



## UNIVERSAL DESTINATIONS & EXPERIENCES UK PROJECT

Former Kempston Hardwick Brickworks  
and adjoining land, Bedford

### Environmental Statement Volume 3

### Appendix 11.1 - Contaminated Land Preliminary Risk Assessment

### Part 1/3

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# 1 INTRODUCTION

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## 1.1 TERMS OF REFERENCE

- 1.1.1. This Preliminary Risk Assessment (PRA) has been prepared in support of the planning proposal for the Proposed Development as described in **Chapter 2: Description of the Proposed Development (Volume 1)** of the Environmental Statement (ES).
- 1.1.2. The Site extends to 268ha and is centred on Ordnance Survey (OS) Grid Reference coordinates TL029445.
- 1.1.3. The Site location and current layout (including Zones) are presented in **Figure 1: Site Location Plan** and **Figure 2: Zonal Plan of Annex 1: Figures**.

## 1.2 DEVELOPMENT PLANS

- 1.2.1. The Site is divided into the following Zones:

- Lake Zone;
- East Gateway Zone;
- Core Zone; and
- West Gateway Zone.

The full description of the Proposed Development is provided in **Chapter 2: Description of the Proposed Development (Volume 1)**.

## 1.3 ASSESSMENT AIMS AND OBJECTIVES

- 1.3.1. The aim of this assessment is to support planning and consenting activities for the Proposed Development.
- 1.3.2. To address the identified aim, the key objectives include:
  - Developing a Preliminary Conceptual Site Model (PCSM) to identify potential contamination risks associated with the Proposed Development; and
  - Evaluate likely contaminated land exposure pathways and their potential significance to identified receptors to support the Proposed Development.

## 1.4 SCOPE OF WORKS

- 1.4.1. To meet the aims and objectives identified in Section 1.3, the following scope of works has been undertaken:
  - Review of a Groundsure report (March 2024) (see **Annex 4**);
  - Review of publicly available historical maps and plans to understand former land uses and potential contaminative activities on, and surrounding the Site;
  - Review of relevant regulatory databases;

- Review of relevant publicly available information relating to hydrological features, hydrogeology, neighbouring land use, ecologically sensitive uses and geology in order to establish the environmental setting of the Site;
- Develop a PCSM via the source-pathway-receptor contaminant linkage approach;
- Describe the environmental risks and or opportunities surrounding ground, groundwater and ground gas conditions, which have the potential to arise associated with the future uses of the Site; and
- Production of a PRA report.

## 1.5 LEGISLATIVE CONTEXT

1.5.1. The assessment was undertaken in the legislative and policy context of:

- *Environment Act 1995*<sup>1</sup>;
- *Environmental Protection Act (1990) – Part IIA*<sup>2</sup>;
- *The Contaminated Land (England) (Amendment) Regulations 2012*<sup>3</sup>;
- *The Construction (Design and Management) Regulations 2015* (hereafter referred to as the ‘CDM Regulations 2015’)<sup>4</sup>;
- *The Environmental Permitting (England and Wales) Regulations 2016*<sup>5</sup>;
- *The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017*<sup>6</sup>;
- *Water Industry Act 1991 (as amended)*<sup>7</sup>;
- *The Environmental Damage (Prevention and Remediation) (England) Regulations 2015*<sup>8</sup>;
- *The Control of Substances Hazardous to Health Regulations 2002*<sup>9</sup>; and
- *National Planning Policy Framework (NPPF) (2024)*<sup>10</sup>.

<sup>1</sup> HM Government (1995) *Environment Act 1995*. Available at: <https://www.legislation.gov.uk/ukpga/1995/25/contents> [Accessed: 11 June 2025].

<sup>2</sup> HM Government (1990) *Environmental Protection Act 1990, Part IIA*. Available at: <https://www.legislation.gov.uk/ukpga/1990/43/part/IIA> [Accessed: 11 June 2025].

<sup>3</sup> HM Government (2012) *The Contaminated Land (England) (Amendment) Regulations 2012*. Available at: <https://www.legislation.gov.uk/uksi/2012/263> [Accessed: 11 June 2025].

<sup>4</sup> HM Government (2015) *The Construction (Design and Management) Regulations 2015*. Available at: <https://www.legislation.gov.uk/uksi/2015/51/contents> [Accessed: 11 June 2025].

