

Land at Box End, Kempston, Bedford
Historic Environment Desk-Based Assessment
March 2021

Land at Box End, Kempston, Bedford
Historic Environment Desk-Based Assessment
March 2021

© Orion Heritage Ltd 2021

No part of this report is to be copied in any way
without prior written consent.

Every effort is made to provide detailed and accurate
information, however, Orion Heritage Ltd cannot be held
responsible for errors or inaccuracies within 3rd party data
supplied to Orion and referred to within this report.

© Ordnance Survey maps reproduced with the
sanction of the controller of HM Stationery Office.

Licence No: 100056706

1

Report

Historic Environment Desk-Based Assessment

Site

Land at Box End, Kempston, Bedford

Date

March 2021

Planning Authority

Bedford Borough Council

Site Centred At

TL 00605 48532

Prepared By

Approved By

Report Status

FINAL

Orion Ref

PN2952/HEDBA1

Contents

Executive Summary

- 1.0 Introduction
- 2.0 Aims, Objectives & Methodology
- 3.0 Statutory and Planning Policy Framework
- 4.0 Archaeological & Historic Baseline
- 5.0 Proposed Development and Potential Impact on Heritage Assets
- 6.0 Summary and Conclusions

Sources Consulted

List of Illustrations

- Figure 1: Site Location Map
- Figure 2a: HER non-designated archaeological assets
- Figure 2b: HER non-designated heritage assets
- Figure 2c: HER National Mapping Programme (NMP) data
- Figure 3: HER events data
- Figure 4: Designated heritage assets
- Figure 5: 1804 Kempston Rural Enclosure Map
- Figure 6: 1814 Ordnance Survey Drawing
- Figure 7: 1883-85 Ordnance Survey Map
- Figure 8: 1902 Ordnance Survey Map
- Figure 9: 1927 Ordnance Survey Map
- Figure 10: 1938-48 Ordnance Survey Map
- Figure 11: 1960 Ordnance Survey Map
- Figure 12: 1972 Ordnance Survey Map
- Figure 13: 1999 Ordnance Survey Map
- Figure 14: 2020 Ordnance Survey Map
- Figure 15: 2020 Google Earth

List of Plates

- Plate 1 View of West End Farmhouse from near the study site's western boundary
- Plate 2 View from the study site towards Top Farmhouse
- Plate 3 View from the study site towards the Clock House
- Plate 4 View from the study site towards the Church of All Saints

Timescales Used in This Report

Prehistoric

Palaeolithic	450,000 -12,000 BC
Mesolithic	12,000 - 4,000 BC
Neolithic	4,000 - 2,200 BC
Bronze Age	2,200 - 700 BC
Iron Age	700 - AD 43

Historic

Roman	43 - 410AD
Saxon/Early Medieval	410 - 1066AD
Medieval	1066 - 1485AD
Post Medieval	1486 - 1901AD
Modern	1901 - Present Day

Executive Summary

This historic environment desk-based assessment considers Land at Box End, Kempston, Bedford (hereinafter referred to as the “Study Site”). In accordance with government policy (National Planning Policy Framework), this assessment draws together the available archaeological, historic, topographic and land-use information in order to clarify the heritage significance and archaeological potential of the study site.

The assessment has been prepared to support the promotion of the study site as an allocated site in the Bedford Borough Local Plan.

A review of the available evidence has confirmed that the study site contains three non-designated archaeological assets in the form of Kempston West End former medieval settlement (MBD16872) in the north-west corner, a potential rectangular building on uncertain date and function (MBB22022), visible only as cropmarks, near the study site’s centre, and the site of a former post-medieval ford (MBD11734) along the southern boundary of the main part of the study site and the northern boundary of the southern, smaller, part of the study site.

Based on the proximity to known archaeological sites, the study site has a moderate to high potential for Prehistoric and Iron Age/Roman remains, a low to moderate potential for Saxon/early medieval remains and a low potential for the post-medieval and modern remains. There is a known potential for the remains of the small post-medieval/modern structures visible adjacent to the study site’s eastern boundary on historic mapping. As such, the groundworks associated with the proposed development are considered likely to have an impact on any potential archaeological remains which may be present within the study site. There is considered to be low potential for remains of national significance that would pose a design or planning constraint.

It is anticipated that the LPA’s archaeological advisor will require the study site to be subject to archaeological evaluation, such as geophysical survey and/or trenching, the timing and scope of which will need to be agreed with the LPA’s archaeological advisor. Should such work have positive results, further follow-on mitigation excavation and recording may be necessary.

The study site contains no designated archaeological assets. The setting of designated archaeological assets in the wider area has been assessed; none are considered sensitive to change by the proposed development.

On this basis it is clear that the impact of the proposed development on the archaeological potential of the study site could be adequately mitigated, and the development made acceptable in terms of archaeological impacts. It, therefore, accords with the requirements in paragraph 197.

Development of the study site would not have a direct physical impact on any designated heritage assets. The assessment has considered the setting and significance of the Grade II* listed Box End House as well as West End Farmhouse, Top Farmhouse, The Clock House with the barn and groom’s cottage, stables, food store and carriage shed (all grade II listed) and the Grade I listed Church of All Saints. With a carefully considered quality layout utilising appropriate density, massing, sensitive & appropriate landscaping and planting, development will be likely to result in less than substantial harm on the lower end of the scale on the designated heritage assets.

1.0 Introduction

- 1.1 This historic environment desk-based assessment considers Land at Box End, Kempston (Figure 1). It has been researched and prepared by Orion Heritage. The site (hereinafter referred to as the “Study Site”) is located at grid reference TL 00605 48532 and the site area is 69.414 hectares, comprising a large area of land to the north of the B560 and a smaller area of land to the south of the main site.
- 1.2 This historic environment desk-based assessment is prepared to support the promotion of the study site as an allocated site in the Bedford Borough Council Local Plan. Future proposals would comprise the residential development of the study site, with associated access, parking, landscaping and open space.
- 1.3 In accordance with the Standard and Guidance for Historic Environment Desk-Based Assessment (Chartered Institute for Archaeologists 2017), the assessment draws together available information on designated and non-designated heritage assets, topographic and land-use information so as to establish the potential for non-designated archaeological assets within the study site. The assessment includes the results of a site survey, an examination of published and unpublished records, and charts historic land-use through a map regression exercise. The assessment also considers the setting of heritage assets and provides an assessment of how their settings contribute to their significance.
- 1.4 The assessment enables relevant parties to assess the significance of heritage/ archaeological assets on and close to the study site and considers the potential for hitherto undiscovered archaeological assets, thus enabling potential impacts on assets to be identified along with the need for design, civil engineering or archaeological solutions. It also provides an understanding of any constraints to development of the study site due to the presence of nearby heritage assets and provides an assessment of the potential impact development would have on the significance of heritage assets and also provides design responses that would serve to reduce that impact in line with local and national policy.
- 1.5 The study area used in this assessment is a 1.5km radius from the centre of the study site (Figures 2a, b and c, 3 and 4).
- 1.6 A site visit was undertaken on 10th March 2021 when the conditions were cloudy, rainy and windy with good visibility.

Location, Topography and Geology

- 1.7 The Study Site is located at to the south-west of the village of Box End and to the north-west of the town of Kempston in the Borough of Bedford and is currently associated with Vicarage Farm. The study site is in use as agricultural land and comprises two areas, separated by the B560. It is bounded to the east by an orchard, residential development and Box End Road, to the south by the B560, a cemetery and agricultural land, to the west by agricultural fields and residential development and to the north by West End Road. The River Great Ouse flows c.480m east of the study site. A land drain runs north-west/south-east across near the study site’s western boundary and along its southern boundary, parallel to the B560. A second land drain issues near the study site’s eastern boundary and runs eastwards into the River Great Ouse. A clay pipe drainage system is installed across the study site. Three electricity pylons are located in the study site’s centre.
- 1.8 The larger area of the study site undulates from c.44m aOD (above Ordnance Datum) along its northern boundary to c.34m aOD in the centre to c.37m aOD along its southern boundary and from c.33m aOD along its eastern boundary to c.36m aOD along its western boundary. The smaller area to the south rises gently

from c.32m aOD along its northern boundary to c.37m aOD along its southern boundary and from c.31m aOD along its eastern boundary to c.34m aOD along its western boundary.

- 1.9 The bedrock geology of the study site comprises Peterborough Member – Mudstone; Kellaways Sand Member – Sandstone and Siltstone, interbedded; Kellaways Clay Member – Mudstone and Cornbrash Formation – Limestone. For the majority of the study site no superficial geology is recorded, however, along the northern boundary, in the north-west and in the southern-most section of the study site superficial geology in the form of Head – Clay, Silt, Sand and Gravel is recorded. In the centre of the eastern and western boundary respectively, superficial deposits of Stoke Goldington Member - Sand and Gravel are recorded.¹

¹ <http://mapapps.bgs.ac.uk/geologyofbritain3d/>

2.0 Aims, Objectives & Methodology

2.1 The principal aims of the desk-based assessment is to:

- Gain an understanding of the archaeological potential of the study site;
- Identify any archaeological constraints to the development of the study site; and to
- Assess the likely impact of the proposed development.

2.2 The results of the archaeological desk-based assessment will inform an archaeological strategy for further on-site assessment and formulation of a mitigation strategy, as appropriate to the archaeological potential of the study site and the layout of the development in relation to built heritage.

2.3 This desk-based assessment conforms to the requirements of current national and local planning policy (including *National Planning Policy Framework* 2019) and it has been designed in accordance with current best archaeological practice, and the appropriate national and local standards and guidelines, including:

- Management of Recording Projects in the Historic Environment: MORPHE (English Heritage 2006);
- Code of Conduct (Chartered Institute for Archaeologists [ClfA] [revised edition] 2014); and
- Standard and Guidance for Historic Environment Desk-Based Assessment (ClfA January 2017).

2.4 It is noted that the Chartered Institute for Archaeologists defines desk-based assessment as:

“a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as appropriate.”

2.5 The Chartered Institute for Archaeologists Standard for desk-based assessment states that:

“Desk-based assessment will determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic environment within a specified area. Desk-based assessment will be undertaken using appropriate methods and practices which satisfy the stated aims of the project, and which comply with the Code of conduct and other relevant regulations of ClfA. In a development context desk-based assessment will establish the impact of the proposed development on the significance of the historic environment (or will identify the need for further evaluation to do so) and will enable reasoned proposals and decisions to be made whether to mitigate, offset or accept without further intervention that impact.”

Methodology

2.6 The archaeological desk-based assessment will include:

- Map regression based on Ordnance Survey maps and tithe/enclosure maps and apportionments held at Bedford Record Office;
- Examination of material currently held in the Bedford Borough Council Historic Environment Record for a 1.5km search radius;
- Consultation of the National Heritage List for England; and
- Site inspection.

- No previous archaeological investigations are recorded on the HER within the study site
- 2.7 The report will also include a consideration of Lidar and aerial photography for the study site.
- 2.8 Lidar provides topographic data and is particularly useful in the detection and identification of heritage assets that survive as earthworks. The Environment Agency (EA) regularly collects Lidar data for England and makes these data available for public use through their online portal. Digital Terrain Models (DTM) are routinely used for heritage purposes as this model shows the ground's surface with buildings and trees filtered out to create a 'bare earth' effect. The Environment Agency collected Lidar data that covers the study site at 1m resolution in 2020 as part of the National LIDAR Programme. The data was processed using the Relief Visualisation Toolkit (RVT) version 1.2 and was reviewed using QGIS.

3.0 Planning Background and Development Plan Framework

Ancient Monuments & Archaeological Areas Act 1979

- 3.1 The Ancient Monuments & Archaeological Areas Act 1979 (as amended) protects the fabric of Scheduled Monuments but does not afford statutory protection to their settings.

Planning (Listed Building and Conservation Areas) Act 1990

- 3.2 The Planning (Listed Building and Conservation Areas) Act 1990 sets out broad policies and obligations relevant to the protection of listed buildings and conservation areas and their settings.
- 3.3 Section 66(1) states:
“In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses”.
- 3.4 Section 69 of the Act requires local authorities to define as conservation areas any ‘areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or enhance’ and Section 72 gives local authorities a general duty to pay special attention ‘to the desirability of preserving or enhancing the character or appearance of that area’ in exercising their planning functions. These duties are taken to apply only within a Conservation Area. The Act does not make specific provision with regard to the setting of a Conservation Area that is provided by the policy framework outlined in section 2.2, below

National Planning Policy Framework (NPPF) & National Planning Practice Guidance (NPPG)

- 3.5 Government policy in relation to the historic environment is outlined in Section 16 of the National Planning Policy Framework (NPPF), entitled ‘Conserving and Enhancing the Historic Environment’. This provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets. Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:
- Delivery of sustainable development;
 - Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
 - Conservation of England's heritage assets in a manner appropriate to their significance; and
 - Recognition of the contribution that heritage assets make to our knowledge and understanding of the past.
- 3.6 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term.
- 3.7 Paragraph 189 states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to understand the potential impact of the proposal upon the significance of that asset.
- 3.8 Paragraph 197 requires the decision-maker to take into account the effect on the significance of non-designated heritage assets and to take a balanced judgement having regard to the scale of harm or loss and the significance of the asset(s) potentially affected.

- 3.9 *Heritage Assets* are defined in Annex 2 as: a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing).
- 3.10 *Archaeological Interest* is defined as: a heritage asset which holds or potentially could hold evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.
- 3.11 *Designated Heritage Assets* comprise: A World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Parks and Garden, Registered Battlefield or Conservation Areas designated under the relevant legislation.
- 3.12 *Significance* is defined as: The value of a heritage asset to this and future generations because of its heritage interest. This interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.
- 3.13 *Setting* is defined as: The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.
- 3.14 The NPPF is supported by the PPG (July 2019). In relation to the historic environment, paragraph 002 (002 Reference ID: 18a-002-20190723) states that:
"Where changes are proposed, the National Planning Policy Framework sets out a clear framework for both plan-making and decision-making in respect of applications for planning permission and listed building consent to ensure that heritage assets are conserved, and where appropriate enhanced, in a manner that is consistent with their significance and thereby achieving sustainable development. Heritage assets are either designated heritage assets or non-designated heritage assets."
- 3.15 Paragraph 18a-013 (Paragraph: 013 Reference ID: 18a-013-20190723) outlines that although the extent and importance of setting is often expressed in visual terms, it can also be influenced by other factors such as noise, dust and vibration. Historic relationships between places can also be an important factor stressing ties between places that may have limited or no intervisibility with each other. This may be historic as well as aesthetic connections that contribute or enhance the significance of one or more of the heritage assets.
- 3.16 Paragraph 18a-013 concludes:
"The contribution that setting makes to the significance of the heritage asset does not depend on there being public rights or an ability to access or experience that setting. This will vary over time and according to circumstance. When assessing any application for development which may affect the setting of a heritage asset, local planning authorities may need to consider the implications of cumulative change. They may also need to consider the fact that developments which materially detract from the asset's significance may also damage its economic viability now, or in the future, thereby threatening its on-going conservation."
- 3.17 The key test in NPPF paragraphs 193-196 is whether a proposed development will result in substantial harm or less than substantial harm to a designated asset. However, substantial harm is not defined in the NPPF. Paragraph 18a-017

(Paragraph: 018 Reference ID: 18a-018-20190723) of the PPG provides additional guidance on substantial harm. It states:

“What matters in assessing whether a proposal might cause harm is the impact on the significance of the heritage asset. As the National Planning Policy Framework makes clear, significance derives not only from a heritage asset’s physical presence, but also from its setting.”

