
021	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NW	Detail , showing timber cladding of the south east corner barn (E)	7600021
022	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Internal detail of the open sided cart shed (H)	7600022
023	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Internal detail of the open sided cart shed (G)	7600023
024	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NE	Cart shed pillars seen through doorway (G)	7600024
025	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Detail showing the butting wall of the timber clad building indicating phasing (E, F))	7600025
026	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Roof timber details within the east west timber clad barn (F)	7600026
027	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Roof timber details within the east west timber clad barn (F)	7600027

Photo Number	B&W	Colour Slide	Digital	Direction facing	Description	B&W photo index number
028	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Roof timber details within the east west timber clad barn (F)	7600028
029	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Roof timber details within the east west timber clad barn with altered south wall of the north south timber clad barn (F)	7600029
030	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NE	View over mowstead from the central threshing floor in to storage area of the north south timber clad barn (E)	7600030
031	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	Roof details of north south timber clad barn (E)	7600031
032	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	General view of the surviving mowsteads within north south timber clad barn (E)	7600032
033	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SW	General view of the surviving mowsteads within north south timber clad barn (E) and extended roof line , entrance and storage room	7600033
034	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Roof details of north south timber clad barn (E)	7600034
035	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	General view of the surviving mowsteads within north south timber clad barn (E) and extended roof line , entrance and storage room	7600035
036	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Building (E) external	7600036
037	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	/	Film Identification	7600037
038	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NE	Building (E) and (B) external	7880001
039	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Building (A) and (B) external	7880002
040	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Building (A) and (C) external	7880003
041	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NW	Building (A) and (C) external	7880004
042	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	Building (G) external	7880005
043	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	Building (G) and (F) external	7880006
044	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SE	Building (G) and (F) external	7880007
045	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SE	Building (E) and (F) external	7880008
046	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Building (E) and (F) external	7880009
047	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NE	Building (B) and (E) external	7880010
048	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Building (E), (F) and (D) external	7880011
049	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Building (A) external	7880012
050	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	Iron water tank , internal detail ,building (C)	7880013
051	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	Internal detail of roof supported in return wing of Building (A)	7880014
052	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	Grain transporter (A)	7880015
053	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	Grain hopper and Archimedes screw in building (A) return wing	7880016
054	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Internal view of the leaded lights in Tudor style three headed window, Building (A) return wing	7880017
055	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Archimedes screw in building (A) return wing	7880018
056	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Cast iron roof trusses within Building (A)	7880019
057	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Internal detail showing timber partition within upper floor of building (A) to return wing	7880020

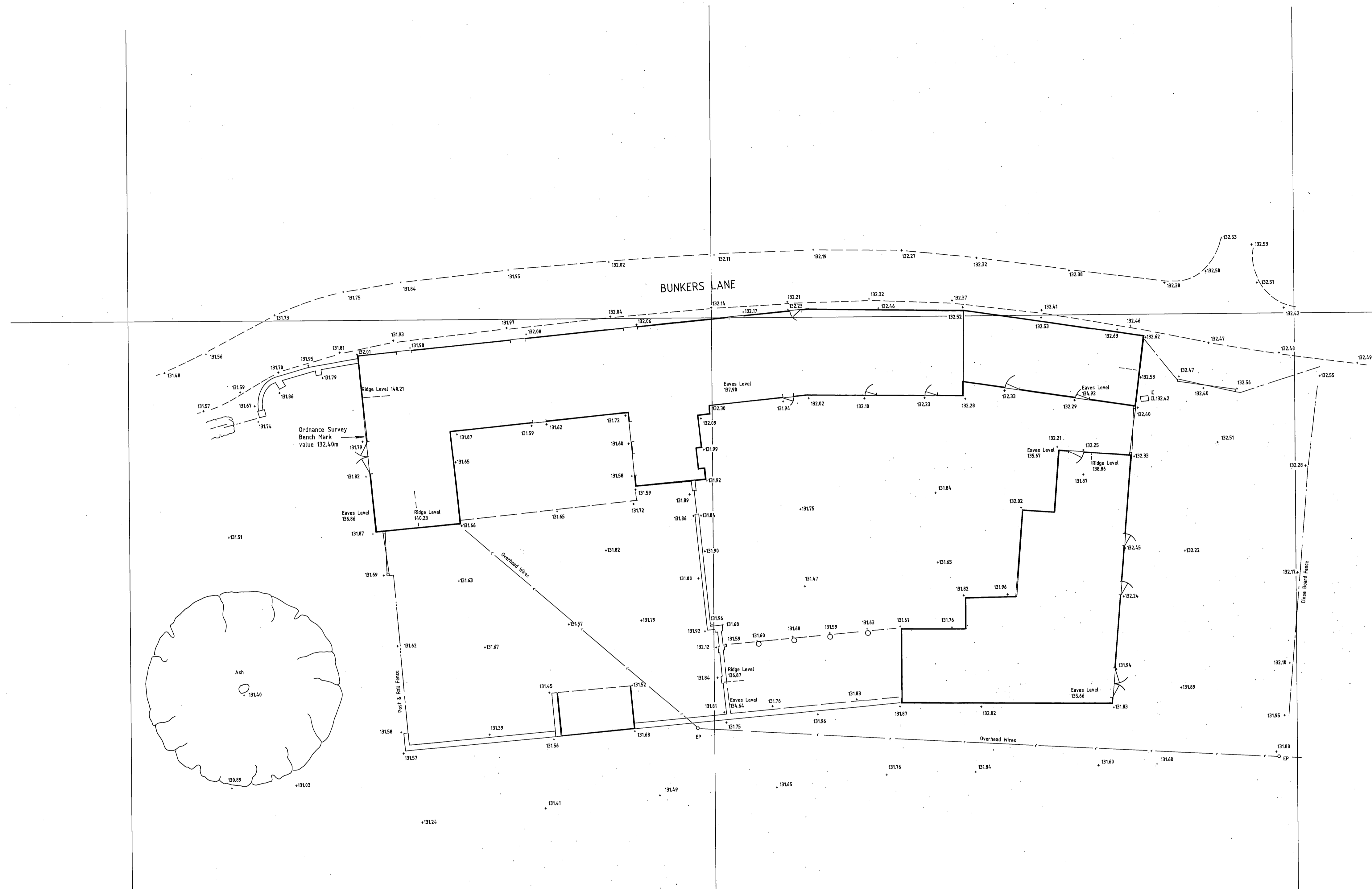
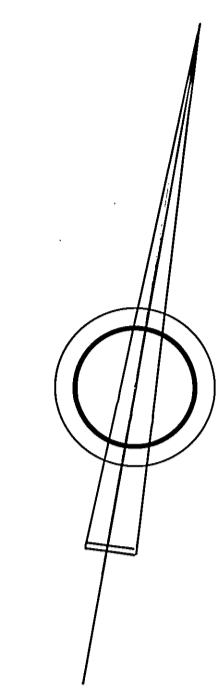
Photo Number	B&W	Colour Slide	Digital	Direction facing	Description	B&W photo index number
058	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Internal detail within (A) showing overhead mounted grain transporter	7880021
059	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	S	Internal detail within (A) showing overhead machine pulley gear	7880022
060	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Internal detail showing secondary ventilation points within Building (A) east gable	7880023
061	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Detail within ground floor of (A) showing stone set floor	7880024
062	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Detail within ground floor (A) showing remains of winnowing machine	7880025
063	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	W	Detail showing iron supports with ground floor of Building (A)	7880026
064	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Water tank mechanism located beneath the water tank of building (C)	7880027
065	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Brick supporting arches of building (C)	7880028
066	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Doorway within (A) and blocking above	7880029
067	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NE	General view of (A) from court yard	7880030
068	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Flint and brick southern gable end of Building (A)	7880031
069	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N	Detail of flint and brick paneling (A)	7880032
070	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NE	External detail showing Tudor style three headed window within Building (A)	7880033
071	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	Detail of worked stone door jamb within Building (A)	7880034
072	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	E	General view of the farm buildings	7880035
073	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	NE	External view of the west elevation of Building (A)	7880036

## 10. APPENDIX III – DETAILED PLANS OF FARMSTEAD

Supplied by Darren Andrew Homes, plans originally produced by Johnson and Partners, Architects and Building Surveyors in 1995, naming conventions are as follows:

Building A	G.01, G.02, G.03, G.04, G.05
Building B	G.06
Building C	G.15
Building D	G0.9, G.11
Building E	G.07, G.08
Building F	G.10
Building G	G.12

Buildings G.13 and G.14 had been demolished by the time of the archaeological investigations (2013-2017).