<sup>5</sup> HM Government (2016) *The Environmental Permitting (England and Wales) Regulations 2016*. Available at: <https://www.legislation.gov.uk/uksi/2016/1154/contents> [Accessed: 11 June 2025].

<sup>6</sup> HM Government (2017) *The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017*. Available at: <https://www.legislation.gov.uk/uksi/2017/407/contents> [Accessed: 11 June 2025].

<sup>7</sup> HM Government (1991) *Water Industry Act 1991*. Available at: <https://www.legislation.gov.uk/ukpga/1991/56/contents> [Accessed: 11 June 2025].

<sup>8</sup> HM Government (2015) *The Environmental Damage (Prevention and Remediation) (England) Regulations 2015*. Available at: <https://www.legislation.gov.uk/uksi/2015/810/contents> [Accessed: 11 June 2025].

<sup>9</sup> HM Government (2002) *The Control of Substances Hazardous to Health Regulations 2002*. Available at: <https://www.legislation.gov.uk/uksi/2002/2677/regulation/7> [Accessed: 11 June 2025].

<sup>10</sup> Ministry of Housing, Communities and Local Government (2024) *National Planning Policy Framework*. Available at: [https://assets.publishing.service.gov.uk/media/67aaf8f3b41f783cca46251/NPPF\\_December\\_2024.pdf](https://assets.publishing.service.gov.uk/media/67aaf8f3b41f783cca46251/NPPF_December_2024.pdf) [Accessed: 11 June 2025].

1.5.2. The following good practice and statutory guidance was considered, and the assessment was undertaken in general accordance with:

- Environment Agency ‘*Land Contamination Risk Management*’ (hereafter referred to as ‘LCRM’) (2023)<sup>11</sup>;
- National House-Building Council ‘*Guidance for the Safe Development of Housing on Land Affected by Contamination*’ (2008)<sup>12</sup>; and
- Construction Industry Research and Information Association (CIRIA) ‘*Contaminated land risk assessment. A guide to good practice (C552)*’ (2001)<sup>13</sup>.

## 1.6 SOURCES OF INFORMATION

1.6.1. The relevant sources of information used in the production of this report are listed in **Table 1-1**.

**Table 1-1 - Sources of Information**

Source	Report
Third Party Reports	<ul style="list-style-type: none"> <li>■ SLR Consulting, Former Kempston Brick Works, Bedfordshire - Phase 1 and 2 Site investigation – Phase 1 Report SLR Ref: 403.00027.00436. version No:1. Dated 2016<sup>14</sup>;</li> <li>■ JPG, Geoenvironmental Desk Study Report, Planning Application No.4 Employment Land Bedford. Dated October 2018<sup>15</sup>;</li> <li>■ Arcadis Phase 1 Geoenvironmental Desk Study (10057883-AUK-XX-XX-RP-ZZ-0001-01-Contaminated Land PRA Report). Dated December 2022<sup>16</sup>;</li> <li>■ Arcadis, Parcel A: Kempston Hardwick, Bedford Phase 1 Geoenvironmental Desk Study. Dated December 2022<sup>17</sup>;</li> <li>■ Arcadis, Parcel B/D – Kempston Hardwick, Bedford Phase 1 Geoenvironmental Desk Study (10057883-AUK-XX-XX-RP-ZZ-0001-01-Contaminated Land PRA Report. Dated December 2022<sup>18</sup>;</li> </ul>

<sup>11</sup> Environment Agency (2023) *Land contamination risk management (LCRM)*. Available at:

<https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm> [Accessed: 11 June 2025].

<sup>12</sup> National House-Building Council, Environment Agency and Chartered Institute of Environmental Health (2008) *Guidance for the Safe Development of Housing on Land Affected by Contamination R&D66: 2008 Volume 1*. Available at: <https://www.middevon.gov.uk/media/114549/volume-1-guidance-for-the-safe-development-of-housing-on-land-affected-by-contamination.pdf> [Accessed: 11 June 2025].

<sup>13</sup> Construction Industry Research and Information Association (2001) *Contaminated land risk assessment. A guide to good practice (C552)*. UK: Construction Industry Research and Information Association.

<sup>14</sup> SLR Consulting (2016) *Former Kempston Brickworks Phase 1 and 2 Site Investigation – Phase 1 Report (Appendix B)*. Available at:

<https://edrms.bedford.gov.uk/OpenDocument.aspx?id=U9VG7%2b1rh2kecUK9r4og5g%3d%3d&name=18+02940+EIA+V OL+3+P3-P4+Appendix+11+GROUND+CONDITIONS.pdf> [Accessed: 11 June 2025].