- 3.18 Proposed development affecting a heritage asset may have no impact on its significance or may enhance its significance and therefore cause no harm to the heritage asset. Where potential harm to designated heritage assets is identified, it needs to be categorised as either less than substantial harm or substantial harm (which includes total loss) in order to identify which policies in the National Planning Policy Framework (paragraphs 194-196) apply.
- 3.19 Within each category of harm (which category applies should be explicitly identified), the extent of the harm may vary and should be clearly articulated.
- 3.20 Whether a proposal causes substantial harm will be a judgment for the decision-maker, having regard to the circumstances of the case and the policy in the National Planning Policy Framework. In general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset’s significance rather than the scale of the development that is to be assessed. The harm may arise from works to the asset or from development within its setting.
- 3.21 While the impact of total destruction is obvious, partial destruction is likely to have a considerable impact but, depending on the circumstances, it may still be less than substantial harm or conceivably not harmful at all, for example, when removing later additions to historic buildings where those additions are inappropriate and harm the buildings’ significance. Similarly, works that are moderate or minor in scale are likely to cause less than substantial harm or no harm at all. However, even minor works have the potential to cause substantial harm, depending on the nature of their impact on the asset and its setting.”
- 3.22 Paragraph 196 of the NPPF outlines that where a proposed development results in less than substantial harm to the significance of a heritage asset, the harm arising should be weighed against the public benefits accruing from the proposed development. Paragraph 18a-020 of the PPG (Paragraph: 020 Reference ID: 18a-020-20190723) outlines what is meant by public benefits:

“Public benefits may follow from many developments and could be anything that delivers economic, social or environmental objectives as described in the National Planning Policy Framework (paragraph 8). Public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and not just be a private benefit. However, benefits do not always have to be visible or accessible to the public in order to be genuine public benefits, for example, works to a listed private dwelling which secure its future as a designated heritage asset could be a public benefit.”

Examples of heritage benefits may include:

- *sustaining or enhancing the significance of a heritage asset and the contribution of its setting;*
- *reducing or removing risks to a heritage asset; and*
- *securing the optimum viable use of a heritage asset in support of its long-term conservation.”*

- 3.23 In considering any planning application for development, the planning authority will be mindful of the framework set by government policy, in this instance the NPPF, by current Development Plan Policy and by other material considerations.

Local Planning Policy

- 3.24 The Bedford Borough Local Plan 2030, adopted in January 2020, contains the following policy relevant to this assessment:

Policy 41S – Historic environment and heritage assets

- i. *Where a proposal would affect a heritage asset the applicant will be required to describe:*
 - a) *The significance of the asset including any contribution made by its setting and impacts of the proposal on this significance, and*
 - b) *The justification for the proposal, how it seeks to preserve or enhance the asset/setting or where this is not possible, how it seeks to minimise the harm.*
- ii. *This description must be in the form of one or a combination of: a desk-based assessment; heritage statement; heritage impact assessment; and/or archaeological field evaluation. Further information will be requested where applicants have failed to provide assessment proportionate to the significance of the assets affected and sufficient to inform the decision-making process.*
- iii. *Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset or non-designated heritage asset of archaeological interest of demonstrably equivalent significance to a scheduled monument, consent will be refused unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply: a) the nature of the heritage asset prevents all reasonable uses of the site; and b) no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and c) conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and d) the harm or loss is outweighed by the benefit of bringing the site back into use.*
- iv. *Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm will be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.*
- v. *In considering proposals affecting designated heritage assets or a non-designated heritage asset of archaeological interest of demonstrably equivalent significance to a scheduled monument, involving their alteration, extension, demolition, change of use and/or development in their setting, the Council will include in their consideration as appropriate:*
 - a) *The asset's archaeological, architectural, artistic and historic interest and any contribution to its significance from setting (including the wider historic landscape)*
 - b) *scale, form, layout, density, design, quality and type of materials, and architectural detailing*
 - c) *boundary treatments and means of enclosure*

- d) *implications of associated car parking, services and other environmental factors*
 - e) *effect on streetscape, roofscape and skyline including important views within, into or out of heritage assets*
 - f) *impact on open space which contributes positively to the character and/or appearance of heritage assets*
 - g) *the positive benefits of the proposal in addressing heritage at risk.*
- vi. *Where heritage assets are included on a Local List and are affected by development proposals the Council will afford weight proportionate to their heritage significance in the decision-making process to protect and conserve the significance which underpins their inclusion. Partial or total loss adversely impacting this significance will require clear and convincing justification.*
- vii. *The effect of proposals on the significance of non-designated heritage assets will be taken into account in determining applications for development. Applications which result in harm or loss of significance to non-designated heritage assets will only be supported if clear and convincing justification has been demonstrated. In making a decision, the Council will weigh the significance of the heritage asset affected against the scale of any harm or loss to it.*
- viii. *Where applications are permitted which will result in (total or partial) loss to a heritage asset's significance (including where preservation in situ of buried archaeological remains is not necessary or feasible), applicants will be required to arrange for further assessment of and recording of this significance in advance of, and where required, during development/works. This assessment and recording must be undertaken by a suitably qualified specialist in accordance with a design brief set by the Council's Historic Environment Team. The work might include:*
- *archaeological and/or historic building fieldwork,*
 - *post-excavation/recording assessment, analysis, interpretation,*
 - *archiving with the local depository, and*
 - *presentation to the public of the results and finds in a form to be agreed with the Council.*
- As a minimum, presentation of the results should be submitted to the Bedford Borough Historic Environment Record and where appropriate, will be required at the asset itself through on-site interpretation.*

Guidance

Historic Environment Good Practice Advice In Planning Note 2: Managing Significance in Decision-Taking in the Historic Environment (Historic England 2015)

- 3.25 The purpose of this document is to provide information to assist local authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the NPPF and NPPG. It outlines a six-stage process to the assembly and analysis of relevant information relating to heritage assets potentially affected by a proposed development:
- Understand the significance of the affected assets;
 - Understand the impact of the proposal on that significance;

- Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;
- Look for opportunities to better reveal or enhance significance;
- Justify any harmful impacts in terms of the sustainable development objective of conserving significance and the need for change; and
- Offset negative impacts on aspects of significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.

Historic Environment Good Practice Advice In Planning Note 3: The Setting of Heritage Assets (Historic England 2017)

- 3.26 Historic England's Historic Environment Good Practice Advice in Planning Note 3 provides guidance on the management of change within the setting of heritage assets.
- 3.27 The document restates the definition of setting as outlined in Annex 2 of the NPPF. Setting is also described as being a separate term to curtilage, character and context; while it is largely a visual term, setting, and thus the way in which an asset is experienced, can also be affected by noise, vibration, odour and other factors. The document makes it clear that setting is not a heritage asset, nor is it a heritage designation, though land within a setting may itself be designated. Its importance lies in what the setting contributes to the significance of a heritage asset.
- 3.28 The Good Practice Advice Note sets out a five-staged process for assessing the implications of proposed developments on setting:
1. Identification of heritage assets which are likely to be affected by proposals;
 2. Assessment of whether and what contribution the setting makes to the significance of a heritage asset;
 3. Assessing the effects of proposed development on the significance of a heritage asset;
 4. Maximising enhancement and reduction of harm on the setting of heritage assets; and
 5. Making and documenting the decision and monitoring outcomes
- 3.29 The guidance reiterates the NPPF in stating that where developments affecting the setting of heritage assets results in a level of harm to significance, this harm, whether substantial or less than substantial, should be weighed against the public benefits of the scheme.

4.0 Archaeological and Historic Baseline

4.1 The heritage assets under consideration have been identified by means of a review of the following resources:

- Bedford Borough Council Historic Environment Record (HER) Data
- The National Heritage List for England (NHLE) held by Historic England
- Historic England Archive
- Pastscape;
- Local studies and record office research; and
- Review of historic mapping

4.2 This resource has been used to provide an understanding of the heritage assets which may be affected by the proposed development. This chapter will describe the heritage assets which may be affected and assess their significance.

4.3 The location of heritage assets mentioned in the text are shown on Figs. 2a, b and c, 3 & 4.

Previous archaeological investigations

4.4 No previous archaeological investigations (Figure 3) have been carried out within the study site. However, immediately to the south of the study site a geophysical survey (EBD532) was carried out at Kempston Cemetery. One linear anomaly was recorded within the survey area. Given its strength and alignment it was interpreted as a likely relatively recent field boundary. Numerous low magnitude responses were noted within the survey area and these were thought to be due to naturally occurring magnetic gravels. Immediately south of the cemetery an archaeological excavation (EBB1209) was carried out in 1992 along the route of the Bedford Southern Orbital Sewer. The main focus of interest was the Roman settlement, especially the villa and cemetery near Kempston Church End.

National Mapping Programme (NMP)

4.5 The Bedford Borough Council HER data includes NMP data (Figure 2c), which identifies and records all archaeological sites and landscapes visible on aerial photographs across England. Within the study site the following NMP data was recorded: five banks, three areas of medieval ridge and furrow cultivation and a slope and edge possibly related to a probable rectangular building (MBB22022) of uncertain date and function. Of the five banks, two were observed on the lidar data (see section 2.8). None of the other NMP data recorded within the study site was observed on the lidar data.

Undated

4.6 A probable rectangular building of uncertain date and function (MBB22022) was visible as cropmarks (NMP reference 1607103) on historic aerial photographs in an area roughly in the study site's centre. It is possible that this was a medieval or post-medieval agricultural building, however, earlier origins cannot be discounted. Aerial photographs taken in 2009 show that a modern field boundary has bisected the building north-west/south-east and as it is not visible, its condition is uncertain.

4.7 The possible site of a roadway (MBD8670) of unknown date was recorded c.700m east of the study site's north-eastern boundary.

Prehistoric

4.8 In 2000 a geophysical survey and subsequent archaeological trial trenching evaluation (EBD535) was carried out c.250m east of the study site's eastern

boundary, at the site of Box End Park. During the evaluation, the former river channels of the River Great Ouse were examined, these are likely to have formed during the late glacial period. Worked flints, likely of a Neolithic to Bronze Age date, indicating hunting and gathering along the river, were recorded.

- 4.9 The findspot of two Neolithic to early Bronze Age flint flakes (MBD16177) was recorded c.400m east of the study site's north-east boundary. A further 300m to the north-east the findspot of two prehistoric (late Neolithic to early Bronze Age) flint scrapers (MBD15884) was recorded.
- 4.10 The line of a possible prehistoric ridgeway (MBD7303) from Cranfield to Bromham was recorded c.700m north of the study site's northern boundary.
- 4.11 Outside the 1.5km study area, c.1.9km south-east of the study site, an archaeological excavation (EBB1212) was carried out prior to the construction of a housing development south of the Biddenham Loop. Evidence for a multi-period occupation site in the form of ditches, gullies and post pits (MBD15029 and MBB22492) was encountered, with finds ranging from the Palaeolithic, in the form of handaxes, to the medieval periods.
- 4.12 The findspot of a Palaeolithic handaxe (MBD1440) was recorded c.500m east of the study site's eastern boundary, in the Biddenham Loop area, which is the local name for an area of land delineated by a large meander of the River Great Ouse to the south of the village of Biddenham. In the south-west portion of the Biddenham Loop a number of Palaeolithic finds (MBD257) were recorded. To the south of this, the findspot of a Mesolithic hand axe (MBD15936) was recorded. Large-scale archaeological investigations (EBB575 flint artefact collection; EBB696 archaeological evaluation; EBB572 archaeological excavation; open area excavation/systematic fieldwalking survey/watching brief EBB581; assessment of potential and UPD EBB652; archaeological investigations EBB580; geophysical survey EBB655, results of archaeological investigation EBB823, archaeological non-intrusive investigations EBB690, geophysical survey EBB691, fieldwalking & earthwork survey EBB692, archaeological evaluation & watching brief EBB694, archaeological assessment EBB695) were undertaken mainly between 2005 and 2012 in the Biddenham Loop area as well as in an area south of the River Great Ouse, to the west of Kempston, c.750m south-east of the study site. Field artefact collection (EBB575) identified Mesolithic/early Neolithic flints (MBB18911, MBB18912). The flint scatters suggest that human activity was concentrated along the edges of the river terrace of the River Great Ouse. It is possible that the interior of the Loop was still wooded at this time, making the edge of the river terrace an ideal location for the exploitation of a broad spectrum of natural resources. Three early Neolithic monuments (MBB18913) were recorded within the Biddenham Loop. They are presumed to have been the focus of ceremonial and ritual activities. The monuments were all defined by a sub-circular ditch (MBB22179) with entrances, which in some cases had been blocked. The monuments may have been kept 'ritually' clean, as virtually no artefacts or other material were recovered from the ditch fills.² Evidence assigned to the late Neolithic (MBB18914) was also located on the Biddenham Loop and comprised isolated and clustered small pits, and one small possible building. In addition, two oval monuments and one segmented boundary were also assigned to the late Neolithic. Monument building, specifically of ring-ditches (MBB22184, MBB22186, MBD1863), along with the digging of shafts and large pits, appears to have reached its peak in the early Bronze Age (MBB18915). In some cases, the early Bronze Age ring ditches were

² East Anglian Archaeology, Report No. 156, 2016, Albion Archaeology, Close to the Loop. Landscape and settlement evolution beside the Biddenham Loop, west of Bedford, Mike Luke https://archaeologydataservice.ac.uk/archiveDS/archiveDownload?t=arch-2304-1/dissemination/pdf/aaa/vol_156/EAA_156_Bedford_West.pdf

aligned on the early Neolithic monuments.³ During the investigations, three clusters of ring ditches were identified on the Loop and one possible monument was identified to the west of Kempston. Eight shafts were found in the vicinity of the ring ditches. In contrast, small pits, postholes and three throws were identified away from the monument clusters, possibly representing areas of occupation. Extensive middle Bronze Age field systems (MBB18916) were identified on the Biddenham Loop. They contained evidence for dispersed activity in the form of small and large pits, fence lines and possible settlement foci. No similar fields were identified on land west of Kempston, but three discrete, much smaller, activity foci were recorded. One of the early Neolithic monuments was fairly central to the two middle Bronze Age field systems, suggesting that it was still a significant feature of the landscape. A total of 35 graves (nineteen within a cremation cemetery) dated to the middle Bronze Age were spread across the Loop.⁴ There is very little evidence for late Bronze Age activity (MBB18917) within the fields. However, two late Bronze Age/early Iron Age settlements were located on the periphery of the two middle Bronze Age field systems. At least one of the settlements was quite extensive, compared to its Neolithic and early Bronze Age precursors. Three pit alignments (MBB22175), broadly dated to the late Bronze Age/early Iron Age, were dug within the Loop.⁵

- 4.13 Based on the results of nearby archaeological investigations it is considered that there is a moderate to high potential for archaeological remains dating to the Prehistoric periods to be present within the study site. The study site's location in the vicinity of the River Great Ouse and its floodplain makes it a suitable location for early settlement and/or seasonal activity.

Iron Age and Roman

- 4.14 Parallel to the study site's eastern boundary the conjectural line of a Roman road from Irchester to Kempston (MBD58) was identified in 1964, however, there is no indication of the road on aerial photographs. A second suggested line of a potential Roman road (MBD485) from Dorchester-on-Thames to Alconbury House was recorded c.600m east of the study site's south-eastern corner. However, its line is fragmentary and disputed through Kempston, and the supposed 'paved ford' (MBD814, scheduled monument NHLE1005412) where it crosses the River Great Ouse may not have existed.
- 4.15 Three incomplete but contiguous sub-rectangular ditched enclosures of probable Iron Age or Roman date (MBD16519) are visible as cropmarks on historic aerial photographs immediately adjacent to the study site's western boundary.
- 4.16 Rectilinear and circular enclosures and field boundaries (MBD16504) from a probable Iron Age or Roman settlement are visible as cropmarks on historic aerial photographs in an area immediately to the west of the study site.
- 4.17 In 2000 a geophysical survey and subsequent archaeological trial trenching evaluation (EBD535) was carried out c.250m east of the study site's eastern boundary, at the site of Box End Park. In the southern part of the evaluation evidence for settlement and burials was recorded in the form of Roman remains including ditches and graves which were found beneath alluvial clays. Late Iron Age and Roman pottery, a small quantity of tile and metalwork, as well as animal bone was recovered from these features.
- 4.18 A series of parallel linear features (MBD13976) was recorded during an archaeological excavation (EBB1211) c.120m east of the study site's eastern

³ Ibid

⁴ Ibid

⁵ Ibid

boundary. The excavation provided evidence for a rectangular ditched enclosure system with an integral trackway, 40 pits, a well and a possible kiln, all believed to be of an Iron Age date. A cemetery consisting of 38 graves was dated to the Roman period.