S I T E P L A N

amendment	initial	date	rev.
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client & job title  
**COMMISSION FOR THE NEW TOWNS  
 BUNKERS FARM, HEMEL HEMPSTEAD.**

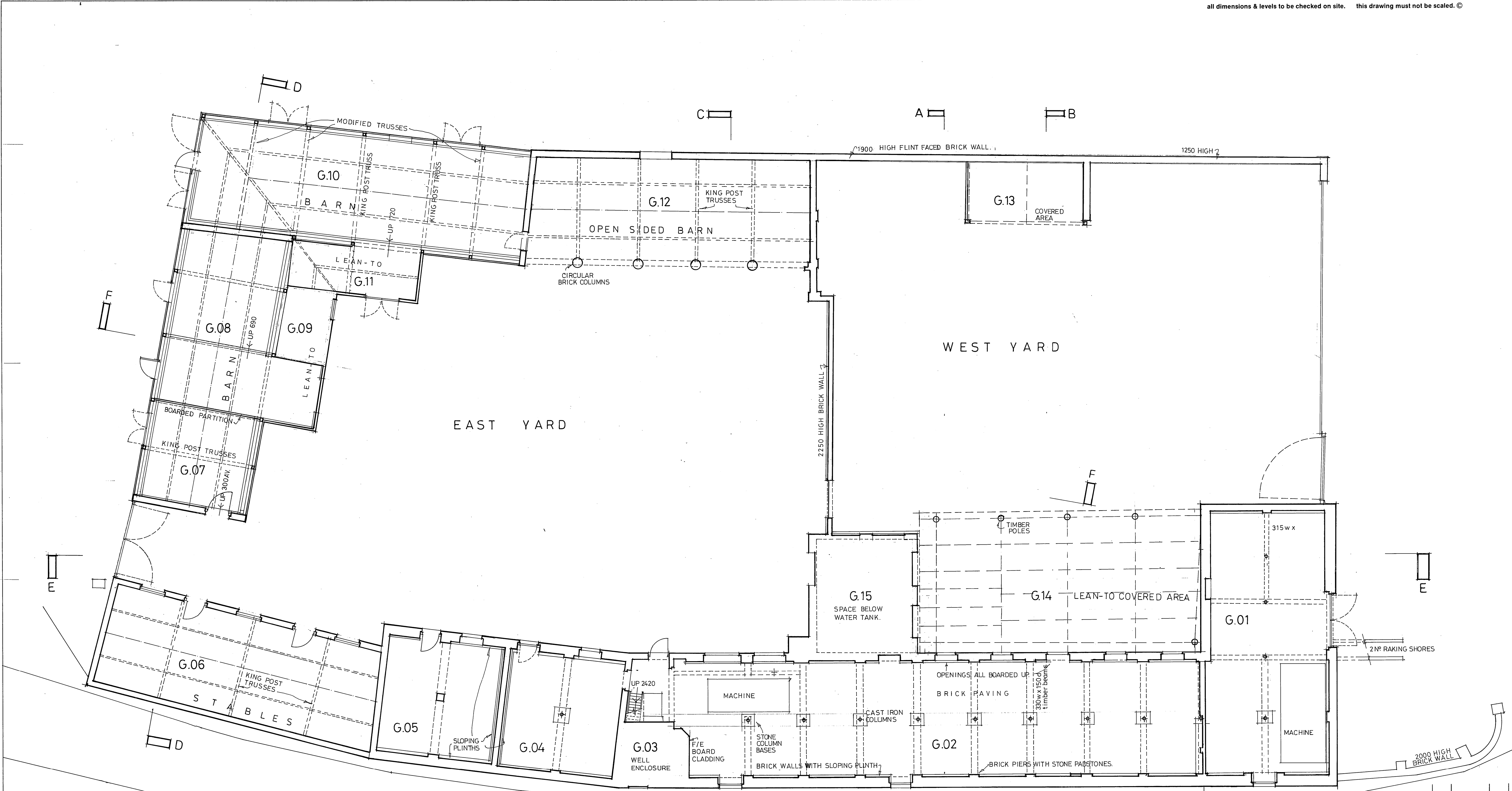
drawing title  
**MEASURED SURVEY - SITE PLAN**

drawn J.P. approved date July 1995 scale 1:200

**JOHNSON & PARTNERS**  
 ARCHITECTS & BUILDING SURVEYORS  
 39A HIGH STREET HEMEL HEMPSTEAD HERTS HP1 3AA  
 TEL. (0442) 212755 FAX (0442) 212759

drawing no. 2411 / 01 / rev.





NOTE - AREAS G03, G09 & G15 WERE NOT SURVEYED - NO ACCESS.  
 amendment initial date rev.

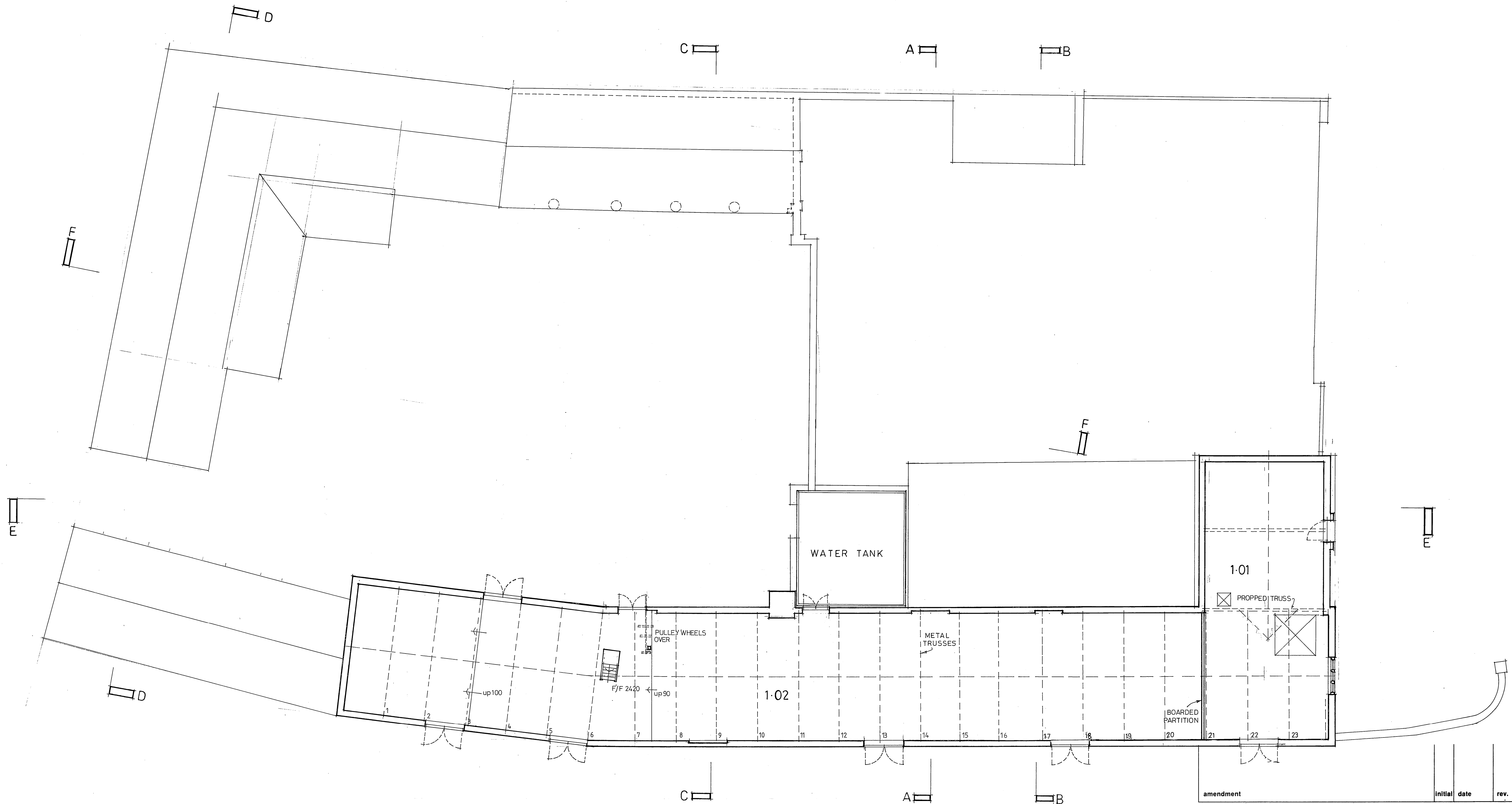
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 COMMISSION FOR THE NEW TOWNS  
 BUNKERS FARM, HEMEL HEMPSTEAD

drawing title  
 MEASURED SURVEY - GROUND FLOOR PLAN

drawn approved date JULY 1995 scale 1:100

JOHNSON & PARTNERS  
 ARCHITECTS & BUILDING SURVEYORS  
 39A HIGH STREET HEMEL HEMPSTEAD HERTS HP1 3AA  
 TEL. (0442) 212755 FAX. (0442) 212759

drawing no. 2411 / 02 / rev.