<sup>15</sup> JPG (2018) *Geoenvironmental Desk Study Report, Planning Application No.4 Employment Land Bedford*. Available at: <https://edrms.bedford.gov.uk/OpenDocument.aspx?id=U9VG7%2b1rh2kecUK9r4og5g%3d%3d&name=18+02940+EIA+V OL+3+P3-P4+Appendix+11+GROUND+CONDITIONS.pdf> [Accessed: 11 June 2025].

<sup>16</sup> Arcadis (2022) *Phase 1 Geoenvironmental Desk Study (10057883-AUK-XX-XX-RP-ZZ-0001-01-Contaminated Land PRA Report)*.

<sup>17</sup> Arcadis (2022) *Parcel A: Kempston Hardwick, Bedford Phase 1 Geoenvironmental Desk Study*.

<sup>18</sup> Arcadis (2022) *Parcel B/D – Kempston Hardwick, Bedford Phase 1 Geoenvironmental Desk Study (10057883-AUK-XX-XX-RP-ZZ-0001-01-Contaminated Land PRA Report)*.

Source	Report
	<ul style="list-style-type: none"> <li>Arcadis, Project 320 - Kempston Hardwick - Phase 2 Preliminary Geoenvironmental Ground Investigation Interpretive Report (30174974-ARC-P01-XX-TR-GE-00001). Dated May 2023<sup>19</sup>; and</li> <li>Groundsure Report (Ref: GSIP-2024-14754-18113-(A-C). Dated March 2024 provided in <b>Annex 4</b>.</li> </ul>
Public Information	<ul style="list-style-type: none"> <li>Google Earth<sup>20</sup>;</li> <li>OS Maps<sup>21</sup>;</li> <li>Google Maps<sup>22</sup>;</li> <li>Geoindex Onshore<sup>23</sup>;</li> <li>British Geological Survey (BGS) Lexicon<sup>24</sup>;</li> <li>MAGIC Map<sup>25</sup>;</li> <li>Coal Authority Interactive Map<sup>26</sup>;</li> <li>Flood Map for Planning<sup>27</sup>;</li> <li>Long Term Flood Risk Map<sup>28</sup>;</li> <li>Environment Agency Catchment Data Explorer<sup>29</sup>;</li> <li>Enhanced Future Flows and Groundwater Portal<sup>30</sup>;</li> <li>UK Health Security Agency (UKHSA) Map of Radon<sup>31</sup>; and</li> <li>Met Office Marine Climate change projections<sup>32</sup>.</li> </ul>

<sup>19</sup> Arcadis (2023) *Project 320 - Kempston Hardwick - Phase 2 Preliminary Geoenvironmental Ground Investigation Interpretive Report*.

<sup>20</sup> Google (n.d.) *Google Earth*. Available at: <https://www.google.com/earth/index.html>. [Accessed: 11 June 2025].

<sup>21</sup> OS Maps (n.d.) *OS Maps*. Available at: <https://explore.osmaps.com/> [Accessed: 11 June 2025].

<sup>22</sup> Google (n.d.) *Google Maps*. Available at: <https://www.google.com/maps> [Accessed: 11 June 2025].

<sup>23</sup> British Geological Survey (n.d.) *GeoIndex (onshore)*. Available at: <https://www.bgs.ac.uk/map-viewers/geoindex-onshore/> [Accessed: 11 June 2025].

<sup>24</sup> British Geological Survey (n.d.) *BGS Lexicon of Named Rock Units*. Available at: <https://www.bgs.ac.uk/technologies/the-bgs-lexicon-of-named-rock-units/> [Accessed: 11 June 2025].

<sup>25</sup> Department for Environment, Food and Rural Affairs and Natural England (n.d.) *Multi-Agency Geographic Information for the Countryside' (MAGIC) Map*. Available at: <https://magic.defra.gov.uk/> [Accessed: 11 June 2025].

<sup>26</sup> Mining Remediation Authority (n.d.) *Mining Remediation Authority Map Viewer*. Available at: <https://datamine-cauk.hub.arcgis.com/> [Accessed: 11 June 2025].