- 4.19 The findspots of Iron Age pottery (MBD22447) and an Iron Age coin (MBD266) were recorded c.300m west of the study site's western boundary, although the exact findspot is unknown.
- 4.20 A pit containing burnt stones, animal bone and pottery (MBD977) was found during agricultural drainage operations c.200m west of the western boundary of the southern area of the study site. The pottery mostly dated from the Iron Age, with some early Roman material, including a mortarium urn.
- 4.21 The findspot of Iron Age pottery (MBD246) was recorded c.600m north-east of the study site's northern boundary.
- 4.22 As part of the Biddenham Loop/Land west of Kempston large scale archaeological investigations (see also 4.12) eight middle Iron Age farmsteads (MBB18918) were recorded within the Loop. All were situated on previously unoccupied land, close to the present course of the River Great Ouse. The farmsteads were all on the periphery of the middle Bronze Age field systems and therefore it is presumed that some fields remained in use. Activity away from the farmsteads was limited to dispersed features which included storage pits and burials. They are presumed to represent areas of short-term or seasonal activity, such as grain storage or the corralling of animals. To the west of Kempston one possible farmstead was located, as well as two activity foci and a major boundary. Two late Iron Age/early Roman farmsteads (MBB18919) were identified within the Biddenham Loop during excavation, with three others identified on the basis of non-intrusive survey. They were close to, but not exactly in the same place, as the middle Iron Age farmsteads. They were more extensive than the earlier farmsteads and usually comprised at least one ditched enclosure. Both cremation and inhumation burials occurred in the periphery of the settlement areas. Away from the farmsteads there was evidence for dispersed and isolated activity, including field systems, short-term occupation and a possible shrine. The findspot of a fragment of a 1st century Iron Age bowl (MBD15224) was recorded in the Biddenham Loop area. At land west of Kempston two contemporary farmsteads were identified. This suggests that the extensive Roman settlement centred on Kempston Church End may have originated in this period. Within the 1.5km study area, seven discreet areas of an extensive Roman settlement (MBB18920) present on both the Biddenham Loop (MBD3663), c.500m east of the study site's eastern boundary, and to the west of Kempston, c.750m south-east of the study site, were recorded. The evidence on the Loop comprised two farmsteads, trackways, a major boundary (MBB22176) and a number of burials including an unusual bustum type. On land west of Kempston trackways, field systems and bedding trenches were identified. The most extensive Roman features and finds were found within the known major settlement centred on Kempston Church End. On the basis of recent and previous investigations and non-intrusive survey, the overall extent of the Roman settlement is now known to be over 17 hectares. The findspot of Roman pottery sherds (MBD14800) was recorded in the Biddenham Loop area, c.500m east of the study site; immediately to the south of that findspot, further Iron Age and Roman pottery, including cremation urns (MBD325) were recorded. The findspots of Roman coins, a ring and a brooch (MBD14813) and Roman pottery and fragments of roof and flue tiles (MBD15302) were also recorded within the Biddenham Loop.
- 4.23 The findspot of 18 Roman bronze coins from the 3rd to 4th century (MBD15220) was recorded c.1.5km north-east of the study site.

- 4.24 The findspot of parts of two Roman bow brooches from the 1st century, 63 late Roman bronze coins and a spindlewhorl (MBD15980) was recorded c.1.4km south of the study site.
- 4.25 Metal detecting at Walnut Tree Cottages, c.1.4km south-east of the study site, produced 99 coins and a spindle whorl of a Roman date (MBD15928), as well as fragments of two 1st century brooches.
- 4.26 Archaeological investigations (EBC314, EBD315 and EBB582) were carried out c.1.4km north-west of the study site, prior to the creation of a golf course. Evidence for occupation of the site from the Iron Age and into the Roman period (MBD16303) was recorded.
- 4.27 An Iron Age or Roman rectilinear enclosure (MBD16506) is visible as cropmarks on historic aerial photographs in a location c.1.5km north of the study site.
- 4.28 A substantial Roman building (MBD245), likely a villa, was first investigated in 1937 (EBB1166) c.1.4km north of the study site. Aerial photographs taken in 1966 showed rectilinear enclosures in the vicinity of the building, which may be contemporary field systems.
- 4.29 Based on the available evidence from nearby archaeological investigations it is considered that there is a moderate to high potential for archaeological remains dating to the Iron Age/Roman periods to be present within the study site.

Saxon and early Medieval

- 4.30 During the archaeological investigations on the Biddenham Loop and at land west of Kempston (see 4.12 and 4.22) early Saxon activity was identified (MBB18921) c.500m east of the study site's eastern boundary. Adjacent to the present-day course of the River Great Ouse evidence for an early Saxon settlement was identified, which comprised 20 sunken-floored buildings. The findspot of an Anglo-Saxon brooch in the shape of a hammer (MBD15303) was recorded c.1.5km east of the study site, in the Biddenham Loop area. Evidence within land west of Kempston comprised mainly dispersed pits and postholes. Saxo-Norman activity (MBB18922) was also recorded from land west of Kempston, c.700m south-east of the study site's southern boundary, indicating continuity of occupation. While not unknown in the region, such an occurrence is unusual because earlier settlements tend to be deserted in favour of new locations in the 7th century. Evidence for this is indicated by the abandonment of settlement SL162 on the Biddenham Loop. All the evidence for the Saxo-Norman settlement was located to the west (SL168) and east (SL169) of The Bury (MBD3667 and NHLE 1450363 – listing application rejected in 2012) on land west of Kempston, where development commenced in 2010. SL169 was situated in the same area as the early Saxon settlement (MBB18921). The two areas of settlement were quite different in nature – to the west SL168 comprised small enclosures, while to the east SL169 was largely unenclosed. Although c.200m apart, it is possible that they were both part of a larger settlement, the intervening was not part of the development and was therefore not excavated. SL169 with its drying ovens and pits may have been located on the periphery of the main settlement.
- 4.31 The findspot of 47 fragments of Saxo-Norman or medieval pottery sherds, two pieces of tile and one medieval limestone roof slate, as well as an iron socketed spearhead (MBD15306), which may be of an early medieval date, was recorded c.300m north of the study site's northern boundary.

- 4.32 During the construction of the Bedford Orbital Sewer in 1992, an Anglo-Saxon inhumation cemetery (MBD22640) was excavated c.300m west of the study site's western boundary.
- 4.33 It is considered that on present evidence the potential for the study site to contain significant remains from this period is low to moderate. If the settlement core was indeed located c.700m south-east of the study site's southern boundary, the study site itself may have been in agricultural use.

Medieval

- 4.34 The National Mapping Project (NMP) recorded three areas of potential medieval ridge and furrow cultivation (ref. 1607103, Figure 2c) within the central and eastern portions of the study site, however no evidence for this was observed on the lidar data.
- 4.35 The shrunken medieval settlement of Kempston West End (MBD16872), covering an area in the north-west corner of the study site and to the west of it, is now mainly occupied by post-medieval farms.
- 4.36 An area of medieval ridge and furrow cultivation (MBD3665) was recorded c.200m west of the study site's western boundary. Eight further areas of medieval ridge and furrow (all recorded under MBD3665) were recorded within the 1.5km study area. Two further areas of medieval ridge and furrow (MBD5089) were recorded c.1.5km north-west of the study site.
- 4.37 Documentary evidence suggests a medieval/post-medieval settlement (MBD11622) immediately east of the study site's north-eastern boundary, with most, if not all, of the referenced buildings now demolished. In the same area, areas of medieval ridge and furrow cultivation (MBD3665) were also recorded from field survey and aerial photographs. Immediately to the north of the probable settlement, the site of a former medieval village green (MBD11624) was recorded. The site of a now demolished medieval manor house (MBD11677) was recorded c.350m north-east of the study site's north-east corner, surrounded by areas of medieval ridge and furrow (MBD3665).
- 4.38 A former roadway (MBD11520) of possible medieval origin, which had gone out of use by 1848, was recorded immediately north of the study site. Earthwork remains (MBD11519) related to the former road were recorded just inside Hanger Wood, c.800m north of the study site's northern boundary and it is possible that this road originated as a prehistoric ridgeway (see MBD7266). To the north of the earthwork remains of a sub-rectangular platform (MBB21928) of probable medieval date and uncertain function, but possibly of Iron Age or Roman origin, is visible as earthworks on remote sensing data mapped as part of the Bedford Borough NMP project (ref. 1608460 on Fig. 2c). Hanger Wood ('hanger' means a wood on a hill; MBD7266) provided timber and underwood for the village during the Middle Ages. Its antiquity can be seen in the sinuous boundaries, especially at the south-western end, and in the rich composition of species. Its south-east boundary is of particular historical interest, as it lies along the ridge-top and parish boundary, along the line of the ancient, possibly even prehistoric, ridgeway, mentioned above.
- 4.39 A small nucleus of buildings, dominated by Kempston parish church, the vicarage and school (MBD11560) is recorded c.300m east of the study site's south-eastern boundary. Archaeological watching briefs (EBD536 and EBB1345) were carried out in the area in 2009 and 2016 respectively, and medieval pottery was recovered during the former. The Domesday survey of 1086 recorded Kempston as a settlement of 38 households, putting it in the largest 20% of settlements recorded

in the survey.⁶ The name Kempston was recorded as ‘*Camestone*’ in 1086, possibly meaning ‘farmstead at the bend’.⁷

- 4.40 A possible medieval trackway (MBD7327), contiguous with a former field & parish boundary, and subsequently ploughed out, was recorded c.500m south of the study site’s southern boundary. The site of another former medieval trackway (MBD11523) was recorded c.750m south-west of the study site’s south-west corner.
- 4.41 Curvilinear sections of medieval wood boundary banks and ditch (MBB22029) are visible as earthworks on remote sensing data in a location c.680m west of the study site’s south-west boundary and were mapped as part of the Bedford Borough NMP project (1606812, Fig. 2c).
- 4.42 The medieval ancient woodland of Kempston Wood and Ransome’s Wood (MBD11573) with well dated associated earthworks was recorded c.700m south-west of the study site’s western boundary. Although only a fragment of its original extent, Kempston Wood has the distinction of being one of the rare woods in which the origin of features can be precisely dated. Immediately to the north of the ancient woodland the medieval (MBD11521) settlement and village green as well as the post-medieval (MBD11579) settlement of Kempston West End were recorded. Within the settlement extent, the sites of the demolished West Leys Farm (MBD11595), Lower Dines Cottage (MBD11673) and Ball’s Cottage (MBD11564) were recorded. Estate Cottages (MBD9039), a pair of mid-19th century red brick estate cottages, are still extant.
- 4.43 The possible site of a demolished medieval watermill (MBD11513, MBD8131) was recorded c.1.4km north-east of the study site.
- 4.44 By the medieval period the majority of the land on the Biddenham Loop and land west of Kempston was open fields associated with nearby villages. Evidence for medieval activity within the investigation areas (EBB572) comprised furrows and headlands associated with open field systems (MBB18924). The only settlement identified within the investigation area was situated to the west of Kempston. The findspots of a medieval bronze mount and a fragment of a probable foot of a skillet or a cauldron, as well as one iron object (MBD15913) and a number of medieval bronze finds (MBD14814) were recorded in the Biddenham Loop area. The possible site of a medieval watermill with a dam and sluice (MBD8117) in a location c.460m east of the study site’s eastern boundary, was also recorded within the Biddenham Loop.
- 4.45 The findspot of medieval pottery (MBD15276) was recorded c.600m south-east of the study site’s southern boundary, near The Bury (NHLE1450363). In 2012 an archaeological evaluation (EBB885) was undertaken at The Bury. Fourteen trenches were excavated and one certain and one possible Roman field ditch, along with a small quantity of residual Roman pottery, were recorded. An undated cremation burial and some undated ditches may have also been of Roman date. A small number of medieval ditches (MBB21752) and pits (MBB21751, MBB21753), containing 12th-13th century pottery, were also recorded. The evidence suggests agricultural rather than settlement activity. It has frequently been suggested that The Bury represents the location of the manorial complex associated with Kempston Brucebury. However, other than the possible fishpond (MBB18924) – an important element of a medieval manorial complex – in 2010 (EBB652) there was no clear archaeological evidence for structures or finds to suggest that this was the

⁶ <https://opendomesday.org/place/TL0147/kempston/>

⁷ Mills, A.D. 2011. *A Dictionary of British Place Names*, Oxford University Press

case.⁸ However, in 2017, during an archaeological excavation (EBB1024) along the Biddenham Loop Reinforcement Water Main, c.650m south-east of the study site's southern boundary, the remains of at least three medieval buildings were recorded. It was suggested that this settlement may have been of some status, perhaps associated with one of Kempston's three documented manors.

- 4.46 In light of the fact that the study site likely lies beyond the medieval settlement core, which may have been located to the south-east of the study site, it is considered that the potential for significant remains from this period is low. Any archaeological finds or features are likely to be associated with farming practices.

Post Medieval and Modern

- 4.47 Within the study site, the site of the former Rushway ford (MBD11734) was recorded along the large area's southern boundary and the small area's northern boundary respectively.
- 4.48 Rays Cottages (MBD9046) and Jasmine's Cottages (MBD9045), both mid-19th century estate cottages are located off West End Road, immediately north of the study site and may have to be considered as part of a future heritage statement.
- 4.49 Kempston Cemetery (MBD8915) was opened in 1877/78 in two acres of glebe land at the foot of Green End Hill, c.80m south of the southern boundary of the study site's southern area. In the cemetery, a human skeleton of 19th century date (MBD11590) was found, along with a knife. It was concluded that the body was buried prior to the area being developed into a cemetery.
- 4.50 The site of a Victorian brickworks and claypit (MBD2560) was recorded c.120m south-west of the southern area of the study site. The post-medieval settlement (MBD11558) at Green End, Kempston was recorded to the south of the brickworks.
- 4.51 The site of a demolished 17th century vicarage (MBD11592) was recorded c.400m east of the study site's eastern boundary and c.500m north of the parish church. A new vicarage (The Old Vicarage, Grade II, NHLE1321544) had been constructed by 1846 c.60m north of the church, which has since been replaced with a new, smaller vicarage building (c.120m south-west of the church) as well.
- 4.52 The post-medieval (MBD11579) settlement of Kempston West End was recorded c.500m west of the study site's north-west corner. Within the settlement extent, the sites of the demolished West Leys Farm (MBD11595), Lower Dines Cottage (MBD11673), Leach's Farm (MBD11856) and Ball's Cottage (MBD11564) were recorded. Estate Cottages (MBD9039), a pair of mid-19th century red brick estate cottages, are still extant.
- 4.53 17th century charity deeds for Kempston record the presence of both a ford (MBD814 and NHLE1005412 scheduled monument) and a bridge (MBD11527, Figure 2b) crossing the River Great Ouse c.600m south-east of the study site's south-east corner. The 1804 enclosure map shows the bridge on the site, but it had gone by 1848, possibly due to floods. The visible remains may be either part of the bridge or the ford.
- 4.54 There are no pre-enclosure maps that show Box End in any detail. It is likely, however, that the study site consisted of one or more large common fields divided into open strips, until the enclosure acts saw the land being parcelled up into smaller units. In Bedfordshire this was predominantly done by Acts of Parliament in the last quarter of the 18th century and the first quarter of the 19th century.