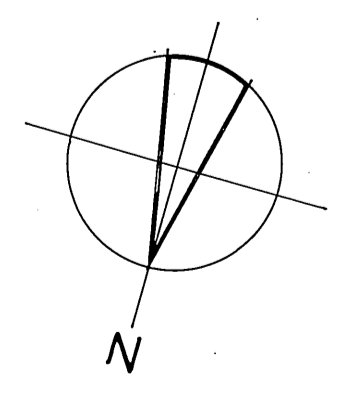
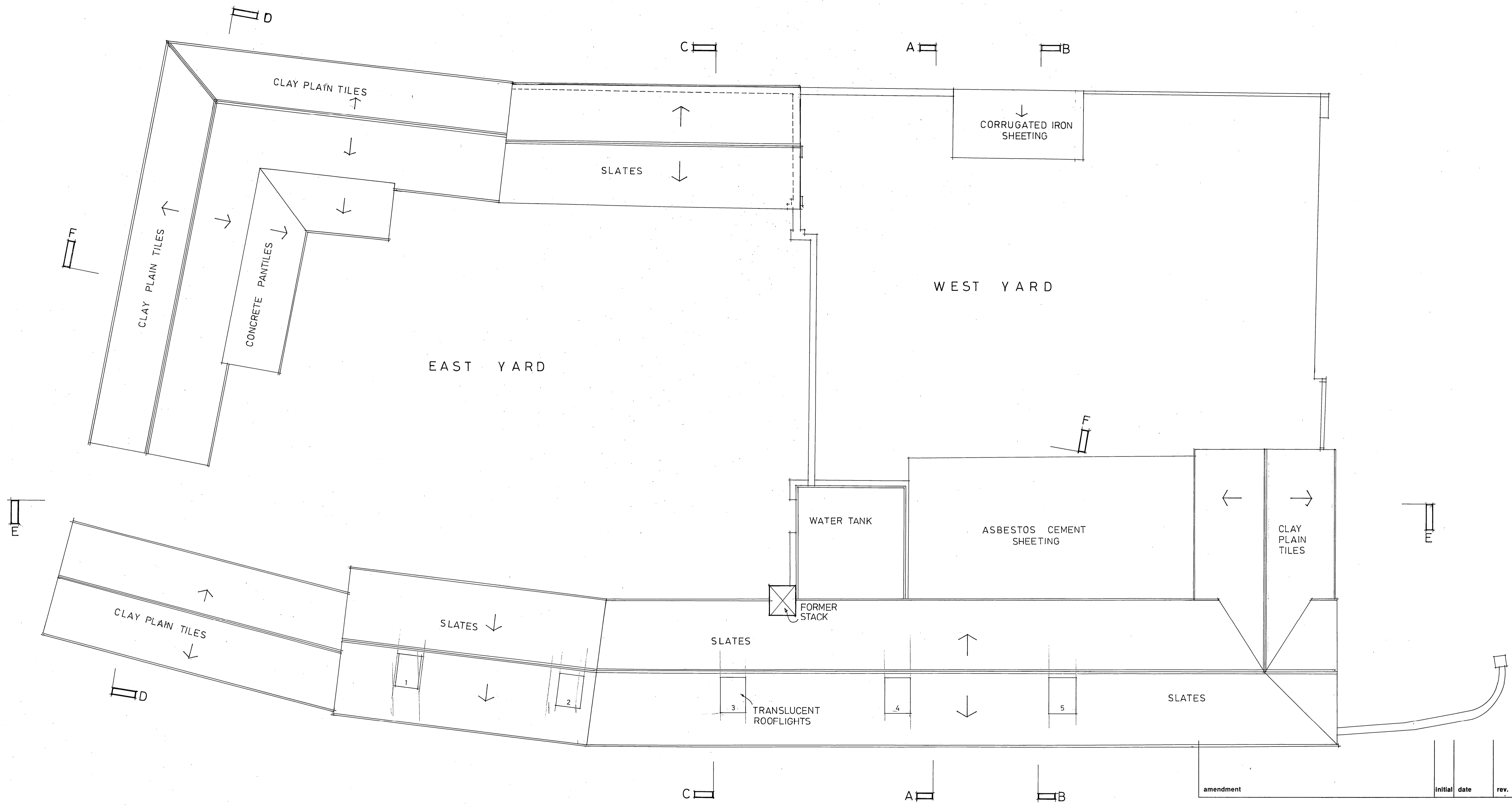
amendment	initial	date	rev.

client & job title  
**COMMISSION FOR THE NEW TOWNS  
 BUNKERS FARM , HEMEL HEMPSTEAD**

drawing title  
**MEASURED SURVEY - UPPER LEVEL PLAN**

drawn	approved	date JULY 1995	scale 1:100
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<b>JOHNSON &amp; PARTNERS</b> ARCHITECTS & BUILDING SURVEYORS 39A HIGH STREET HEMEL HEMPSTEAD HERTS HP1 3AA TEL. (0442) 212755 FAX. (0442) 212759	drawing no.	rev.
	2411 / 03 /	



amendment	initial	date	rev.

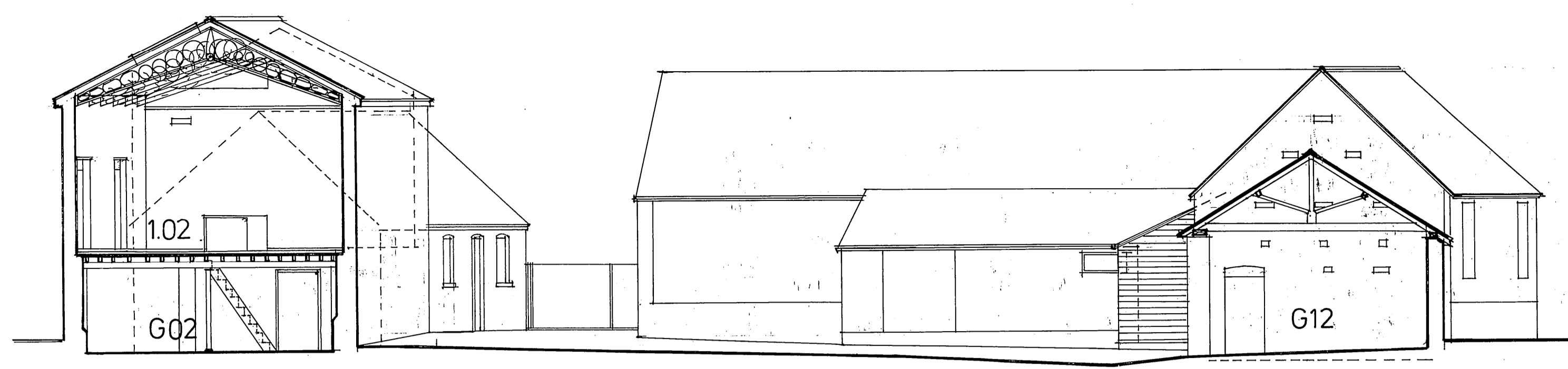
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 COMMISSION FOR THE NEW TOWNS  
 BUNKERS FARM , HEMEL HEMPSTEAD.

drawing title  
 MEASURED SURVEY - ROOF PLAN

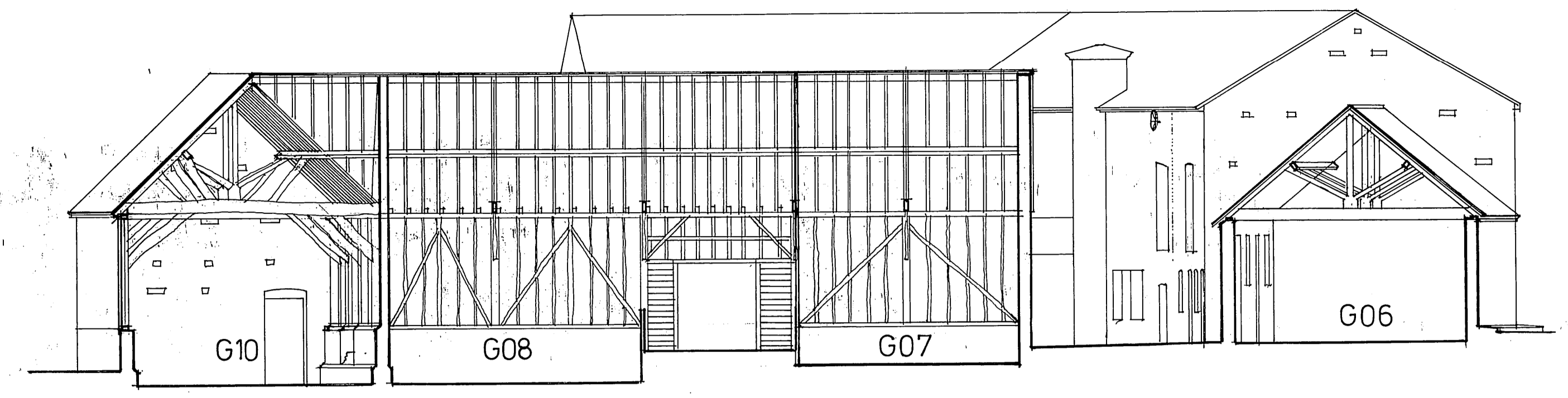
drawn      approved      date JULY 1995      scale 1:100