<sup>27</sup> Environment Agency (n.d.) *Flood Map for Planning*. Available at: <https://flood-map-for-planning.service.gov.uk/> [Accessed: 11 June 2025].

<sup>28</sup> Environment Agency (n.d.) *Check the long term flood risk for an area in England*. Available at: <https://www.gov.uk/check-long-term-flood-risk> [Accessed: 11 June 2025].

<sup>29</sup> Environment Agency (n.d.) *Explore Catchment Data*. Available at: <https://environment.data.gov.uk/catchment-planning/> [Accessed: 11 June 2025].

<sup>30</sup> UK Centre for Ecology & Hydrology (n.d.) *Enhanced Future Flows and Groundwater (eFLaG) Portal*. Available at: <https://eip.ceh.ac.uk/hydrology/eflag> [Accessed: 11 June 2025].

<sup>31</sup> UK Health Security Agency (2022) *UK Maps of Radon*. Available at: <https://www.ukradon.org/information/ukmaps> [Accessed: 09 June 2025].

<sup>32</sup> Met Office (n.d.) *Marine climate change projections*. Available at: <https://www.metoffice.gov.uk/research/approach/collaboration/ukcp/summaries/marine-climate-change-projections> [Accessed: 11 June 2025].

## 1.7 UNDERSTANDING RISK

- 1.7.1. It is important to understand that any risks identified during a preliminary assessment, such as the one presented in this document, are perceived risks based on the information reviewed. A more detailed assessment of the actual risks can only be assessed following further intrusive investigations.
- 1.7.2. The preliminary assessments presented herein are qualitative, based on professional judgements following the review of available data and within the context of the existing/proposed use. Those risk categories presented (very low, low, low to moderate, moderate, high and very high) follow guidance presented in *CIRIA Publication C552, Contaminated Land Risk Assessment – A Guide to Good Practice*<sup>13</sup>. CIRIA states that the risk levels should be based on an understanding of both the probability (likelihood) of a risk occurring and the magnitude of the potential consequence (severity) of a risk.
- 1.7.3. CIRIA defines four levels of probability and four levels of severity with relation to contaminated land, as presented in **Annex 2**.

## 1.8 CONFIDENTIALITY AND LIMITATIONS

- 1.8.1. This report is addressed to and may be relied upon by UDX. The report may not be relied upon or transferred to any other parties without the express written authorisation of WSP. This report should be read in full. No responsibility will be accepted where this report is used, either in its entirety or in part by any other party.
- 1.8.2. Third-party information used in the production of this report has been taken in good faith as being accurate. WSP cannot and will not accept any liability for errors and/or omissions in data provided by others and WSP cannot warrant the work of others.
- 1.8.3. General limitations of the assessment are included in **Annex 3**.

## 2 SITE BACKGROUND INFORMATION AND SETTING

### 2.1 SITE DESCRIPTION AND CURRENT USE

2.1.1. Site location and current layout plans are presented in **Site Location Plan (Document Reference 1.6.0)** and **Zonal Plan (Document Reference 1.8.0)** and **Table 2-1** provides a summary of the Site's details.

**Table 2-1 - Site Details**

Detail	Comment
Name and Address of Site	Former Kempston Hardwick Brickworks and adjoining land, Bedford.
National Grid reference	TL 02963 44516
Site Description	<p>The Site extends to 268ha and is divided into the four main distinct Zones (see <b>Figure 2: Zonal Plan of Annex 1: Figures</b>) comprising:</p> <ul style="list-style-type: none"> <li>■ Core Zone;</li> <li>■ West Gateway Zone;</li> <li>■ Lake Zone; and</li> <li>■ East Gateway Zone.</li> </ul>
Area	The total Site area is 268ha.
Site Setting and Surrounding Land Uses	<p>The Site is located in an area broadly defined on all four sides by existing road and rail infrastructure. The A421 passes from northeast to southwest along the western side of the Site, with local access provided by Woburn Road running in parallel on the A421's eastern edge. Ampthill Road runs from north to south to the eastern edge of the Site. Broadmead Road connects from Woburn Road, running west to east along the southern edge of the Site.</p> <p>The Marston Vale Railway Line bounds the western edge of the Lake Zone and Core Zone and bisects the Site (north to south) between the Core Zone and West Gateway Zone. The Midland Main Railway Line runs from north to south to the east of the Site, parallel to and west of Ampthill Road.</p> <p>Elstow Brook, a tributary of the Great River Ouse, follows the line of Marston Vale Railway Line along the western boundary of the Lake Zone, then diverges slightly to cross through the West Gateway Zone. Existing waterbodies bound the Site to the north, east and southeast, while warehouse units bound the Site to the northwest. The Site is primarily surrounded by agricultural land and open fields to the west and south.</p> <p>The Site is situated in a semi-rural location, split by Manor Road which connects the village of Kempston Hardwick to Woburn Road on the west and Ampthill Road to the east. There are a small number of residential properties with direct frontage along Manor Road, in addition to the CEMEX Bedford Concrete Plant and BCA Bedford car auction site.</p> <p>The Lake Zone is located to the north of Manor Road, part of which is a brownfield site whose former uses include brickworks, clay pits and an electrical substation. The Lake Zone also currently comprises an area of unused hard standing, associated with the former Kempston Hardwick Brickworks along with stockpiles of former demolition waste. The previous clay extraction pits are now either in-filled or flooded semi-permanent</p>