⁸ East Anglian Archaeology, Report No. 156, 2016, Albion Archaeology, Close to the Loop. Landscape and settlement evolution beside the Biddenham Loop, west of Bedford, Mike Luke https://archaeologydataservice.ac.uk/archiveDS/archiveDownload?t=arch-2304-1/dissemination/pdf/aaa/vol_156/EAA_156_Bedford_West.pdf

- 4.55 Kempston was enclosed under an Act of 1802. The 1804 Kempston Rural enclosure map (Figure 5) shows the study site split into several fields. The majority of these appear to be owned by Frederick W. Foster Esq. The southern section, separated from the main section by the B560, appears to have belonged to Robert Hewland Esq. Two small structures, now demolished, are shown within the study site, adjacent to the eastern boundary and opposite Box End House (Grade II* listed, NHLE1159567). A valuation in 1927 under the Rating Valuation Act 1925⁹ stated that the orchard and kitchen garden of Box End House were located across the road and included a greenhouse and potting shed, therefore the structures shown on the 1804 map could have been earlier versions of those. The map is a black & white copy, so it is not possible to group the fields accurately and attach them to any specific farmhouse based solely on the map's shading. Neither the enclosure award nor a transcription is currently available, so the only information about ownership is the names of Foster and Hewland printed directly onto the map. The Frederick W. Foster referred to on the map is likely Frederick William Foster, who lived on a farm at Up End, Kempston and was Bishop of the Moravian Church in the parish. An abstract of title (BARS Ref. P60/11/1a) states that the Kempston enclosure award of 4 November 1804 allotted a 9-acre piece of land in Box Meadow and a further seventy-two acres in Box End Field to Frederick William Foster. Various other deeds (BARS Ref. X732/129-136) indicate that the Foster Family owned Box End Farm during the 19th century, so it is likely that parts of the northern section of the study site were associated with Box End Farm at least during the that century. The Box End farmhouse is now known as The Clock House (NHLE1321548) and was associated with the Barn at the Clock House (NHLE1114287) and the Groom's Cottages (NHLE1159604). It seems the Carter Mitchell family of Box End House may later have acquired the farm, as the Carter Mitchell estate papers include a terrier and plan of Box End Farm dating from the 19th century (BARS Ref. ST735). Box End House had belonged to the Carter family during the 16th-18th centuries, and it eventually descended to the Carter Mitchells in the 19th century though for some years prior to 1847 it is believed to have been let as a farmhouse.¹⁰ No references to Robert Hewland, whose name appears on the enclosure map across the southern section of the study site, have been found in the archive catalogues¹¹, so it has not been possible to establish any link between the land comprising the southern portion of the study site and any of the nearby listed buildings in Kempston and Biddenham.
- 4.56 In the absence of a comprehensive tithe survey for Kempston Parish and without being able to access the enclosure award,¹² it is difficult to determine whether any other parts of the study site were connected to any of the nearby farms or were glebe land belonging to either the vicar of All Saints Church in Kempston (NHLE1114281) or the vicar of St James Church in Biddenham (NHLE1158130). No glebe terriers have been found in the archive catalogue¹³ that refer specifically to Box End.
- 4.57 The dispersed settlements of the various 'Ends', such as Church End, West End, Box End and Green End are likely to have expanded and contracted over time. The Ends were linked by a system of trackways, which were straightened or

⁹ <https://bedsarchives.bedford.gov.uk/CommunityHistories/KempstonRural/BoxEndHouse.aspx>

¹⁰ <https://bedsarchives.bedford.gov.uk/CommunityHistories/KempstonRural/BoxEndHouse.aspx>

¹¹ Bedfordshire Archives & Records Service and The National Archives, Kew

¹² The archives are currently shut due to Covid restrictions

¹³ Bedfordshire Archives & Records Service

abandoned, while new ones were created as part of major improvements to the road network undertaken from the early 19th century.¹⁴

- 4.58 The 1815 Ordnance Survey Drawing (Figure 6) by William Hyett shows the study site on the west side of Box End Road between the Church End and Box End hamlets. The now demolished structures are still shown within the study site, adjacent to Box End Road, along the eastern boundary. Drains are shown flowing west-east across the centre of the study site as well as along the southern boundary of the main portion of the study site, along the B560, towards the River Great Ouse. A slight loss of field boundaries had occurred in the south-east corner of the study site.
- 4.59 By 1883-85, as shown on the Ordnance Survey Map (Figure 7), two small structures adjacent to the study site's eastern boundary are shown immediately south of a small orchard. Field boundaries had been reinstated in the south-east corner of the study site. Two footpaths are shown in the north-west section of the study site, and there appears to be a third one in the north-east section of the study site.
- 4.60 The 1902 Ordnance Survey Map (Figure 8) shows the loss of a field boundary in the study site's centre. Only one small structure is visible near the study site's eastern boundary, south of the small orchard. A much larger orchard had been planted immediately east of the study site's north-east boundary. Footpaths are shown in the smaller, southern, portion of the study site as well as along its western boundary.
- 4.61 By 1927 (Figure 9) an area of which the smaller, southern, portion of the study site is part of is labelled as 'allotments.' A small area near the study site's centre is shown to be in use as a sand quarry, with a track leading from the quarry to the study site's southern boundary.¹⁵ One small structure is still visible adjacent to the study site's eastern boundary.
- 4.62 No change is visible on the 1938-48 Ordnance Survey Map, as shown on Figure 10.
- 4.63 By 1960 (Figure 11) the sand quarry appears disused. An overhead electricity line runs north-east/south-west across the study site's centre. Construction of residential properties had commenced off Box End Road, to the east/north-east of the study site as well as off West End Road, immediately north of the study site. One small structure is still visible adjacent to the study site's eastern boundary.
- 4.64 The 1972 Ordnance Survey Map (Figure 12) shows that field boundary loss had occurred across the study site. A track is shown leading to the former sand quarry area near the study site's centre. Three electricity pylons are shown within the study site. The smaller, southern, portion of the study site is no longer labelled as 'allotments'. The developments to the east/north-east as well as to the north of the study site had been completed. The potential greenhouse/potting shed associated with Box End House is not shown anymore adjacent to the study site's eastern boundary and neither is the small orchard.
- 4.65 Further field boundary loss had occurred in the main part of the study site by 1999, as shown on the Ordnance Survey Map (Figure 13).

¹⁴ East Anglian Archaeology, Report No. 156, 2016, Albion Archaeology, Close to the Loop. Landscape and settlement evolution beside the Biddenham Loop, west of Bedford, Mike Luke

¹⁵ Conversation with the landowner of over 50 years: "Approximately 0.25 acre in use as a sand quarry pit prior to and after WWII. Allegedly filled with ash from WWII camp east of Bedford as well as building rubble. A small railway transported the sand to the study site's south-east corner."

- 4.66 By 2020, as shown on the Ordnance Survey Map (Figure 14) and Google Earth (Figure 15), further field boundary loss had occurred in the north-east and south-east parts of the study site. The study site remains undeveloped agricultural land.
- 4.67 The study site lies between known historic settlements and it is considered that it has been in agricultural use since the post-medieval period. There is a known potential for the remains of the small post-medieval/modern structures visible adjacent to the study site's eastern boundary on historic mapping. The potential for significant archaeological finds and features from the post-medieval and modern periods is considered to be low for the remainder of the study site.

Past Impacts, Summary of Archaeological Potential and Assessment of Significance

- 4.68 Past impacts within the study site comprise general historic ploughing/agricultural activity, which may have impacted sub-surface remains across the study site. Modern clay drains extend across the study site, and their installation may also have had an impact on sub-surface remains. The digging of the sand quarry and the removal of field boundaries in the 20th century will have had a localised impact. The construction and demolition of the small structures adjacent to the study site's eastern boundary will also have had a localised impact.
- 4.69 A review of the available evidence has confirmed that the study site contains three non-designated archaeological assets in the form of Kempston West End medieval settlement (MBD16872) in the north-west corner, a potential rectangular building on uncertain date and function (MBB22022), visible only as cropmarks, near the study site's centre, and the site of a former post-medieval ford (MBD11734) along the southern boundary of the main part of the study site and the northern boundary of the southern, smaller, part of the study site.
- 4.70 Based on proximity to known archaeological sites the study site has a moderate to high potential for prehistoric and Iron Age/Roman remains, a low to moderate potential for Saxon/early medieval remains and a low potential for the post-medieval and modern periods. There is a known potential for the remains of the small post-medieval/modern structures visible adjacent to the study site's eastern boundary on historic mapping. Based on available evidence, prehistoric remains are considered likely to comprise unstratified prehistoric flint artefacts and/or settlement activity of Local to Regional significance; there is considered low potential for remains of National Significance that would pose a design or planning constraint.

- 4.71 This assessment will consider the potential effects of development within the study site on the significance of built heritage assets. Heritage assets and potential impacts will be assessed using best practice, including that set out in Historic England guidance on setting (Historic England 2017).
- 4.72 There are no strict parameters for the setting of study areas. This has been defined based on the results of the site visit, professional judgement and experience of potential significant direct and indirect effects likely to arise from the proposed development.
- 4.73 A radius of 1.5 km from the boundary of the study site has been used for assessing indirect effects on all non-designated and designated heritage assets.
- 4.74 The distribution of built heritage designated heritage assets in relation to the study site can be found in Figure 4. The area beyond this radius was also reviewed to determine whether the Grade I listed Parish Church of St James (NHLE1158130) in Biddenham, c.1.6km north-east of the study site, merited further consideration in this assessment, however, it was found that it did not, due to distance and intervening topography, development and vegetation.
- 4.75 A site visit was undertaken on 10th March 2021 to assess the setting of nearby designated heritage assets. The conditions were cloudy, rainy and windy with good visibility. Additional desk-based assessment using Google Earth and Bing maps was also utilised.

Designated assets not requiring assessment

- 4.76 Not all built heritage assets within the study area will require full assessment for impacts on an individual basis; where a heritage asset has been excluded, a clear justification will be provided, for example, if the asset is sufficiently far, and well screened from the study site. Also, not all assets will require the same level of assessment: the level of detail will be sufficient to inform the nature and degree of effect of development within the study area on the significance of the heritage asset in question.
- 4.77 In the majority of cases there is no intervisibility with the study site, due to topography, vegetation and/or intervening residential development. For this reason, it is clear that no harm to the significance of the following assets would result from the proposed development: Lodge to Kempston Bury (NHLE1321576); Garden walls, piers, gates and railings at Kempston Bury (NHLE1321575); 32 Green End Road (NHLE1321545); 42 Green Road (NHLE1114283); 56 Green Road (NHLE1321546); The Cottage, Kempston House (NHLE1114284); Kempston House (NHLE1114285); Ramsay Cottage (NHLE1321547); Tithe Farmhouse (NHLE1114286); The Old Vicarage (NHLE1321544); Church End Cottages (NHLE1114282); Orchardside (NHLE1159576); The Owl's Nest (NHLE1114280); Lodge to Crossland Fosse (NHLE1321543); Crossland Fosse (NHLE1310989); Rushey Ford House (NHLE1310966); Barn at Rushey Ford House (NHLE1114288); Threeways Farmhouse (NHLE1300794); Paved ford 400 yds SE of Kempston Church (NHLE1005412). Due to distance, orientation and intervening vegetation, no non-visual impacts are anticipated. As such, further assessment is not necessary.

Designated assets requiring assessment

- 4.78 The following designated assets have the potential to be affected by the proposed development.

Box End House (Grade II NHLE 1159567)*

- 4.79 Box End House is a Grade II* listed building located c.25m east of the study site's eastern boundary. The listing describes the house as follows:

A late C16 timber-framed house probably of H-plan in origin but with right-hand cross wing removed and the gable end built up with stone rubble and the left-hand wing extended forward for one bay in the C17 or early C18. In 1847 a new principal range was built parallel with the original, facing south. The original main wing is of two storeys with heavy close studding exposed to front and internally on former rear elevation. Old clay tile roof. 2 storey central gabled porch timber-framed and open on ground floor. Cross-mullionea timber casements with leaded lights. Large stone chimney stack inserted into left end with tall paired-shaft brick chimney stack, probably late C17. The surviving cross wing has 2 bay C17 or early C18 timber-framed addition to left hand with external stone chimney stack. The 1847 range is of 2 storeys coursed stone rubble with ashlar dressings, Jacobean detailing. Gabled tile roof with saddlestones and kneelers, crowned by chimneys with octagonal pairs of shafts. 3 bay south garden front with 4-light lozenge-leaded stone mullioned transomed windows to ground floor. 3-light similar windows, with 2-light to centre, on first floor breaking through corbelled eaves, with kneelers and finialed gables. Central shallow porch with moulded lintel and 3-light windows over. A weathered string is carved across the ground floor, stepped up over window and porch. In one of the first floor rooms is an early C17 wall-painting. It represents a bull-baiting scene, with a charging bull in the centre surrounded by dogs, horsemen and hunters. The painting is executed in monochrome distemper with the bull's and dogs' tongues coloured red.

- 4.80 The significance of the house resides in architectural and historic interest as an example of a late 16th century house. It was originally known as Snipe Hall and belonged to the Carter family from 1546, before descending to the Carter Mitchells, probably in the 18th/19th century. For some years before 1847 it was let as a farmhouse and in that year the house was extended. In 1927 Kempston Rural was valued under the Rating Valuation Act 1925; each piece of land and building was valued to determine the rates to be paid on it. The valuer of Box End House noted that the orchard and kitchen garden were across the road (within the study site, see Figures 5 - 11) and totalled 0.342 acres; they included a greenhouse measuring 30 feet by 10 feet and a potting shed.¹⁶ Small structures can be seen on the historic mapping in the small parcel of land opposite Box End House, which are likely the greenhouse and the potting shed. The smaller of the two parcels of land measures indeed 0.3 acres, and the larger parcel, immediately to the north comprised the orchard. Therefore, this small area of land within the study site has a direct historic ownership link to Box End House.

- 4.81 The study site does not form part of the setting of Box End House visually. Trees fronting the road create an enclosed feel to Box End House and it is severed from the study site to the west. There are no views from the study site to Box End House and vice versa. The open countryside to the west of Box End House formed an element of its wider setting since the 16th century, however, the historic mapping shows that planting in the form of coniferous trees had been introduced along the house's plot boundary by 1972 (Figure 12), and any views into and out of Box End House would have been blocked. Therefore, a complete lack of intervisibility, due to vegetation, means that the study site does not have a positive contribution to the significance of the house.

West End Farmhouse (Grade II NHLE 1159618)

- 4.82 West End Farmhouse is a Grade II listed building located c.330m west of the study site's north-west corner. The listing describes the house as follows:

C16 timber-framed house which is rendered with colourwashed roughcast. Minor alterations late C18 or early C19. Old clay tile roof. T-plan. Cross-wing to LH side has large external chimney stack to SW elevation. Two storeys and attics. Cross wing has attic sash window in gable end, main wing has attic roof lights. 3-light sash window with glazing bars to first and ground floor cross-wing. Main wing has

¹⁶ <https://bedsarchives.bedford.gov.uk/CommunityHistories/KempstonRural/BoxEndHouse.aspx>

similar windows to right hand side. To left there is a single-light casement to each floor. Central C19 gabled porch with carved bargeboards.



Plate 1 View of West End Farmhouse from near the study site's western boundary

- 4.83** The significance of the farmhouse resides in its vernacular architectural interest as an example of an unpretentious agricultural building which exhibits local materials and detail and in its historic interest as part of the early settlement in Kempston West End, showing the hamlets agricultural history. The building dates from the 16th century, making it one of the oldest in the area. At the time of writing, it was not possible to determine whether West End Farmhouse has a historic ownership link with the study site. The northern, eastern and southern plot boundaries are lined by trees/shrubs and the western boundary comprises a low brick wall and shrubs. The T-shaped building is set back from the road and sits near the plot's centre. The setting of the house comprises its garden and the open fields to the north and south of it, and it is within this area where the setting has a strong positive contribution to the significance of the house. Due to a combination of intervening vegetation and the orientation of the building, West End Farmhouse has extremely limited intervisibility with the study site and therefore the study site in its current state is considered to make a neutral contribution to the setting, with no material contribution to the significance of the asset.

Top Farmhouse (Grade II NHLE 1321549)

- 4.84 Top Farmhouse is a Grade II listed building located c.125m north of the study site's northern boundary. The listing describes the house as follows:

C18 house. Exterior of colourwashed roughcast. Hipped old clay tile roof. Two projecting rear wings with double-pitched hipped roof. Two storeys. First floor has three sash windows with glazing bars and architrave surrounds. Two similar ground floor windows. Cut bracketed doorhood.