**JOHNSON & PARTNERS**  
 ARCHITECTS & BUILDING SURVEYORS  
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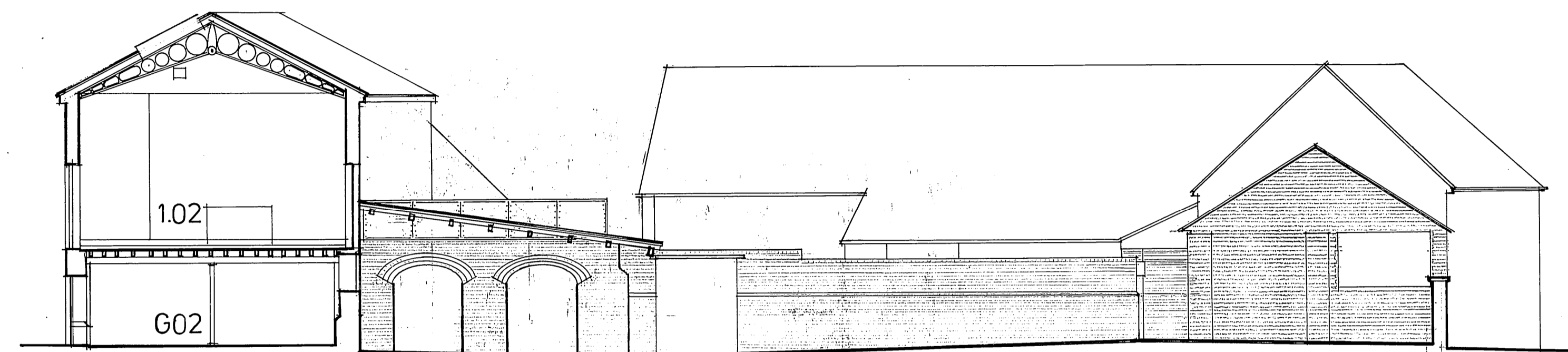
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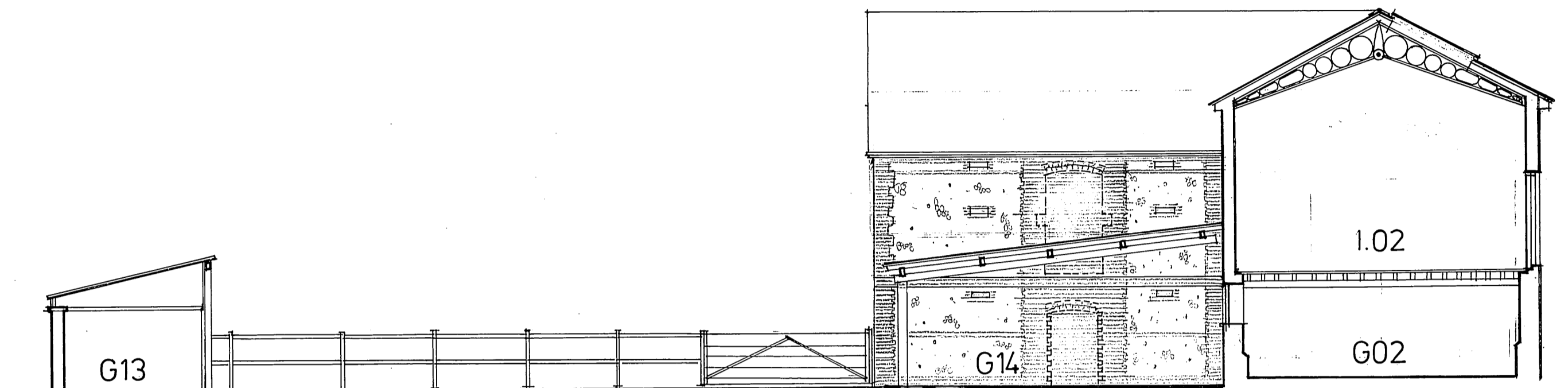
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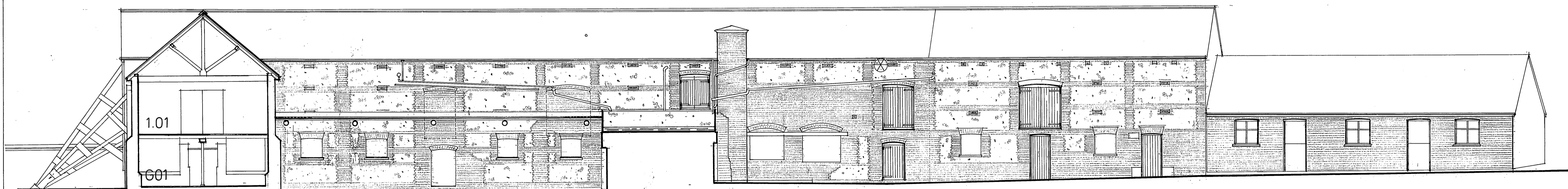
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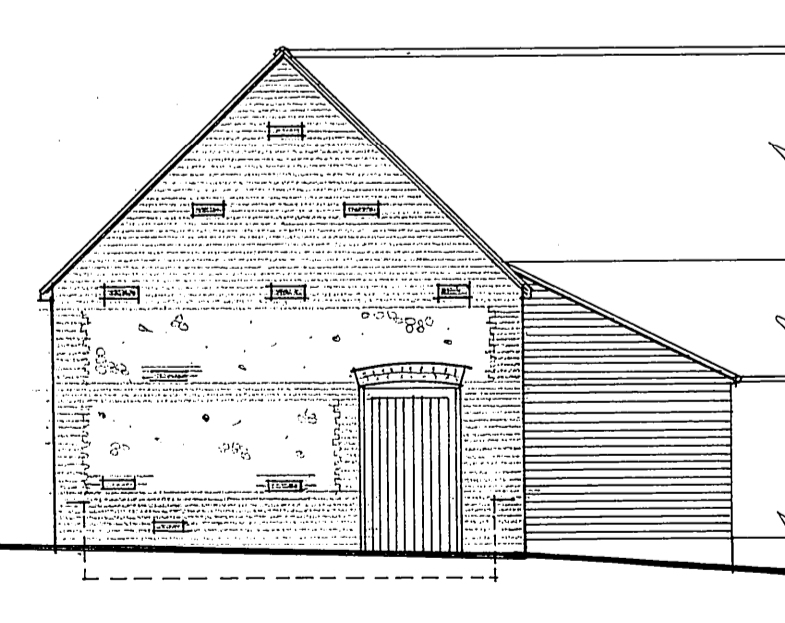
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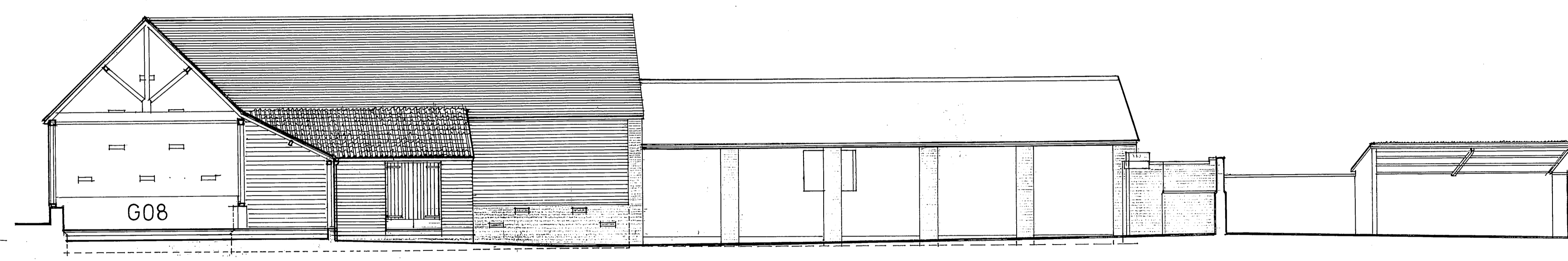
SECTION B-B



SECTION E-E



ELEVATION of  
NORTH END of BARN G07



SECTION F-F

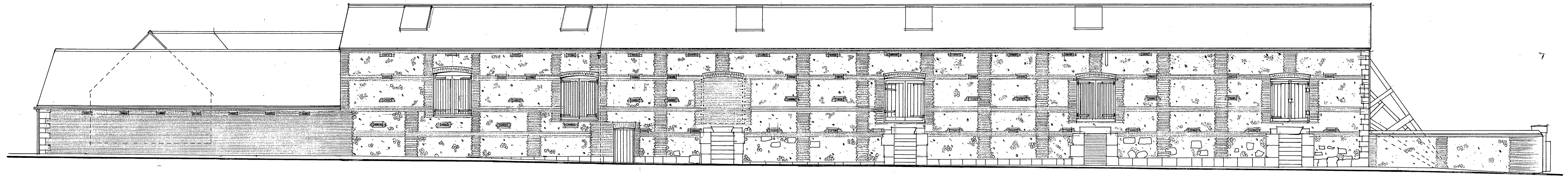
amendment	initial	date	rev.

client & job title  
**COMMISSION FOR THE NEW TOWNS  
 BUNKERS FARM, HEMEL HEMPSTEAD**

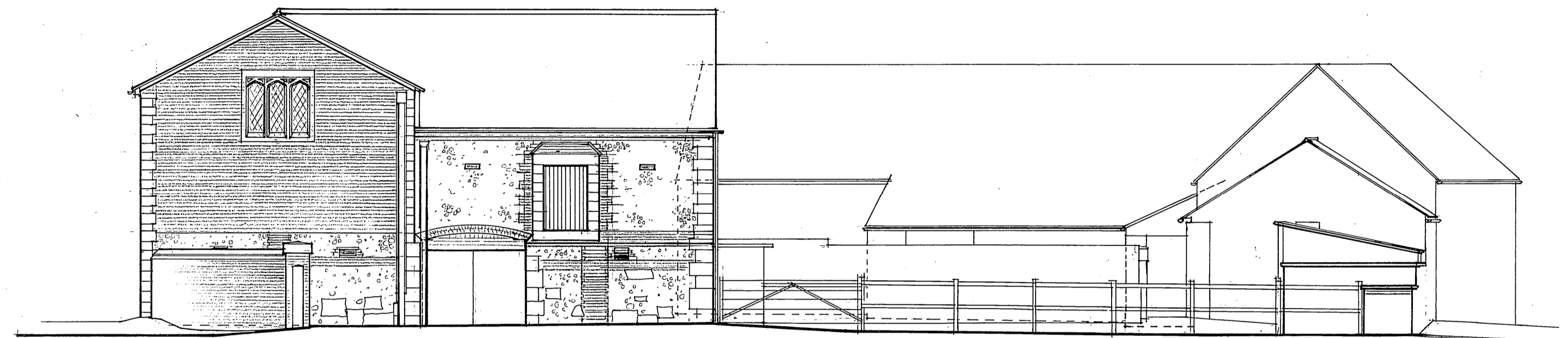
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drawn	BP	approved	date	JULY 1995	scale	1:100
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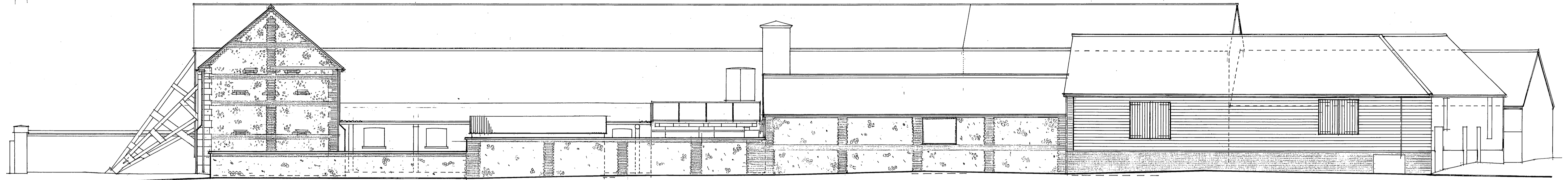
<b>JOHNSON &amp; PARTNERS</b> ARCHITECTS & BUILDING SURVEYORS 39A HIGH STREET HEMEL HEMPSTEAD HERTS HP1 3AA TEL. (0442) 212755 FAX. (0442) 212759	drawing no.	rev.
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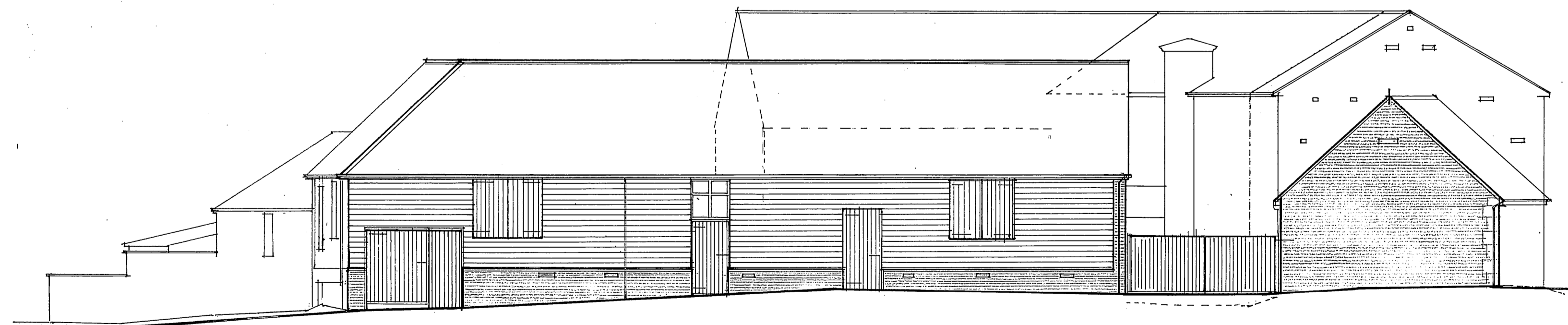
NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION



EAST ELEVATION

amendment	initial	date	rev.

client & job title  
 COMMISSION FOR THE NEW TOWNS  
 BUNKERS FARM, HEMEL HEMPSTEAD

drawing title  
 MEASURED SURVEY - ELEVATIONS 1.

drawn VJE approved date JULY 1995 scale 1:100

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## 11. APPENDIX IV – OASIS FORM

# OASIS DATA COLLECTION FORM: England

[List of Projects](#) | [Manage Projects](#) | [Search Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Change country](#) | [Log out](#)

## Printable version

**OASIS ID: headland4-159100**

### Project details

Project name	Bunker's Farm, Hemel Hempstead
Short description of the project	Archaeological investigation of Bunker's Farm a Grade II listed 19th century farm. Investigation comprised four separate elements: Watching brief, strip, map and sample, historic building recording and trial trenching
Project dates	Start: 09-09-2013 End: 03-03-2017
Previous/future work	Not known / Not known
Any associated project reference codes	BFHD11 - Contracting Unit No.
Any associated project reference codes	BUNK16 - Contracting Unit No.
Any associated project reference codes	1393017 - NMR No.
Any associated project reference codes	4/01524/09/FUL - Planning Application No.
Any associated project reference codes	DACHT 3777/3778 - Museum accession ID
Type of project	Field evaluation
Site status	Listed Building
Current Land use	Residential 1 - General Residential
Current Land use	Cultivated Land 1 - Minimal cultivation
Monument type	BUILDING Post Medieval
Significant Finds	NONE None
Methods & techniques	"Documentary Search", "Photographic Survey", "Survey/Recording Of Fabric/Structure", "Targeted Trenches"
Development type	Building refurbishment/repairs/restoration
Development type	Rural residential
Prompt	Planning condition
Position in the planning process	After full determination (eg. As a condition)

### Project location

Country	England
Site location	HERTFORDSHIRE DACORUM HEMEL HEMPSTEAD Bunker's Farm, Hemel Hempstead
Postcode	HP3 8SW
Study area	358 Square metres
Site coordinates	TL 086 058 51.739905936008 -0.426976560081 51 44 23 N 000 25 37 W Point
Lat/Long Datum	Unknown
Height OD / Depth	Min: 132m Max: 135m

### Project creators

Name of Organisation	Headland Archaeology Ltd
Project brief originator	Local Planning Authority (with/without advice from County/District Archaeologist)
Project design originator	Headland Archaeology Ltd
Project director/manager	Joe Abrams
Project supervisor	Simon Mayes
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Darren Andrews Homes Ltd

### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Archaeological Evaluation, Historic Building Recording, Strip, Map and Sample and Watching brief at Bunkers Farm, Bunkers Lane, Hemel Hempstead, Hertfordshire
Author(s)/Editor(s)	Spencer, P.
Date	2017
Issuer or publisher	Headland Archaeology Ltd
Place of issue or publication	Silsoe, Bedfordshire
Description	Unpublished grey literature report
Entered by	Peter Spencer (peter.spencer@headlandarchaeology.com)
Entered on	30 August 2017

## OASIS:

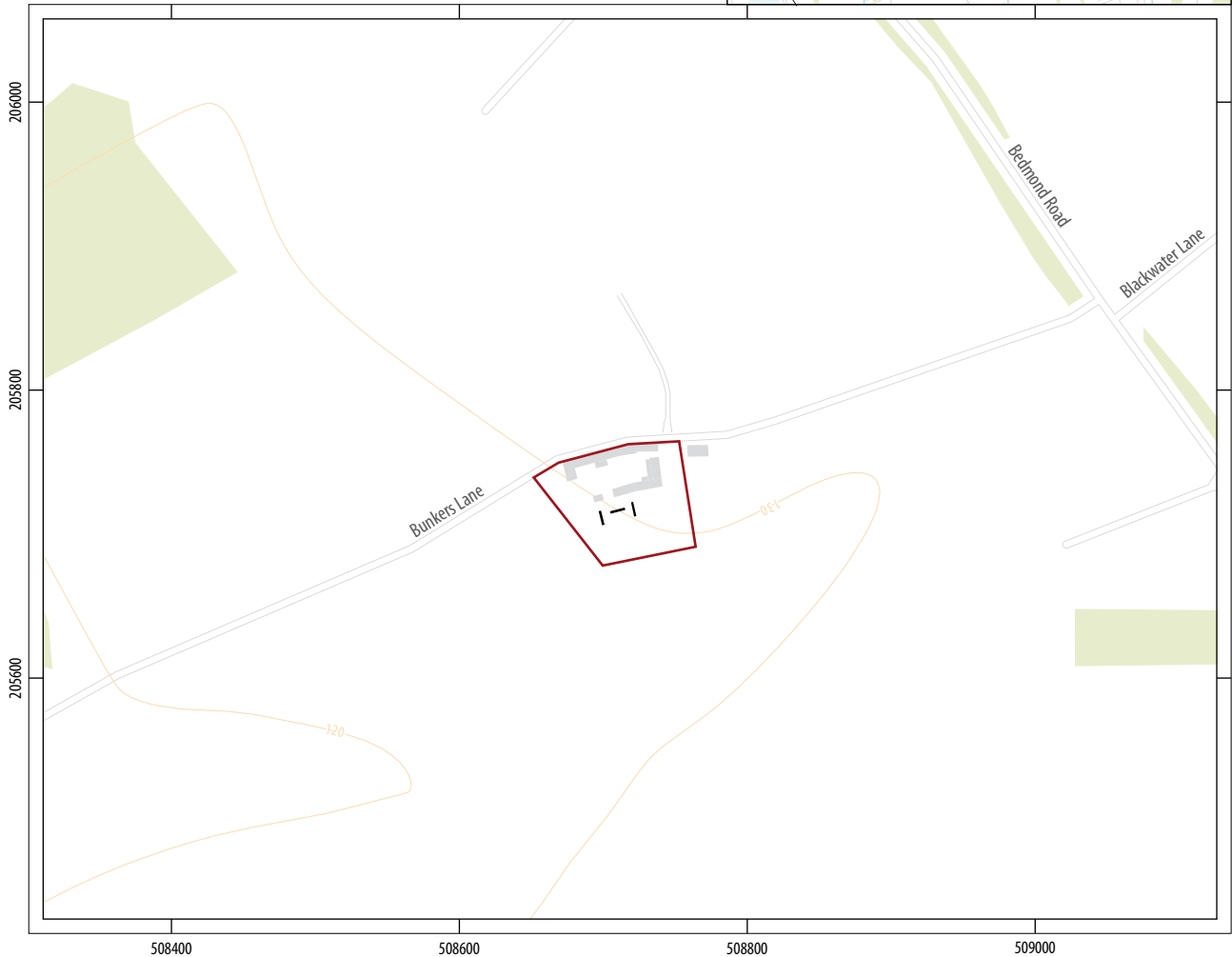
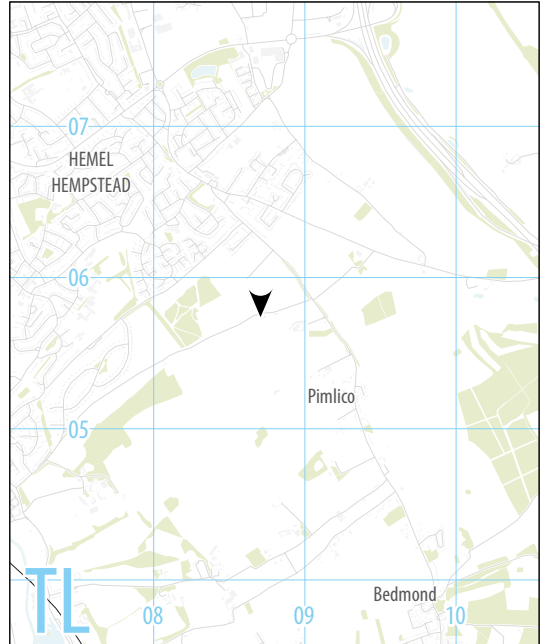
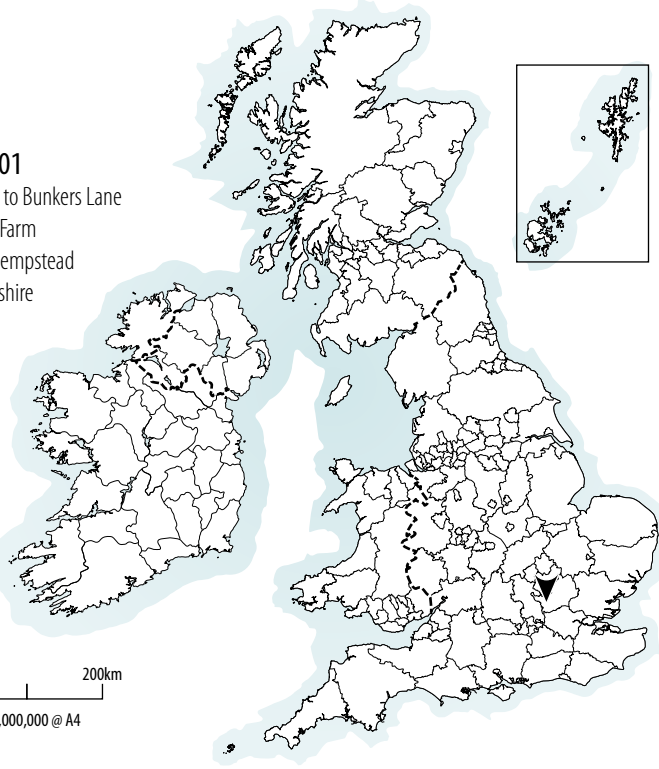