Detail	Comment
	<p>waterbodies. The Lake Zone also includes areas of grass scrub and arable farmland used to grow crops.</p> <p>The Core Zone, located to the south of Manor Road comprises primarily arable fields, hedgerows and drainage ditches.</p> <p>Three public rights of way (PRoWs) cross the Site. One links the eastern end of Manor Road to Woburn Road, crossing the Core Zone and the Marston Vale Railway Line at a footpath level crossing near the centre of the Core Zone. A second PRoW runs from north to south through the Core Zone (and across the other PRoW) from Manor Road to Broadmead Road. The third PRoW skirts the northeastern boundary of the Lake Zone following along field edges from Ampthill Road, meeting the field's edge to cross under the A421 adjacent to the Marston Vale Railway Line.</p>
Topography and Ground Cover	The Site sits between 30m above ordnance datum (AOD) and 36m AOD and is roughly flat with the majority of the Site at approximately 33m AOD.

## 2.2 SUMMARY OF PREVIOUS REPORTS

- 2.2.1. A review and appraisal of the ground investigation data provided in the SLR<sup>14</sup> and Arcadis Phase 2 report<sup>19</sup> listed below is presented in **Appendix 11.2: Ground Investigation Technical Note (Volume 3)**.

### **SLR, FORMER KEMPSTON BRICK WORKS, BEDFORDSHIRE - PHASE 1 AND 2 SITE INVESTIGATION – PHASE 1 REPORT SLR REF: 403.00027.00436. VERSION NO:1. DATED 2016**

- 2.2.2. The report<sup>14</sup> was commissioned to support a proposed residential development at the Kempston Brickworks Site. The desk study concluded that given the historical land use included quarrying, landfilling, bulk fuel storage and brick manufacturing, the potential for made ground and contaminated soil was considered reasonably high.
- 2.2.3. No conclusions were drawn in the report regarding source-pathway-receptor contaminant linkages.
- ### **JPG, GEOENVIRONMENTAL DESK STUDY REPORT, PLANNING APPLICATION NO.4 EMPLOYMENT LAND BEDFORD. DATED OCTOBER 2018**
- 2.2.4. This report<sup>15</sup> comprises a desk study focused around the former Kempston Brickworks and two previously undeveloped agricultural fields located in the Lake Zone and Core Zone of the Site. The report indicated that based on the Site's history, the following potential sources of contamination may be present on, beneath or adjacent to the Site:
- Made ground/groundwater associated with landfills and infilled clay pits;
  - Made ground/groundwater associated with historical industrial development of the Site;
  - Localised elevated concentrations of potential contaminants associated with leakage from above-ground storage tanks (ASTs) and below-ground storage tanks (BSTs); and
  - Residual concentration of pesticides, herbicides or other chemicals used for farming.

- 2.2.5. Based on the potential pollution linkages present, a low to moderate risk was considered appropriate with respect to hazardous ground gases/soil vapours and potentially localised contamination sources. The report recommended a Phase 2 intrusive investigation was completed to fully assess the risk to human health and controlled waters.

**ARCADIS, PARCEL A: KEMPSTON HARDWICK, BEDFORD PHASE 1  
GEOENVIRONMENTAL DESK STUDY, DECEMBER 2022**

- 2.2.6. This report<sup>17</sup> comprises a desk study in the Lake Zone (referred to as Parcel A in the report) assessing the Site history, geology ground hazards, hydrology, hydrogeology, industrial land use, flood risk, ecology, Conceptual Site Model (CSM), initial geotechnical engineering assessment and key geotechnical engineering constraints/considerations.