Plate 2 View from the study site towards Top Farmhouse

- 4.85 The significance of the farmhouse resides in its architectural interest as an example of an agricultural building which exhibits local materials and detail. Alterations to the farmhouse were carried out during WWII. In 1991 an exterior wall was reconstructed. The West End Road frontage is lined by a hedge and the building is set back from the road by c.120m. A footpath is shown on the 1883-85 Ordnance Survey Map (Figure 7) which appears to lead from the farmhouse, across West End Road onto the study site. Top Farmhouse was owned at the turn of the century by farmer Charles Frossell, who also acquired Box End Farm (now named The Clock House, NHLE1321548) in 1911 (BARS Ref. BMB14/A82). The rural and agricultural wider context of the landscape generates a degree of illustrative context to the farmhouse, however, in absence of a tithe survey or

enclosure award¹⁷ a historic ownership link cannot be securely established. There is therefore no confirmed historic functional relationship between the asset and the study site and its contribution in terms of illustrative value is lessened. The very north-west corner of the study site forms a minor element of the setting of the farmhouse, however due to intervening vegetation and distance the house can only be glimpsed from the study site and therefore the study site does not contribute to the significance of the Top Farmhouse.

The Clock House (Grade II NHLE 1321548) Barn at the Clock House (Grade II NHLE 1114287) and Groom's Cottage, stables, fodder store and carriage shed the Clock House (Grade II NHLE 1159604)

- 4.86 The Clock House is a Grade II listed building located c.100m north-east of the study site's north-east corner. The listing describes the house as follows:

Early C18 house, E gable end has a datestone 1723. Extended and altered late C19. Red brick with double pitched old clay tile roof. Two storeys and attics. Two hipped dormers with tile hung cheeks. Modillion eaves cornice. Central projecting section surmounted by pediment. 2:1:2 C19 sash windows to first floor. Ground floor built out and heavy porch added in 1884. One storey C19 extension to E gable end.



Plate 3 View from the study site towards the Clock House

¹⁷ Currently not accessible due to archive closure

- 4.87 The Barn at the Clock House is a Grade II listed building located c.85m north-east of the study site's north-east corner. The listing describes the barn as follows:

Late C17 or C18 barn. Red brick with some grey headers. Old clay tile roof with tile gable coping. Sunk clock face in E gable with eaves band below. Three modern doorways in N elevation. Listed for group value with the house.

- 4.88 The Groom's cottage, stables, fodder store and carriage shed at the Clock house are Grade II listed structures and are located c.105m north-east of the study site's north-east corner. The listing describes them as follows:

Range of late C19 outbuildings arranged around three sides of a square and abutting the N.W. corner of the house. They consist of groom's cottage, stables, fodder store and carriage shed. All are built of local mottled red brick with either slate or pantile roofs. The whole range is single storey. The E. range has one cast iron lattice casement and two casements with glazing bars. Simple tongued and grooved plank door with rectangular fanlight. N stables have five doors under slightly cambered heads. R.H. modern garage doors. Barn is to L.H. side of this range with five steps up. W. carriage shed on moulded brick pillars, and loose box. Included for group value.

- 4.89 The significance of the Clock House, the associated barn, cottage and outbuildings resides in its architectural interest as an example of a farmhouse built in the Georgian style. Some Georgian landowners were at the forefront of the agricultural revolution, turning their home farms and/or tenant farms into model farms, built on a courtyard plan. Some were designed by notable architects and books of plans were published in the 18th and 19th centuries.¹⁸ The Clock House was labelled as 'Box Farm' on historic mapping (Figures 7 – 13) and is only labelled as Clock House on the 2020 Ordnance Survey Map (Figure 14). An abstract of title (BARS Ref. P60/11/1a) states that the Kempston enclosure award of 4th November 1804 allotted a 9-acre piece of land in Box Meadow and a further seventy-two acres in Box End Field to Frederick William Foster. Various other deeds (BARS Ref. X732/129-136) indicate that the Foster Family owned Box End Farm during the 19th century, so it is possible that parts of the northern section of the study site were associated with Box End Farm at least during that century. Therefore, there may be a historic ownership link between the study site and the Clock House, however, until archives re-open, this cannot be determined with certainty. Census records for 1891 have no 'Box Farm' but there is a 'Box End Farm' that is listed just after the cottages at West End, which is to the northwest side of the study site. The census route seems to move east along West End Road from West End to Box End Farm, then down along Box End Road to Box End House. Box End Farm is household number 103 while Box End House is household number 132, quite some distance away. None of the farmhouses are named in the 1871, 1881 or 1901 census, which means it is difficult to make further comparisons, though in the 1911 census the household identified as 'Box End Farm' again is near to West End Farmhouse, suggesting it was on the north/northwest side of the study site while again Box End House is more than twenty households away. One of the LaTrobe/Foster deeds in Beds Archives (Ref. X732/129-136) says that Box End Farm was let to Charles Frossell in 1906 and he appears in the 1911 census as the owner of 'Box End Farm up near West End Farm' (BARS Ref. BMB14/A82). He also owned the Top Farmhouse at the turn of the century. The northern, eastern and western plot boundaries are fully or partially lined by trees, and the southern plot boundary comprises a brick wall and trees/shrubs. The setting of the house and outbuildings comprises of the plot and the orchard to the south of it, and it is within this area where the setting has a strong positive contribution to the significance of the house. Due to a combination of intervening vegetation the Clock House and all associated outbuildings have extremely limited intervisibility with the study site and therefore the study site in its current state is considered to make a neutral contribution to the setting, with no material contribution to the significance of the asset.

¹⁸ <https://historicengland.org.uk/advice/hpg/heritage-assets/sources/> AND <https://www.buildinghistory.org/buildings/farms.shtml>

Church of All Saints (Grade I NHLE1114281)

- 4.90 The Church of All Saints is a Grade I listed building located c.300m east of the study site's eastern boundary (of the southern, smaller, portion of the study site). The listing describes the church as follows:

Parish church of coursed limestone rubble. Much of the church is C15 and Perpendicular although there are remains of Norman work at the base of the West tower and in the chancel where there are blocked Norman windows. The 3-bay arcades are Early English. The upper storey of the tower, nave and chancel are all C15, as is the two-storey south porch which has a tierceron-star vault. The nave wall has two painted panels depicting the Creation of Eve, the Temptation, Discovery and Expulsion.



Plate 4 View from the study site towards the Church of All Saints

- 4.91 The significance of the church resides in its architectural and historic interest as an example of a parish church with Norman origins. The setting of the church comprises of the churchyard, which is surrounded by mature trees and approached via Church End, a tree lined road. Due to intervening vegetation in the form of mature trees views of the study site from the church itself are not possible. The very top of the church tower and the weathervane on top of it can just be glimpsed from the study site if the observer knows what they are looking for. The views from

the study site towards the church are not designed views and they do not have a positive contribution to the significance of the church. Therefore, the proposed development would not result in change to the setting of the church.

4.92 In the absence of a comprehensive tithe survey for Kempston parish and without being able to access the enclosure award, it is difficult to determine whether any part of the study site was glebe land belonging the Church of All Saints. No glebe terriers have been found in the BARS catalogue. Vicarage Farm (non-designated heritage asset MBD8731, Figure 2b) is located immediately south of the study site's south-east corner and it is plausible that Vicarage Farm was historically in the ownership of the Church of All Saints. The current owner of Vicarage Farm also owns the study site, therefore there is the potential for a historic ownership link between the church and the study site.

5.0 Proposed Development and Predicted Impact on Designated and Non-Designated Heritage Assets

Site Conditions

- 5.1 The study site is currently in agricultural use.

The Proposed Development

- 5.2 Currently no detailed development proposals are available, however, this document has been prepared to support a promotion of the study site as allocated land in the Bedford Borough Local Plan and residential development with associated access, parking, landscaping and open space would be proposed.

Potential Archaeological Impacts and Mitigation Measures

- 5.3 A review of the available evidence has confirmed that the study site contains three non-designated archaeological assets in the form of Kempston West End medieval settlement (MBD16872) in the north-west corner, a potential rectangular building on uncertain date and function (MBB22022), visible only as cropmarks, near the study site's centre, and the site of a former post-medieval ford (MBD11734) along the southern boundary of the main part of the study site and the northern boundary of the southern, smaller, part of the study site.
- 5.4 Based on proximity to known archaeological sites the study site has a moderate to high potential for prehistoric and Iron Age/Roman remains, a low to moderate potential for Saxon/early medieval remains and a low potential for post-medieval and modern remains. There is a known potential for the remains of the small post-medieval/modern structures visible adjacent to the study site's eastern boundary on historic mapping. Based on available evidence, prehistoric remains are considered likely to comprise unstratified prehistoric flint artefacts and/or settlement activity of Local to Regional significance; there is considered low potential for remains of National Significance that would pose a design or planning constraint. Any archaeological remains present within the study site would be impacted by the construction of a residential development and archaeological evaluation works may be necessary in support of a future planning application or as a condition of planning permission.

Potential Impacts on Designated Heritage Assets

- 5.5 As outlined in section 4, the development of the study site has the theoretical potential to have indirect impacts on four designated heritage assets, which are the Grade II listed West End Farmhouse (NHLE1159618), Top Farmhouse (NHLE1321549), The Clock House (NHLE1321548) with the Barn at the Clock House (NHLE 1114287) and the groom's cottage, stables, fodder store and carriage shed (NHLE1159604) as well as the Grade I listed Church of All Saints (NHLE1114281).
- 5.6 As outlined in paragraphs 4.78 to 4.81 there is a historic ownership link between Box End House and a small area within the study site, adjacent to the eastern boundary. However, a complete lack of intervisibility, due to vegetation, means that the study site does not have a positive contribution to the significance of Box End House.
- 5.7 As outlined in paragraphs 4.82 and 4.83 due to a combination of intervening vegetation and the orientation of the building, West End Farmhouse has extremely limited intervisibility with the study site and therefore the study site in its current

state is considered to make a neutral contribution to the setting, with no material contribution to the significance of the asset.

- 5.8 As outlined in paragraphs 4.84 and 4.85 the very north-west corner of the study site forms a minor element of the setting of the Top Farmhouse, however due to intervening vegetation and distance the house can only be glimpsed from the study site and therefore the study site does not contribute to the significance of the Top Farmhouse.
- 5.9 As outlined in paragraphs 4.86 to 4.89 the setting of the Clock House and associated outbuildings comprises of the plot and the orchard to the south of it, and it is within this area where the setting has a strong positive contribution to the significance of the house. Due to a combination of intervening vegetation the Clock House and all associated outbuildings have extremely limited intervisibility with the study site and therefore the study site in its current state is considered to make a neutral contribution to the setting, with no material contribution to the significance of the asset.
- 5.10 As outlined in paragraphs 4.90 to 4.92 due to intervening vegetation in the form of mature trees views of the study site from the church itself are not possible. The very top of the church tower and the weathervane on top of it can just be glimpsed from the study site if the observer knows what they are looking for. The views from the study site towards the church are not designed views and they do not have a positive contribution to the significance of the church. Therefore, the proposed development would not result in change to the setting of the church.
- 5.11 As discussed in section 4 further research will have to be conducted to determine with certainty any potential historic ownership links between the designated heritage assets and the study site.

6.0 Summary and Conclusions

- 6.1 This historic environment desk-based assessment considers Land at Box End, Kempston which will be proposed for promotion as an allocated site in the Bedford Borough Local Plan.
- 6.2 A review of the available evidence has confirmed that the study site contains three non-designated archaeological assets in the form of Kempston West End former medieval settlement (MBD16872) in the north-west corner, a potential rectangular building on uncertain date and function (MBB22022), visible only as cropmarks, near the study site's centre, and the site of a former post-medieval ford (MBD11734) along the southern boundary of the main part of the study site and the northern boundary of the southern, smaller, part of the study site.
- 6.3 Based on the proximity to known archaeological sites, the study site has a moderate to high potential for Prehistoric and Iron Age/Roman remains, a low to moderate potential for Saxon/early medieval remains and a low potential for post-medieval and modern remains. There is a known potential for the remains of the small post-medieval/modern structures visible adjacent to the study site's eastern boundary on historic mapping. As such, the groundworks associated with the proposed development are considered likely to have an impact on any potential archaeological remains which may be present within the study site. There is considered to be low potential for remains of National Significance that would pose a design or planning constraint.
- 6.4 It is anticipated that the LPA's archaeological advisor will require the site to be subject to archaeological evaluation, such as geophysical survey and/or trenching, the timing and scope of which will need to be agreed with the LPA's archaeological advisor. Should such work have positive results, further follow-on mitigation excavation and recording may be necessary.
- 6.5 The study site contains no designated archaeological assets. The setting of designated archaeological assets in the wider area has been assessed; none are considered sensitive to change by the proposed development.
- 6.6 On this basis it is clear that the impact of the proposed development on the archaeological potential of the study site could be adequately mitigated, and the development made acceptable in terms of archaeological impacts. It, therefore, accords with the requirements in paragraph 197.
- 6.7 The proposed development would not have a direct physical impact on any designated heritage assets. The assessment has considered the setting and significance of the Grade II* listed Box End House as well as West End Farmhouse, Top Farmhouse, The Clock House with the barn and groom's cottage, stables, food store and carriage shed (all Grade II listed) and the Grade I listed Church of All Saints. With a carefully considered quality layout utilising appropriate density, massing, sensitive & appropriate landscaping and planting, development will be likely to result in less than substantial harm on the lower end of the scale on the designated heritage assets.
- 6.8 In relation to built heritage the proposals accord with the requirements in paragraph 193-196 of the NPPF.

Sources

General

British Library

The National Archives

Bedford Borough Council Historic Environment Record

Cartographic

1804 Kempston Rural Enclosure Map

1814 Ordnance Survey Drawing

1883-85 Ordnance Survey Map

1902 Ordnance Survey Map

1927 Ordnance Survey Map

1938-48 Ordnance Survey Map

1960 Ordnance Survey Map

1972 Ordnance Survey Map

1999 Ordnance Survey Map

2020 Ordnance Survey Map

Websites

Archaeological Data Service – www.ads.ahds.ac.uk

Bedfordshire Archives and Records Service

<https://bedsarchives.bedford.gov.uk/ArchivesAndRecordOffice.aspx>

Bedford Borough Council Local Plan 2030

<https://bbcdevwebfiles.blob.core.windows.net/webfiles/Planning%20and%20Building/local-plan-2030/Local%20plan%202030.pdf>

British History Online – <http://www.british-history.ac.uk/>

British Geological Society Geology of Britain Viewer –

<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>

1871 England Census - <https://www.ancestry.co.uk> National Archives RG10/1542.

1881 England Census - <https://www.ancestry.co.uk> National Archives RG11/1621.

1891 England Census - <https://www.ancestry.co.uk> National Archives RG12/1250.

Historic England National Heritage List for England -

<https://www.historicengland.org.uk/listing/the-list/>

Historic England Farmstead Assessment Framework

<https://historicengland.org.uk/images-books/publications/national-farmstead-assessment-framework/farmsteads-assessment-framework-2015/>

Heritage Gateway - www.heritagegateway.org.uk

MAGIC - www.magic.gov.uk

Ministry of Housing, Communities & Local Government. Guidance, Historic Environment -

<https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment>

Pastscape - www.pastscape.org.uk

Bibliographic

DCMS, 2013. Scheduled Monuments & nationally important but non-scheduled monuments.