**BFHD/01**

adjacent to Bunkers Lane  
Bunkers Farm  
Hemel Hempstead  
Hertfordshire

0 200km  
1:10,000,000 @ A4

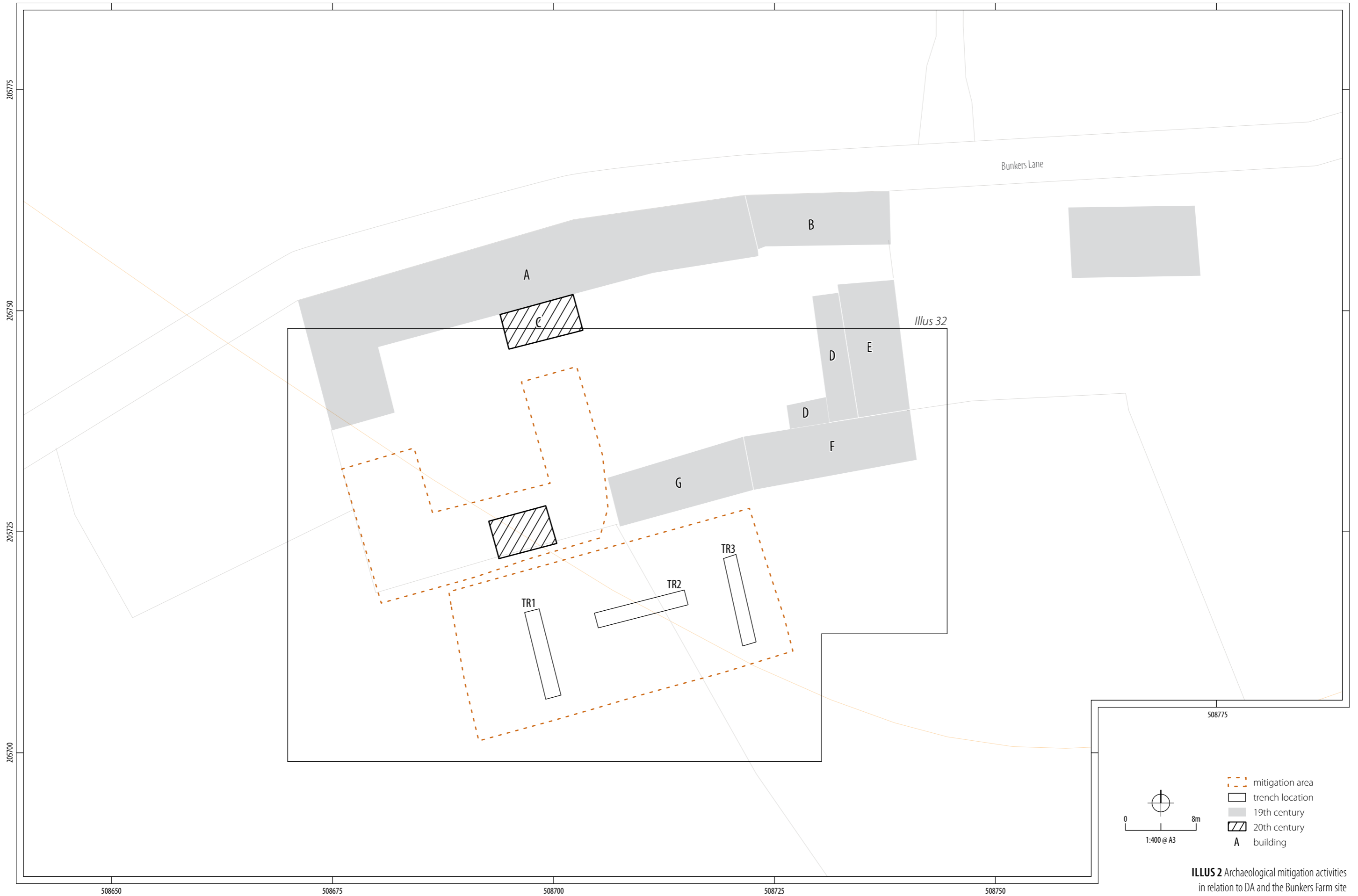


0 100m  
1:5,000 @ A4

- Bunkers Farm buildings
- site boundary
- trench location

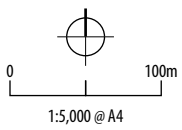
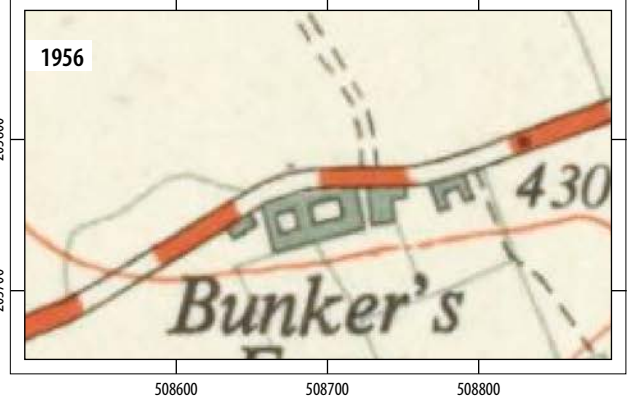
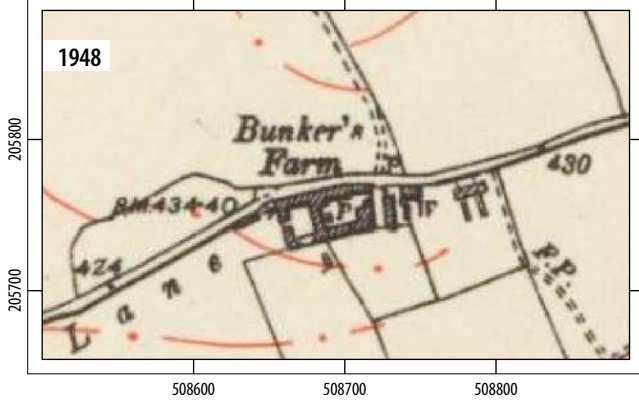
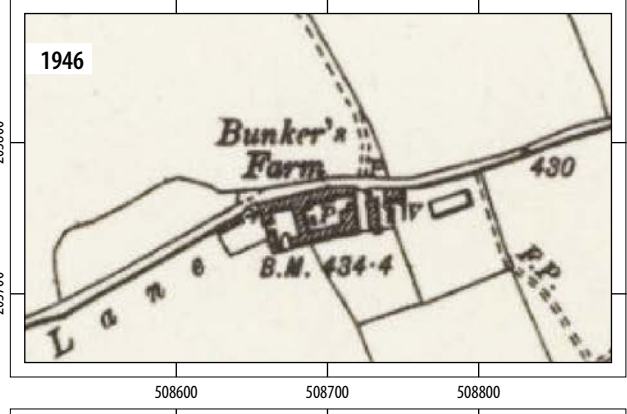
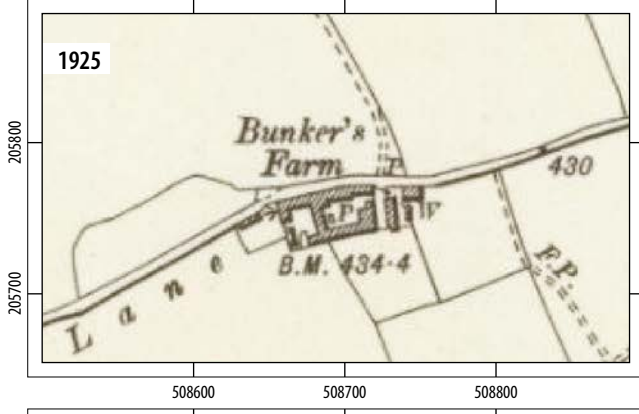
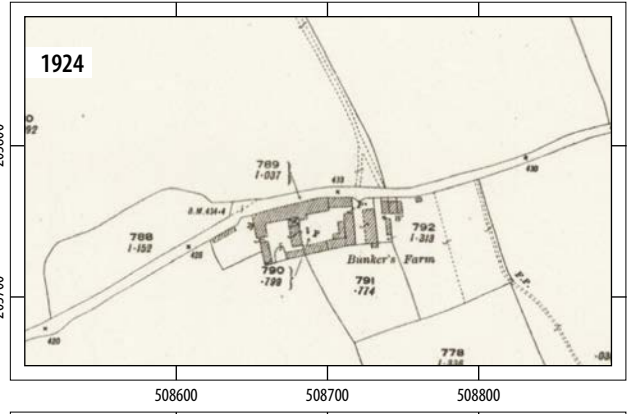
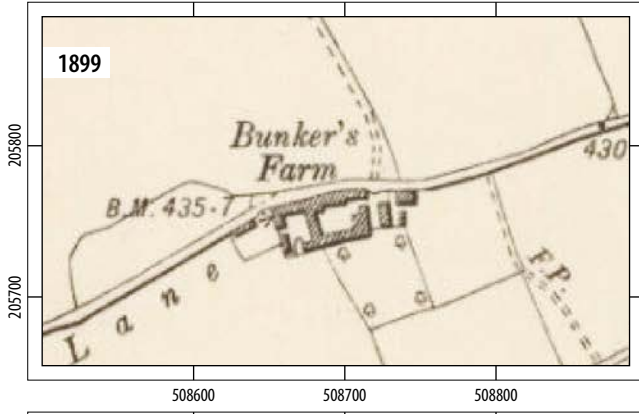
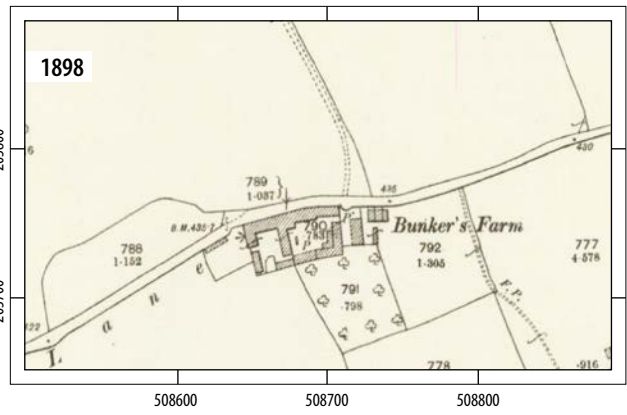