**ARCADIS, PARCEL B/D – KEMPSTON HARDWICK, BEDFORD PHASE 1  
GEOENVIRONMENTAL DESK STUDY, DECEMBER 2022**

- 2.2.7. This report<sup>19</sup> comprises a desk study in the Core Zone and West Gateway Zone (referred to as Parcels B and D in the report, respectively) assessing the Site, Site history, geology ground hazards, hydrology, hydrogeology, industrial land use, flood risk, ecology, CSM, initial geotechnical engineering assessment and key geotechnical engineering constraints/considerations.

**ARCADIS, PROJECT 320 KEMPSTON HARDWICK, PHASE 2 PRELIMINARY  
GEOENVIRONMENTAL GROUND INVESTIGATION INTERPRETIVE REPORT, MAY  
2023**

- 2.2.8. This report<sup>19</sup> covers Lake Zone and Core Zone (referred to as Parcels A and B in the report, respectively). This report covers the topographical conditions of the land, land ownership, utilities including power, water and telecoms, an ecological survey, an archaeological survey, a flood risk assessment and an environmental Site assessment.
- 2.2.9. The environmental Site assessment constituted a summary of a previous Geoenvironmental Desk Study as well as the results of a ground investigation conducted between 20 March to 21 April 2023.



### 3 HISTORICAL LAND USE

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- 3.1.1. The development of the Site and surrounding area (in relation to potentially contaminative uses and sensitive receptors) has been reviewed by reference to historical maps supplied within the Groundsure Reports included in **Annex 4** and Google Earth Imagery<sup>20</sup>.

#### 3.2 ON-SITE HISTORY

- 3.2.1. From the earliest mapping dated circa 1882, the West Gateway Zone was shown as mostly undeveloped agricultural land with the London Western Railway Cambridge running along the eastern edge of the zone. The London Western Railway Cambridge extended along the western boundary of the Core Zone, which was mostly undeveloped agricultural land with multiple trackways running throughout. Buildings were noted in the northeast corner of the Core Zone and were likely residential properties and ancillary farm buildings. Racemeadow Farm was noted in the northern section of the Lake Zone, which, like the rest of the Site, comprised undeveloped agricultural land, with the exception of an unnamed trackway spanning the eastern boundary from south to north and Elstow Brook flowing north from the southwest corner. The London Midlands and Scottish Railway ran through the centre of the East Gateway Zone, extending from south to north. A stream was noted in the centre of the West Gateway Zone, running south to north.
- 3.2.2. The mapping from 1938 showed the development of the Kempston Brickworks in the southern portion of the Lake Zone, along with a large lake that was present by 1948 to the east of the brickworks. The brickworks comprised multiple buildings, structures, heaps (unspecified) and tanks (unspecified), as well as clay pits surrounding the works. By 1948, the unnamed trackway spanning the eastern boundary of the Lake Zone had been noted as the A418 and was later, in 1987, noted as the B530. In the East Gateway Zone, railway tracks associated with the London Midlands and Scottish Railway had been constructed by 1948, which branched off the main track to the southeast, toward a small industrial area east of the Site. Ancillary sections of the London Midlands and Scottish Railway were noted as dismantled in the 1980 mapping. The London Midlands and Scottish Railway is now part of the Thameslink line, with the London Western Railway Cambridge line on the western edge of Site now part of the West Midland Railway line.
- 3.2.3. By 1968, an electrical substation had been constructed on the southern edge of the Lake Zone and can be seen in mapping up until 1993. Part of the large lake adjacent to the Kempston Brickworks was infilled by 1972, and later, in 1991, a large clay pit was noted north of the lake on the eastern boundary of the Site. By 1989, Elstow Brook had been diverted from its original course. It is understood that the old river course was then infilled and repurposed for agricultural farming. In 2001, an electrical substation was noted on the southern boundary of the Site in the East Gateway Zone. The 2001 mapping referred to the B350 as Bedford Road.
- 3.2.4. By 2010, the Kempston Brickworks had been demolished, with the Site comprising a network of roads and old foundations demarcating where former structures and buildings had been located. Much of the surrounding clay pits had been infilled or flooded.
- 3.2.5. No significant land use changes were noted in the Core Zone, which has remained undeveloped agricultural land from 1882 until the present day.