DCMS

Department of Communities and Local Government. 2019. Planning Practice Guidance

Department for Communities and Local Government. 2019. National Planning Policy Framework

DCLG

East Anglian Archaeology, Report No. 156. 2016. Albion Archaeology, Close to the Loop, Landscape and settlement evolution beside the Biddenham Loop, West of Bedford

Historic England 2015. Historic Environment Good Practice Advice in Planning: 2 – Managing

Significance in Decision-Taking in the Historic Environment

Historic England. 2017. Historic Environment Good Practice Advice in Planning Note 3 – The

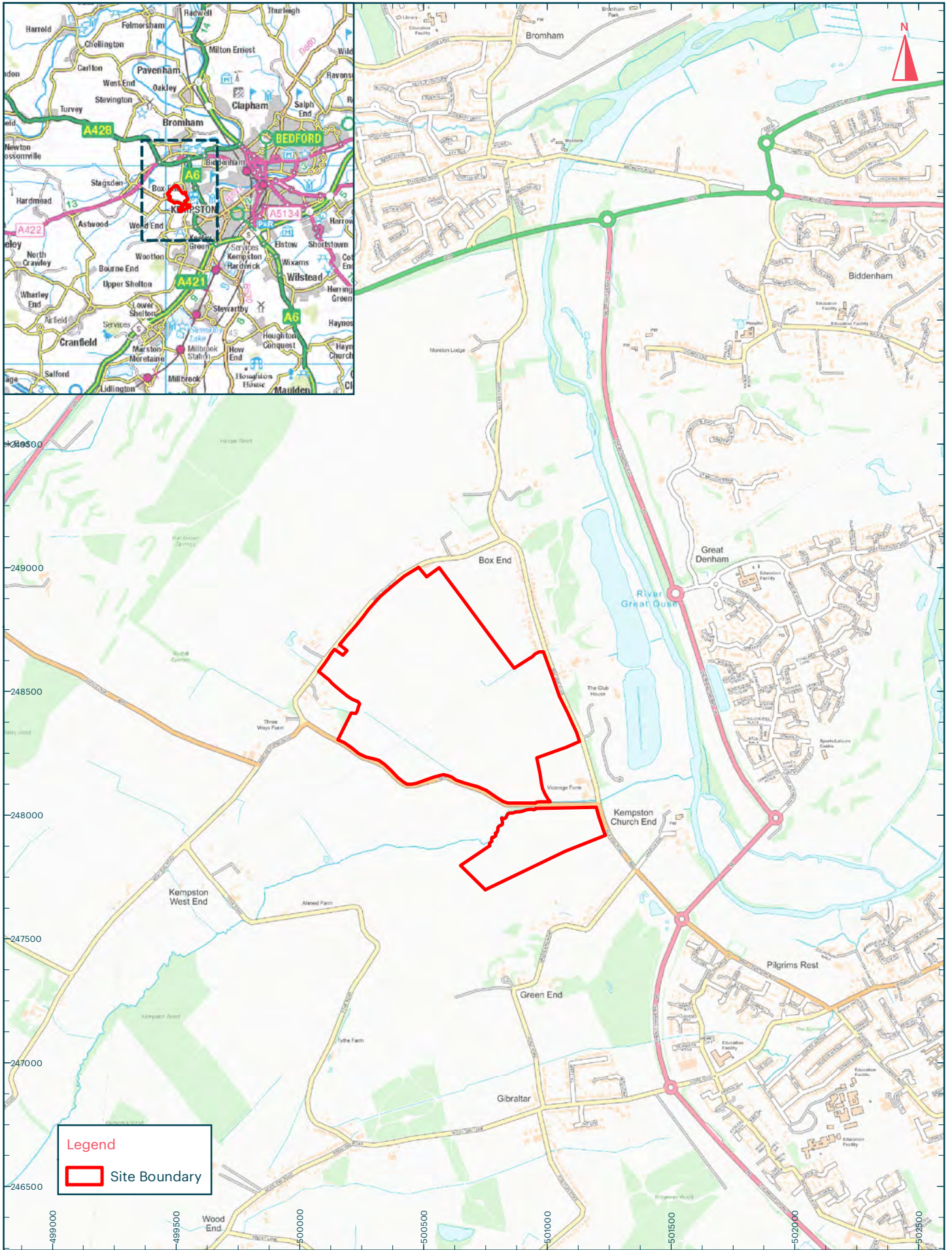
Setting of Heritage Assets

Page, W. ed. 1912. A History of the County of Bedford: Volume 3. London: VCH.

Lidar

Lidar data were downloaded from the Environment Agency website in March 2020 - <https://environment.data.gov.uk/DefraDataDownload/?Mode=survey>

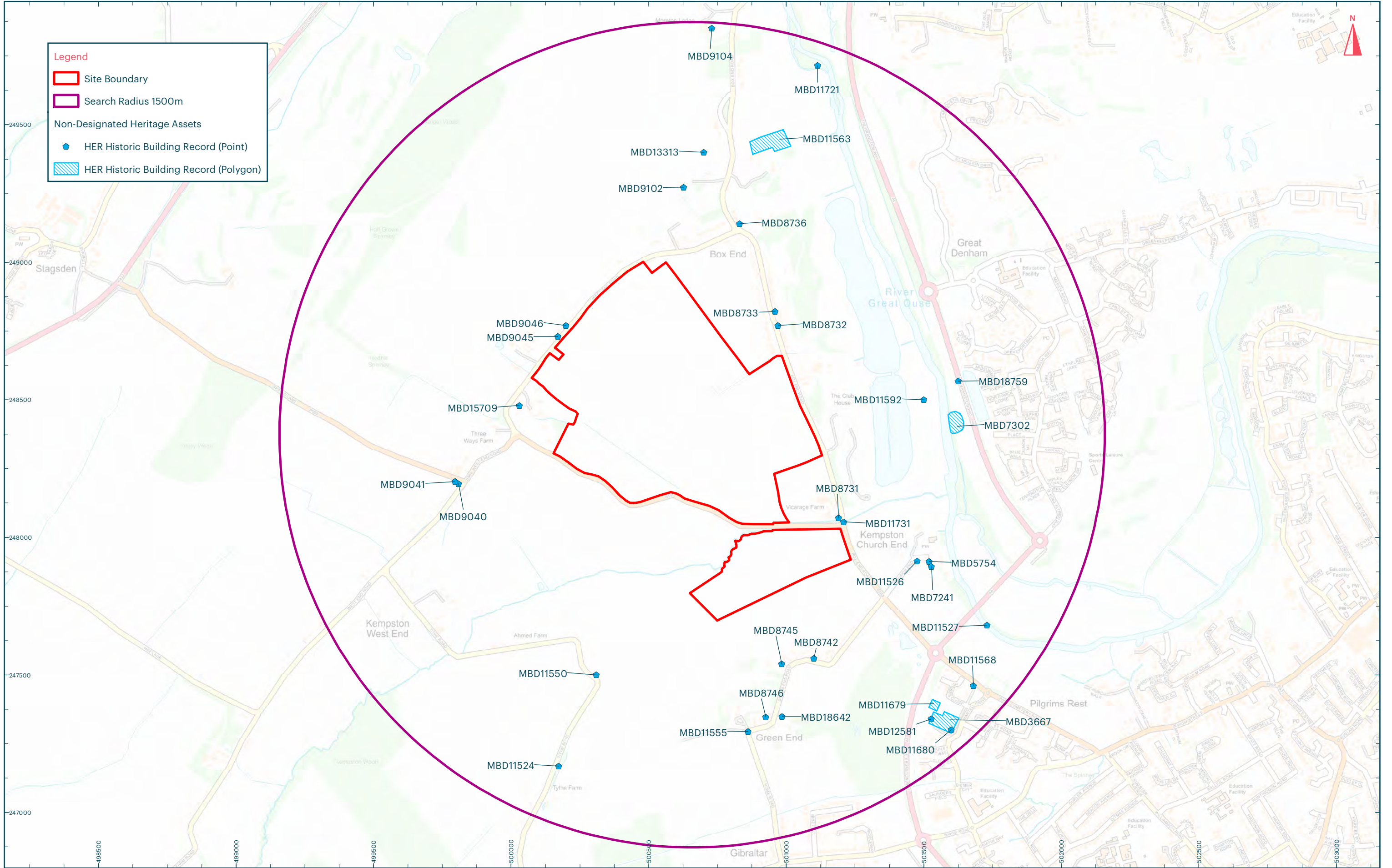
Tile Name	Year	Resolution (m)
TL04NW	2020	1



Title:
Figure 1: Site Location
Address:
Land at Box End, Kempston

Scale at A4: 1:20,000





Legend

- Site Boundary
- Search Radius 1500m

Non-Designated Heritage Assets

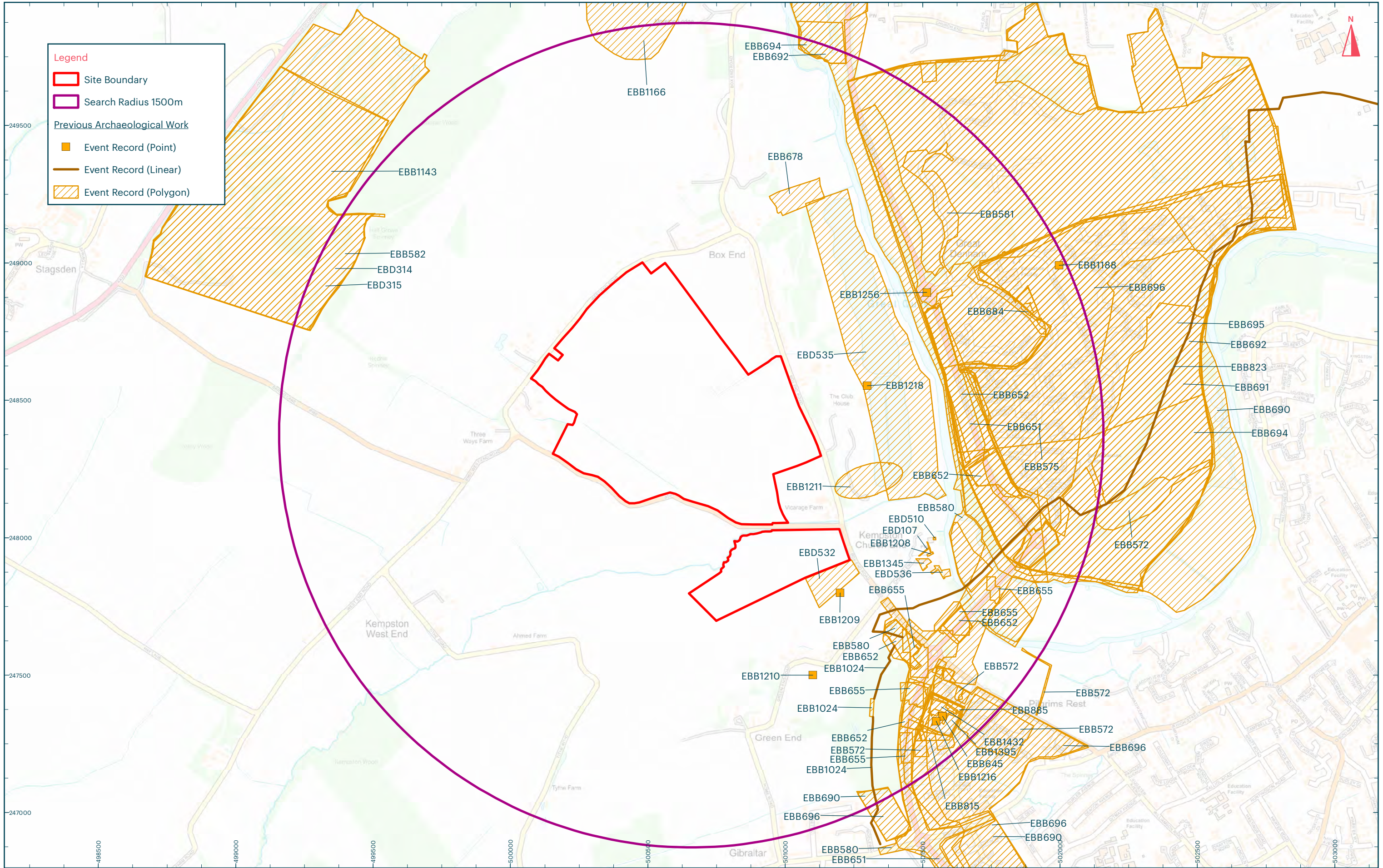
- ◆ HER Historic Building Record (Point)
- HER Historic Building Record (Polygon)

Title:
Figure 2b: HER Non-designated Heritage Assets

Address:
Land at Box End, Kempston

Scale at A3: 1:12,500





Legend

- Site Boundary
- Search Radius 1500m

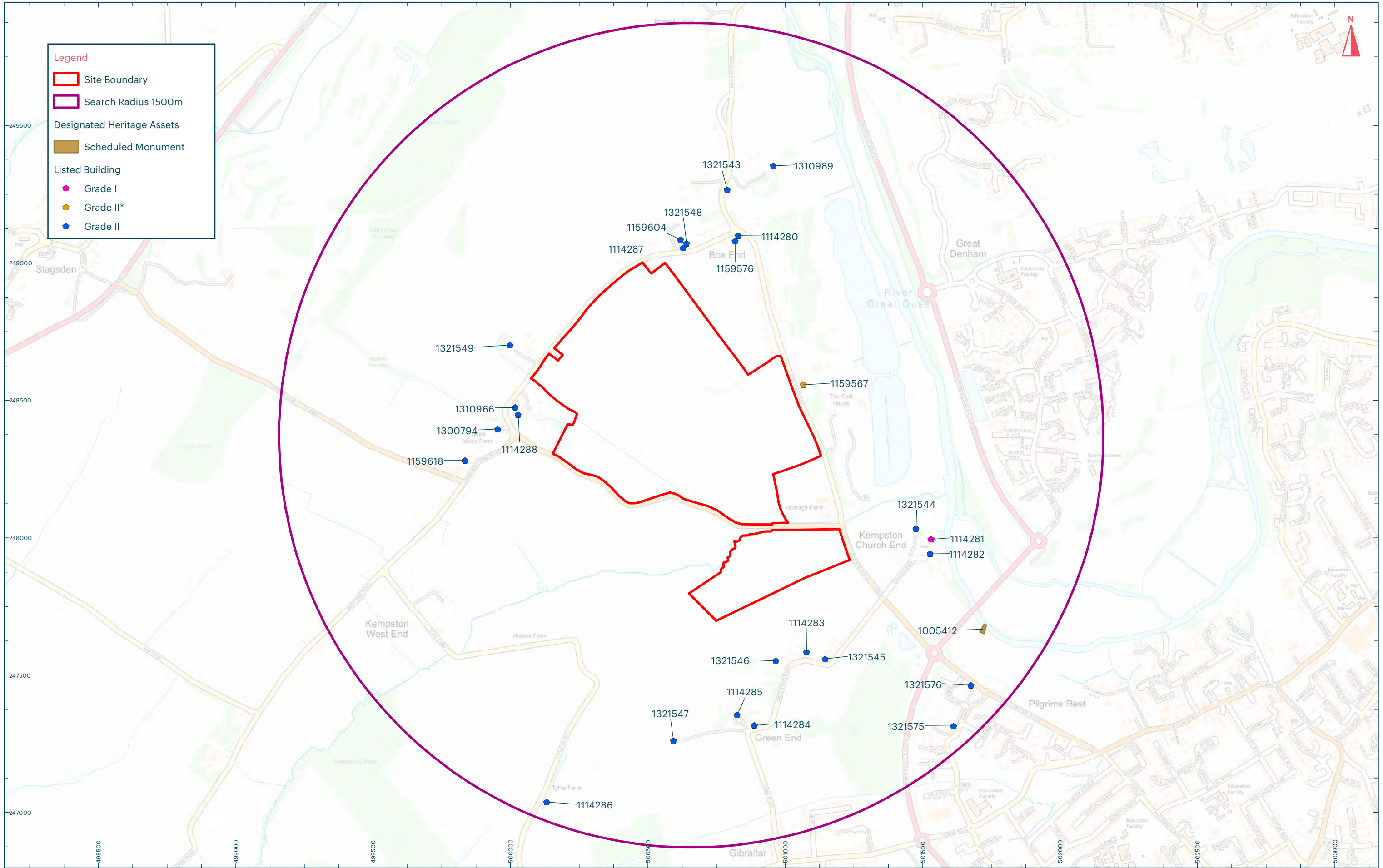
Previous Archaeological Work

- Event Record (Point)
- Event Record (Linear)
- Event Record (Polygon)