Headland Archaeology South & East  
Building 68C | Wrest Park | Silsoe | Bedfordshire MK45 4HS  
t 01525 861 578  
e southandeast@headlandarchaeology.com  
w www.headlandarchaeology.com



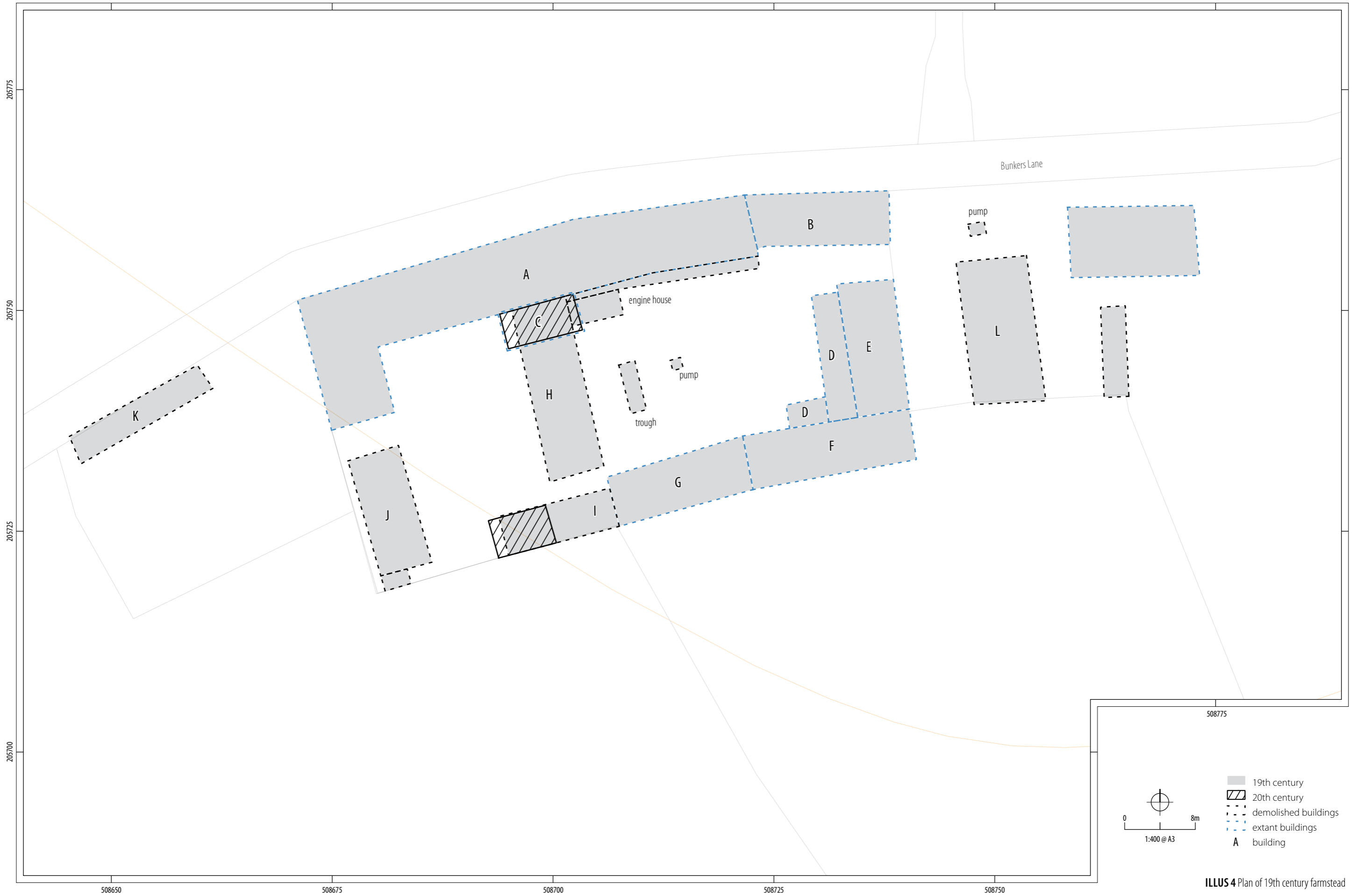
**ILLUS 2** Archaeological mitigation activities in relation to DA and the Bunkers Farm site

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ILLUS 3 Historic map regression 1883–1956 (Ordnance Survey)