### 3.3 HISTORY OF SURROUNDING LAND USE

**Table 3-1 - Summary of Surrounding Land Use Within 250m**

Date	Details
1882 (1:10,560)	<p>Brick fields and associated kilns were present immediately adjacent to the southwest tip of the West Gateway Zone.</p> <p>Vicarage and Hoo Farms were noted adjacent to the southwest tip of the West Gateway Zone.</p> <p>The Elms Farm was present immediately adjacent to the north of the West Gateway Zone.</p> <p>Marshleyes Farm was present immediately adjacent to the west of the Lake Zone</p> <p>Elstow Hardwick Farm was noted immediately adjacent to the east of the East Gateway Zone.</p> <p>Wooten Broadmead Farm was noted immediately adjacent to the south of the Core Zone</p> <p>Kempston Hardwick Halt (later Kempston Hardwick Station) was noted immediately adjacent to the northwest corner of the Core Zone.</p>
1900 (1:10,560)	<p>Harwickhill Brickworks was noted immediately adjacent to the east of the Lake Zone.</p> <p>Elstow Brickworks was noted approximately 100m east of the Lake Zone.</p>
1924 (1:10,560)	<p>A clay pit, tramway and tanks were noted to the northeast of the Elstow Brickworks, approximately 250m east of the Lake Zone.</p>
1938 (1:10,560)	<p>Brickworks were constructed immediately east of the Core Zone.</p>
1946-1948 (1:10,560) 1959-1960 (1:10,000)	<p>A large pit was noted south of the Brickwork adjacent east of the Core Zone.</p> <p>The Bedford Brickworks was expanded to east of the Lake Zone, with more pits visible.</p> <p>An unnamed works was noted 250m south of the West Gateway Zone with several tanks present.</p> <p>Railway sidings were noted 250m south of the West Gateway Zone</p> <p>Two reservoirs and multiple tanks were noted over 250m east of the East Gateway Zone.</p>
1972 (1:10,000) 1980-1982 (1:10,000) 1989 (1:10,000) 1987-1992 (1:10,000)	<p>A disused pit was present immediately south of the West Gateway Zone.</p> <p>An electrical substation was noted adjacent to the southwest tip of the West Gateway Zone and immediately adjacent to the east of the Core Zone.</p> <p>Elstow Brickworks was noted as disused.</p> <p>A clay pigeon shooting range was noted 100m east of the northeast tip of the Lake Zone.</p> <p>Multiple Storage Depots were noted approximately 100m east of the East Gateway Zone.</p> <p>A sewage works was present approximately 250m south of the West Gateway Zone.</p> <p>The brickworks to the east of the Core Zone was expanded with a conveyor present.</p> <p>The pit adjacent to the works was marked as disused.</p>
1989-1993 (1:2,500)	<p>A refuse tip was marked in the same location as the disused pit immediately south of the West Gateway Zone.</p>
2001 (1:10,000)	<p>An electrical substation was noted immediately south of the East Gateway Zone.</p>

Date	Details
2010 (1:10,000)	A depot was noted adjacent to the southwest tip of the West Gateway Zone. Marsh Leys business park was constructed to the west of the Lake Zone.
2024 (1:10,000)	Multiple lakes were present immediately north of the Lake Zone and 50m south of the Core Zone.

## 4 ENVIRONMENTAL SETTING

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### 4.1 PUBLISHED GEOLOGY

- 4.1.1. The following published geological information was obtained from a review of Geological Survey Online Map Viewer<sup>33</sup> and Geological Survey of England and Wales, Sheet 203 Bedford, 1:50,000, 2010<sup>34</sup> and from the Groundsure Report (**Annex 4**).

#### MADE GROUND

- 4.1.2. Available records indicate Made Ground to be present in the southern and eastern portions of the Lake Zone and is described as artificial deposits of Made Ground and infilled ground. Records indicate that an area of worked ground is present in the West Gateway Zone and is noted to comprise a void. Due to the developed nature of some areas of the Site it would be expected that Made Ground would be encountered in areas around the A421, and the trainline.