Title:
Figure 3: HER Events data

Address:
Land at Box End, Kempston



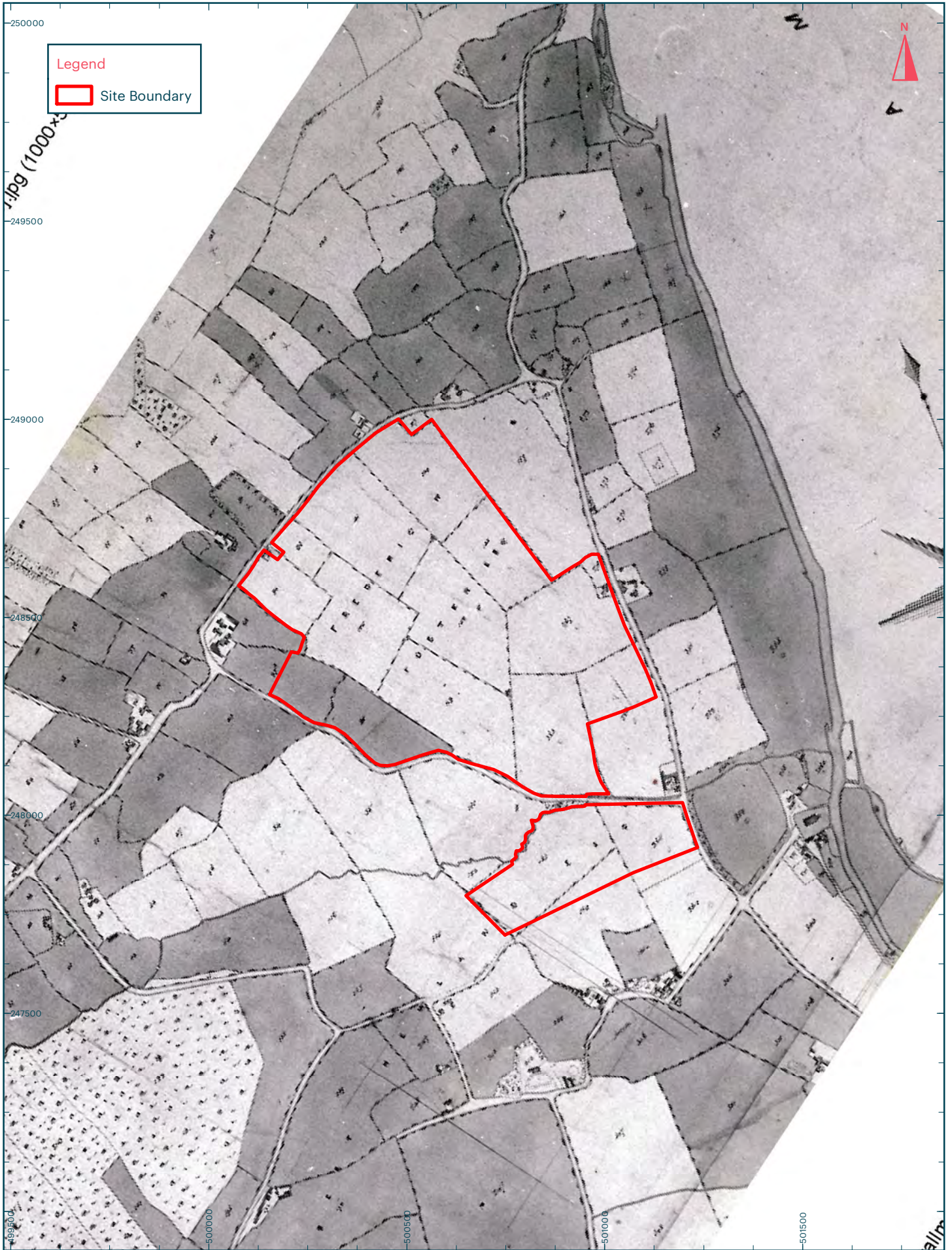


Title:
Figure 4: Designated Heritage Assets
Address:
Land at Box End, Kempston

Scale at A3: 1:12,500
0 400m



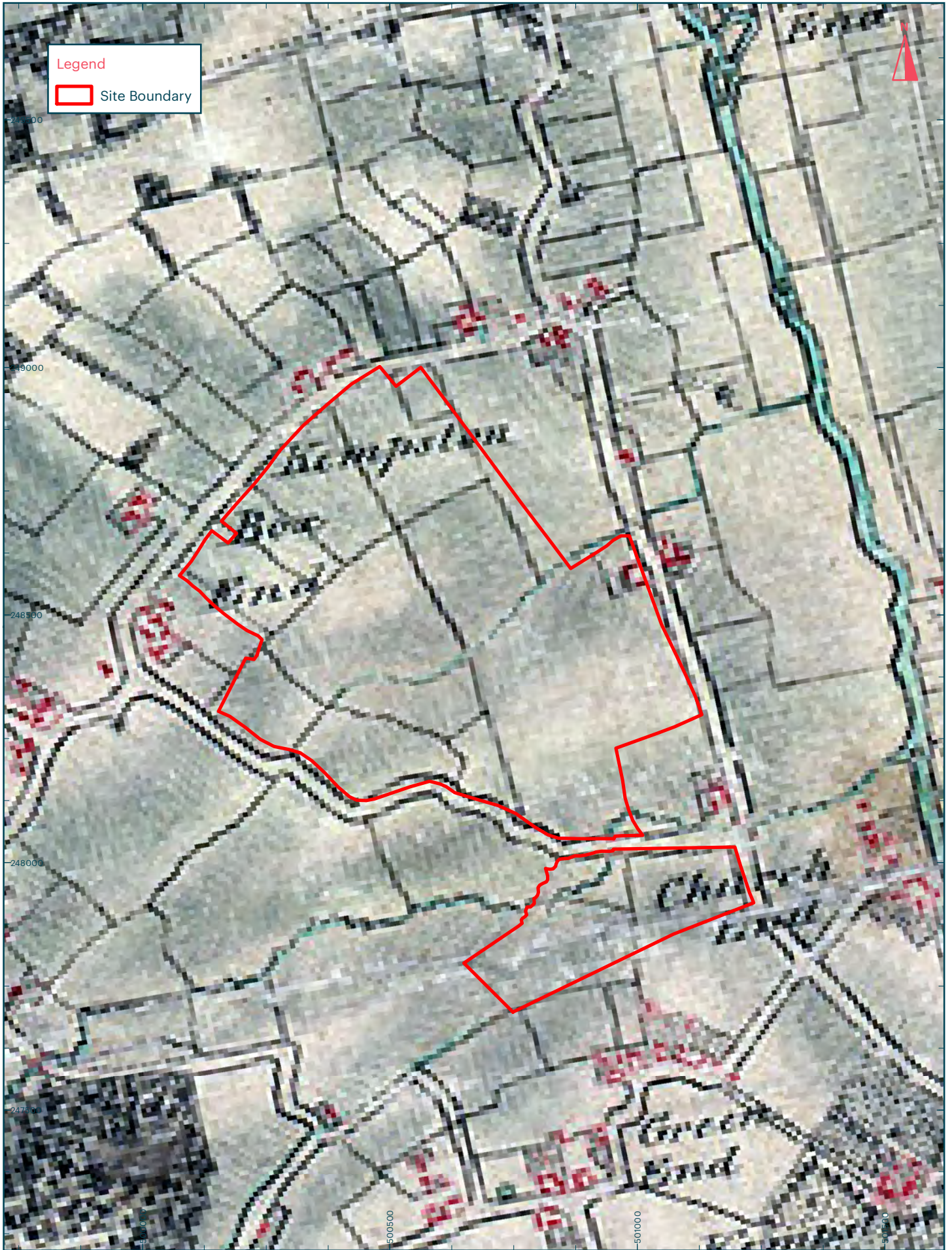
© Historic England (2021). Contains OS data © Crown copyright and database right (2021).
© Ordnance Survey maps reproduced with the sanction of the controller of HM Stationery Office.
Licence No: 100056706. Data contained in this material was obtained on 03.03.21



Title:
 Figure 5: 1804 Kempston Rural enclosure map
Address:
 Land at Box End, Kempston

Scale at A4: 1:12,500
 0 400m



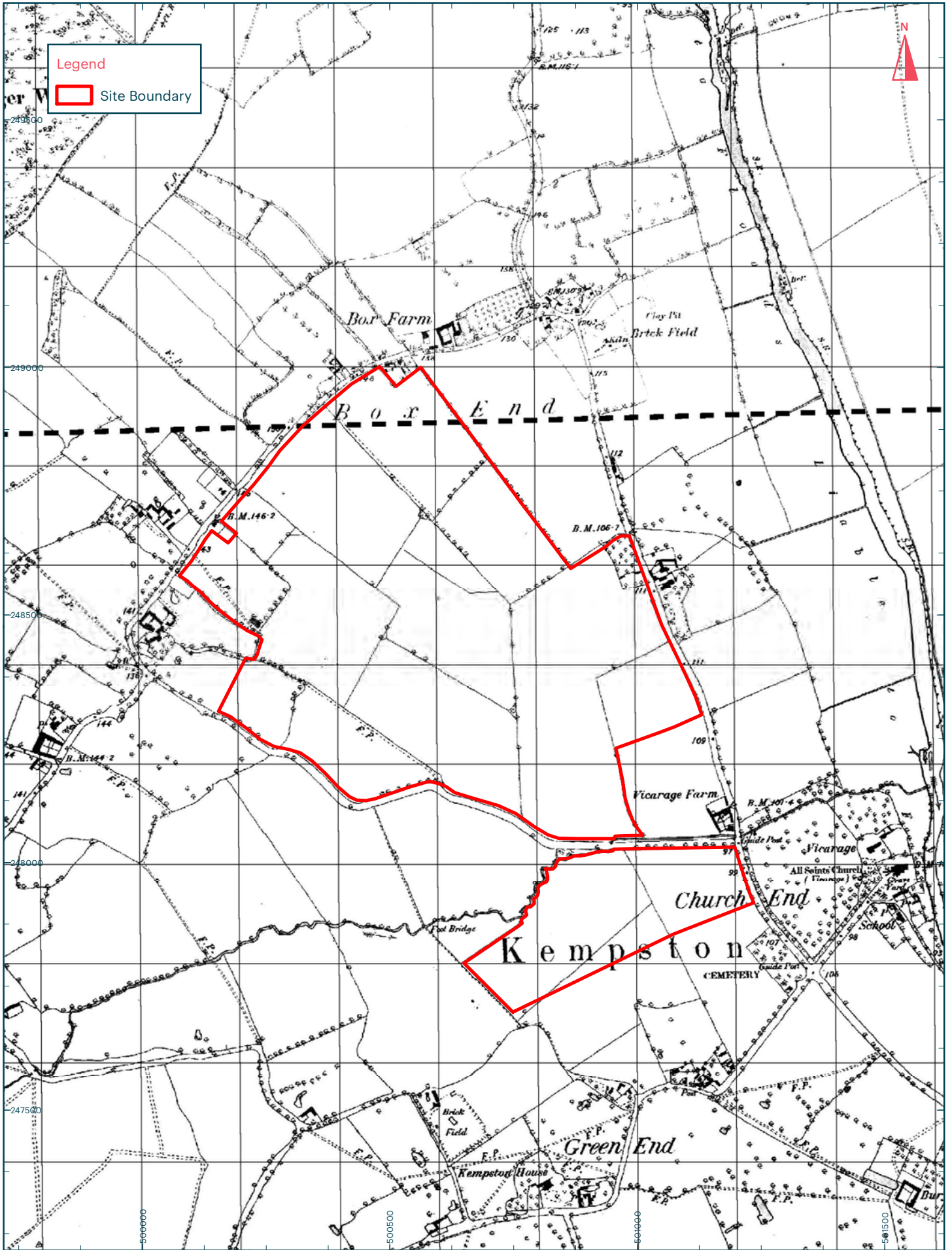


Title:
Figure 6: 1814 OS Drawing
Address:
Land at Box End, Kempston

Scale at A4: 1:10,000

0 300m

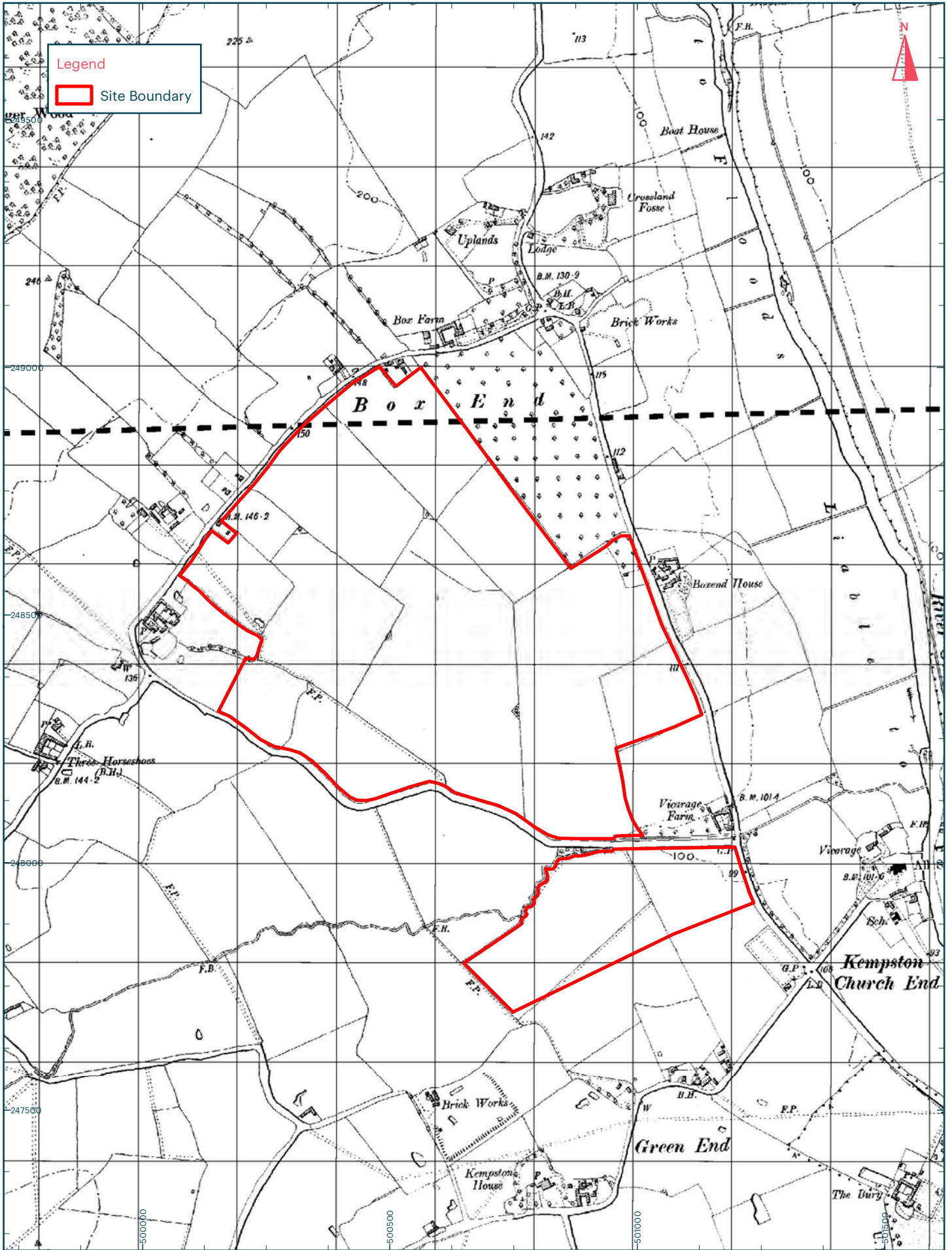




Title:
Figure 7: 1883-85 Ordnance Survey Map (Scale 1:10560)
Address:
Land at Box End, Kempston