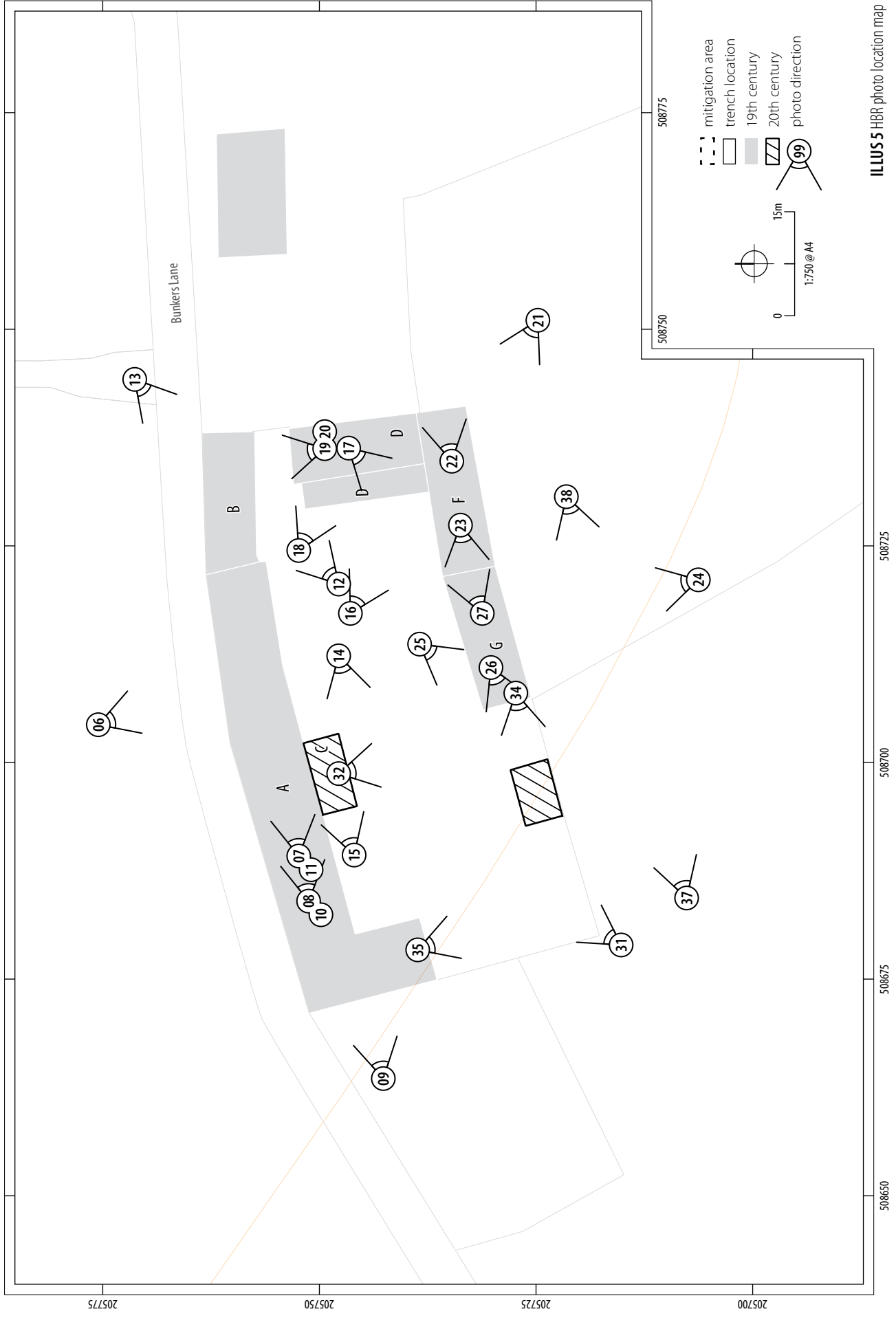




ILLUS 4 Plan of 19th century farmstead

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ILLUS5 HBR photo location map



**ILLUS 6** Building A exterior, northern elevation, facing south    **ILLUS 7** Building A interior, east-west wing, facing E    **ILLUS 8** Building A interior, east-west wing, lower floor    **ILLUS 9** Building A exterior detail – west gable, mullioned tudor window, return north-south wing visible to the right of image    **ILLUS 10** Building A interior detail – east-west wing lower floor, winnowing machine    **ILLUS 11** Building A interior detail – east-west wing, upper floor, belt-wheels



**ILLUS 12** Building B exterior, southern elevation, facing north-east    **ILLUS 13** Building B exterior, northern elevation and eastern gable, facing south-west    **ILLUS 14** Building C exterior (foreground), eastern and southern elevations, Building A north-south return wing in background, facing north-west    **ILLUS 15** Building C exterior, western elevation, facing east    **ILLUS 16** Building D exterior (foreground), western and northern elevations, Building E in background, facing east    **ILLUS 17** Building D interior, facing west taken from inside Building E, central threshing floor of building E can be seen in foreground with an example of the surviving mowstead visible to the left of the image



18



19



20

**ILLUS 18** Building E exterior, western and northern elevations, facing west, Building D in foreground **ILLUS 19** Building E interior detail – Roof trusses **ILLUS 20** Building E interior detail – Mowstead, northern gable visible in background



**ILLUS 21** Building F exterior, southern elevation, facing north-west, eastern elevation of Building E to the right of image **ILLUS 22** Building F interior, detail of roof trusses, east gable in background, facing east **ILLUS 23** Building F interior, west gable in background, facing west, entrance to Building D to the right of image



**ILLUS 24** Building G exterior, southern elevation, facing north, building F to right of image and original enclosure wall to the left    **ILLUS 25** Building G exterior, northern elevation and brick columns, facing south-west, note short extent of original courtyard wall extending northwards from west gable of Building G    **ILLUS 26** Building G interior, west gable in background, facing west    **ILLUS 27** Building G interior, eastern elevation (west gable of Building F), facing east



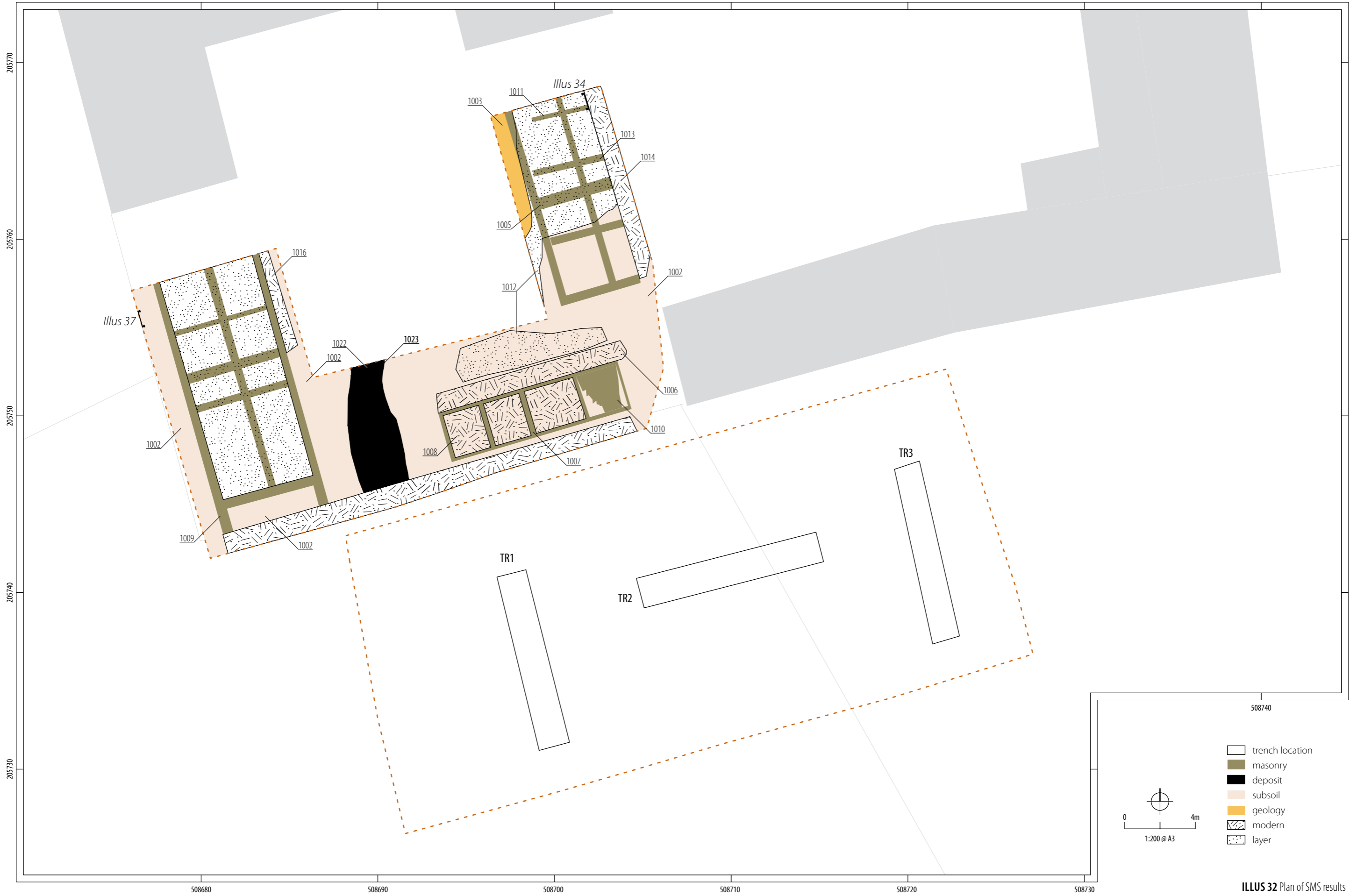
**ILLUS 28** Trench 1, facing south    **ILLUS 29** Trench 2, facing east    **ILLUS 30** Trench 3, facing south



**ILLUS 31** Excavation areas (SMS), facing north-east

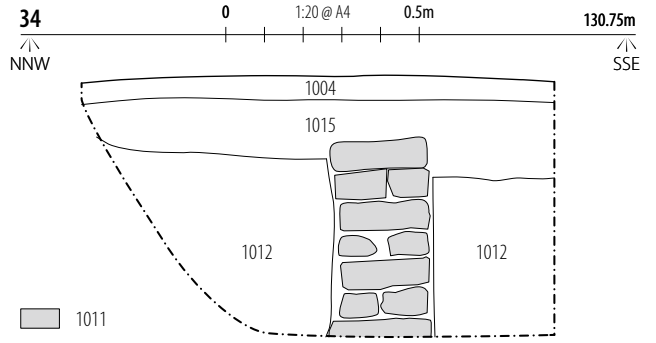




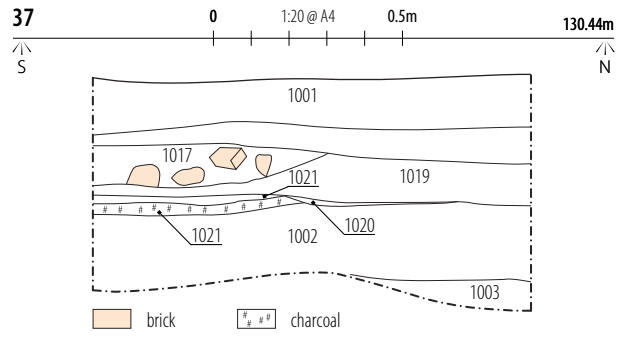


ILLUS 32 Plan of SMS results

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**ILLUS 33** SMS Area 1, facing south    **ILLUS 34** Sample section Area 1, west facing section    **ILLUS 35** SMS Area 2, facing west, in situ 19th century floor in foreground of image



**ILLUS 36** SMS Area 3, facing south

**ILLUS 37** Sample section Area 3, east facing section

**ILLUS 38** Archaeological monitoring area, facing east, Buildings G and F to left of image

**ILLUS 39** Archaeological monitoring area, facing west