Scale at A4: 1:10,000
0 300m

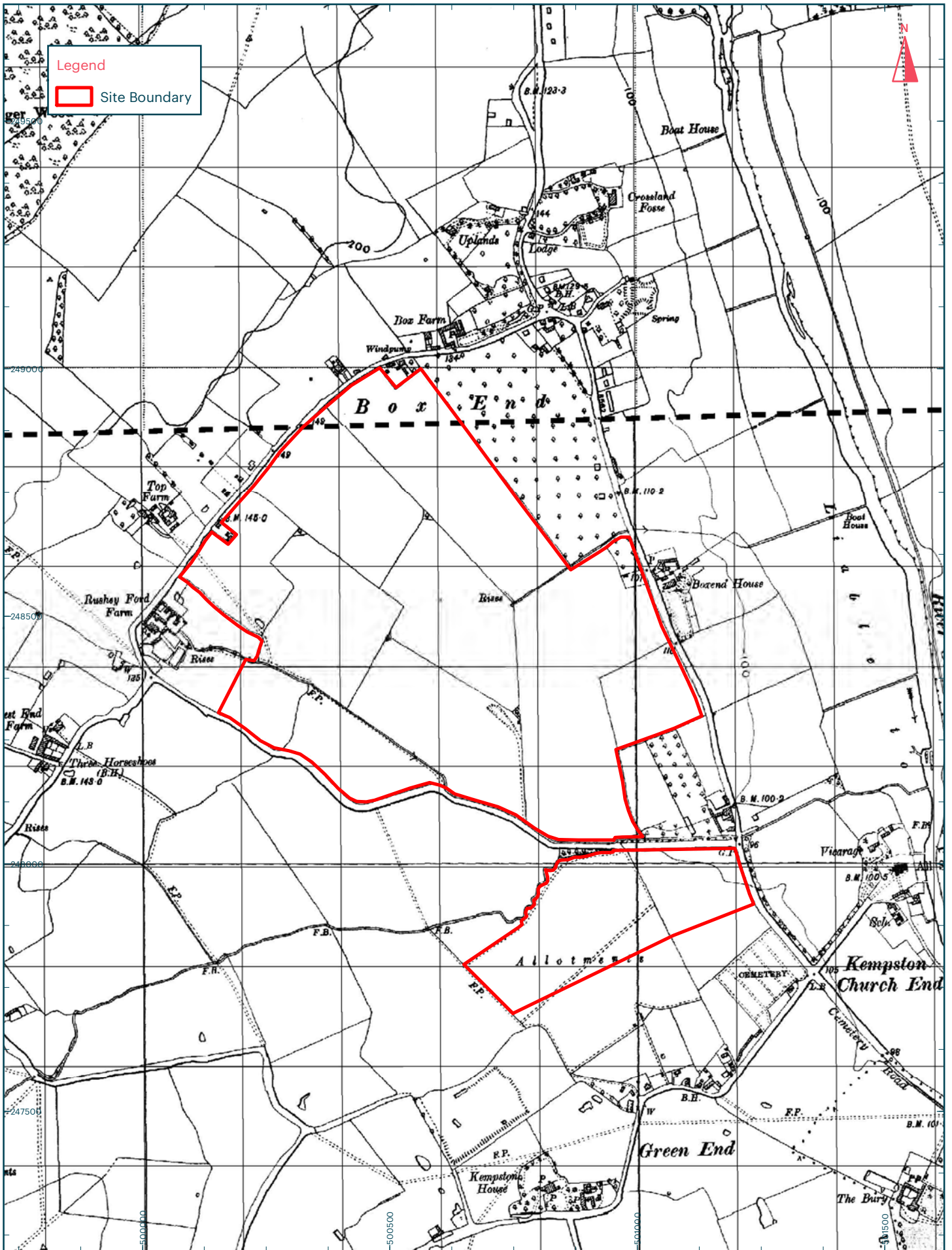




Title:
Figure 8: 1902 Ordnance Survey Map (Scale 1:10560)
Address:
Land at Box End, Kempston

Scale at A4: 1:10,000
0 300m

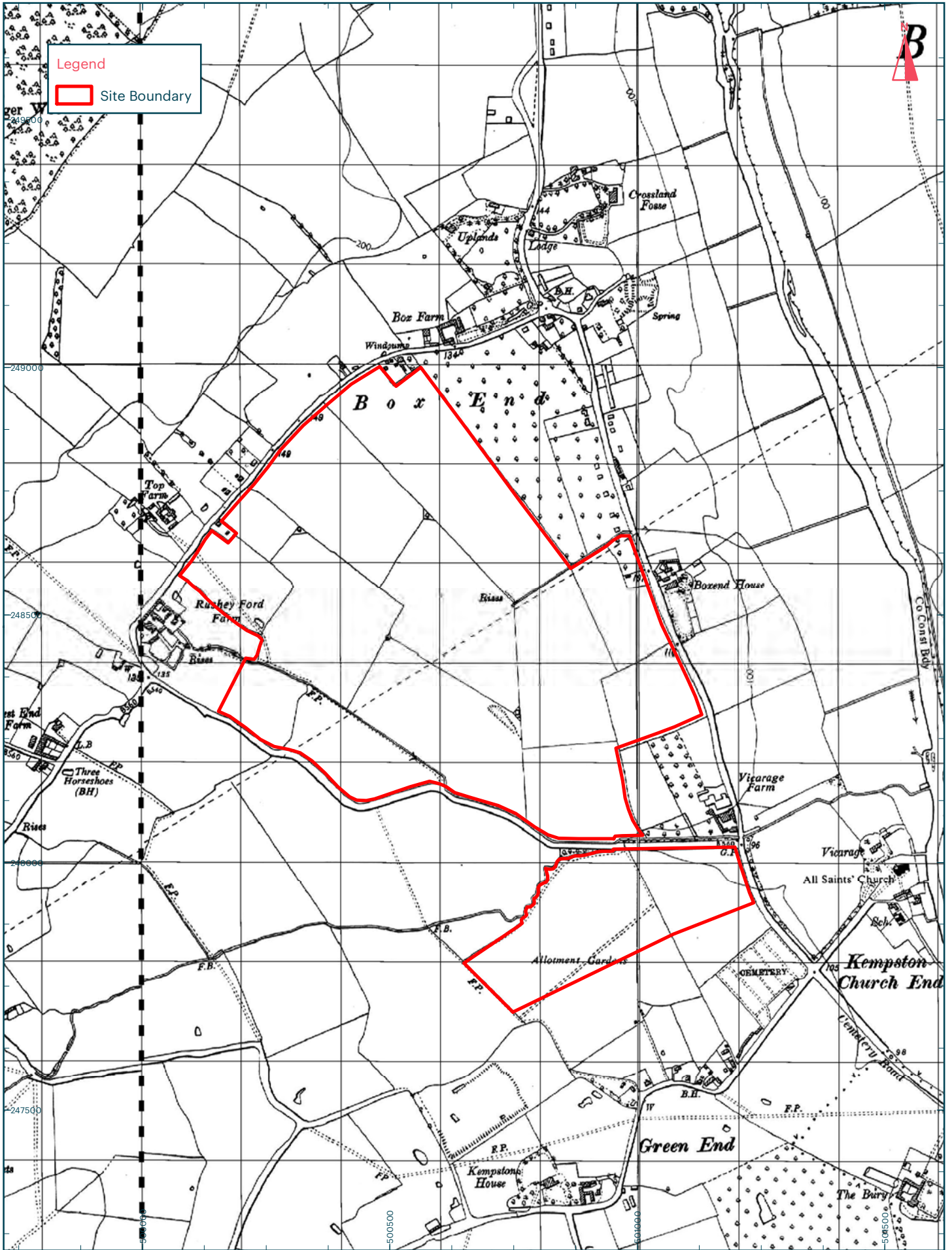




Title:
 Figure 10: 1938-48 Ordnance Survey Map (Scale 1:10560)
Address:
 Land at Box End, Kempston

Scale at A4: 1:10,000
 0 300m

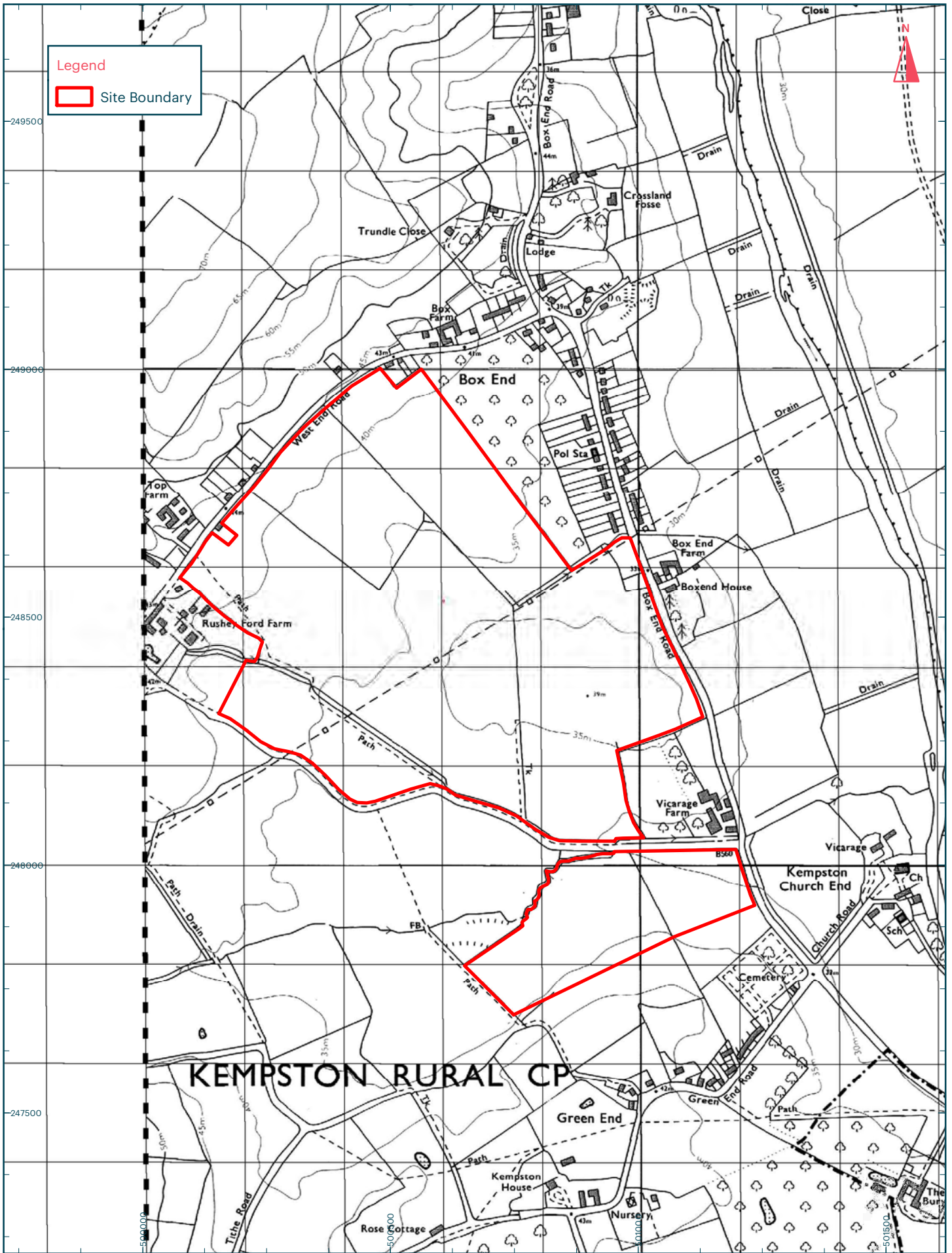




Title:
Figure 11: 1960 Ordnance Survey Map (1:10000)
Address:
Land at Box End, Kempston

Scale at A4: 1:10,000

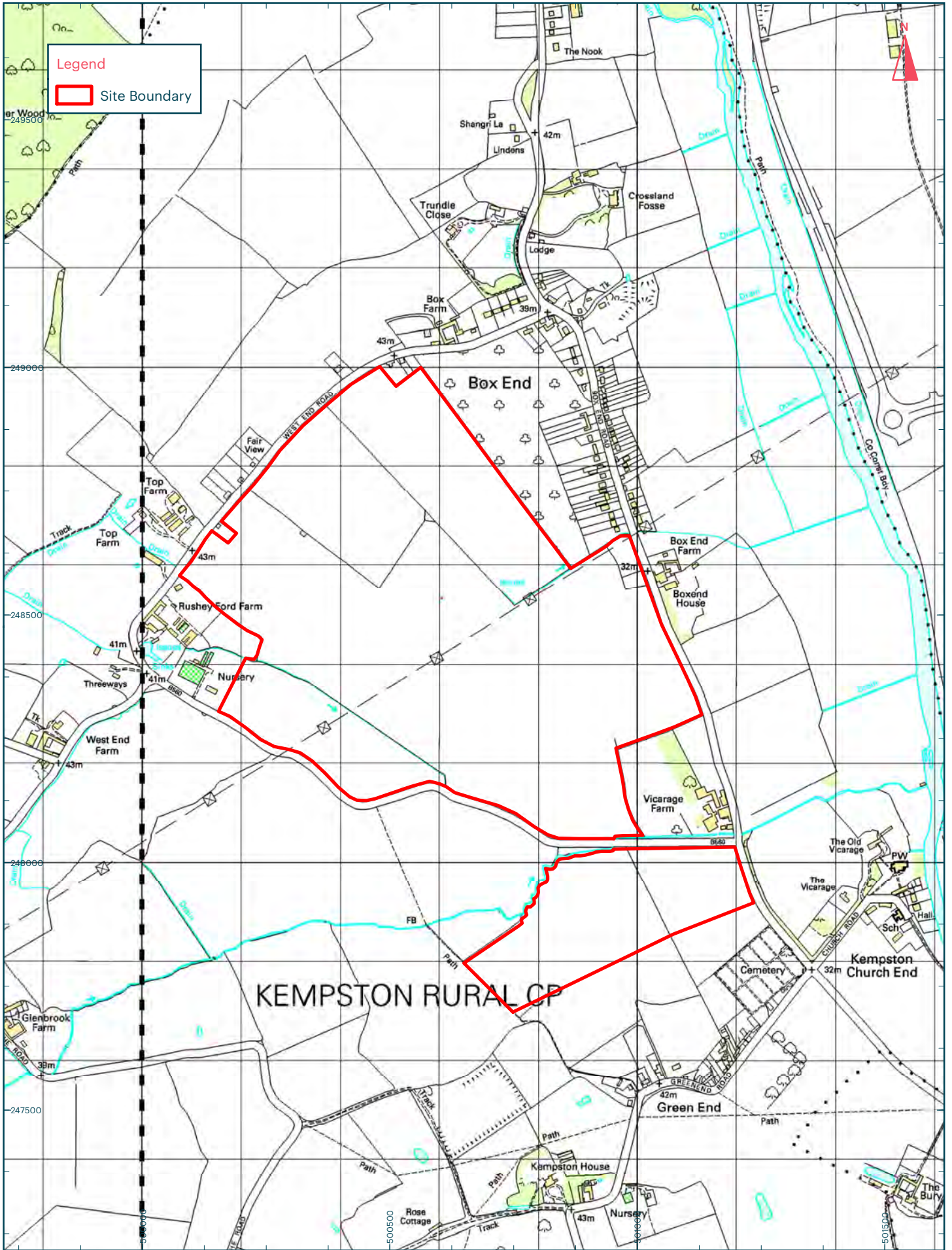




Title:
Figure 12: 1972 Ordnance Survey Map (1:10000)
Address:
Land at Box End, Kempston

Scale at A4: 1:10,000





Title:
Figure 13: 1999 Ordnance Survey Map (1:10000)
Address:
Land at Box End, Kempston

Scale at A4: 1:10,000





Title:
Figure 15: 2020 Google Earth
Address:
Land at Box End, Kempston

Scale at A4: 1:10,000
0 300m