#### SUPERFICIAL DEPOSITS

- 4.1.3. The majority of the Site is indicated by the BGS to be underlain by superficial deposits, covering the west, north and east area of the Site. From the northern portion of the Site, superficial deposits taper towards the western edge of the Site, following the route of the on-Site stream. A narrow strip of superficial deposits follows the route of an on-Site stream to the south and from west to east beneath Manor Road. The superficial deposits comprise Head deposits across most of the area with the soils adjacent to the stream comprising Alluvium. The Head Deposits comprise clay, silt, sand and gravel. The Alluvium comprises clay and silt.

#### BEDROCK

- 4.1.4. The bedrock beneath the Site is indicated by BGS to comprise the Peterborough Member Mudstone. This is reported to consist of “*brownish-grey, fissile, organic-rich (bituminous) mudstones. [...] Subordinate beds of pale-medium grey, blocky mudstone. Several bands of cementstone nodules/concretions*”<sup>35</sup>. The stratigraphy below the Peterborough Member Mudstone comprises: the Kellaways Formation (Sand and Clay members), the Cornbrash Formations, the Forest Marble formation, the Blisworth Formation and the Ruthland Formation.

#### STRUCTURAL GEOLOGY

- 4.1.5. Three faults have been identified on-Site. Two faults cross the West Gateway Zone, trending approximately east-west with a southerly downthrow and one fault runs from the west into the centre of the Site trending northwest to southeast with the downthrow to the southwest. The other fault is located in the Lake Zone, running northwest to southeast with a downthrow to the southwest. These faults are unlikely to be a significant constraint. Further Ground Investigation will be required to support detailed design and will take account of these faults if necessary.

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<sup>33</sup> British Geological Survey (n.d.) *BGS Geology Viewer*. Available at: <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/> [Accessed: 11 June 2025].

<sup>34</sup> British Geological Survey (2010) *1:50 000 Sheet 203 Bedford (Bedrock and Superficial)*. Available at: <https://webapps.bgs.ac.uk/data/MapsPortal/series.html?series=E50k&collection=PMAP&filter=203&page=1&pageSize=100> [Accessed: 11 June 2025].

<sup>35</sup> British Geological Survey (n.d.) *The BGS Lexicon of Named Rock Units — Result Details, Peterborough Member*. Available at: <https://webapps.bgs.ac.uk/lexicon/lexicon.cfm?pub=PET> [Accessed: 11 June 2025].

## 4.2 EXPLORATORY HOLE RECORDS

- 4.2.1. Previous investigation was completed in the former Kempston Brickworks (southern extent of the Lake Zone) by SLR in 2016<sup>14</sup> and within the Lake Zone and Core Zone by Arcadis in 2023<sup>19</sup>. A summary of encountered ground conditions is provided below.

### MADE GROUND

- 4.2.2. Made Ground up to 3.00m in thickness was only encountered locally within exploratory holes positioned within the undeveloped fields within the Lake Zone (TP02, TP05 and TP06). Organic rich soils (black) and accompanying organic odours were noted within positions targeting the former river channel. Topsoil (0.20m to 0.40m) overlying natural deposits was more typically encountered in this area of the Site.
- 4.2.3. Although exploratory holes positioned within Arcadis' Zone A3 mostly sit outside the current boundary of interest (i.e., to the east of the Lake Zone), it is worth noting that similar recovered thicknesses of Made Ground were noted in this area (2.80m – 3.00m).
- 4.2.4. A thicker and more spatially continuous layer of Made Ground (1.70m to 5.00m) was encountered within exploratory holes positioned about the location off the former brickworks (Arcadis Area A2). Frequent inclusions of brick/concrete cobbles and gravel were generally noted within Made Ground recovered in this part of the Site. An infilled basement structure was also encountered at TP23 (1.00 m – 2.50m below ground level (bgl)).
- 4.2.5. Very limited recovery of Made Ground was recorded across the Core Zone (Arcadis Area B), varying in thickness between 0.20m (TP37) and 0.60m (CP08) across only two exploratory hole locations.

### NATURAL GROUND

- 4.2.6. Made Ground or topsoil was encountered at the surface overlying either superficial deposits of Alluvium or Head Deposits (where present). Alluvium was encountered in general accordance with the footprint of BGS mapped exposures. The subsequent Peterborough Member (Oxford Clay Formation) was noted to initially comprise an upper weathered zone, overlying a non-weathered deposit. The Kellaways Formation, present beneath the Oxford Clay Formation, comprised both sand and clay members, the latter of which was noted to be absent locally.
- 4.2.7. The strata underlying the Kellaways Formations was only encountered within the rotary follow-on boreholes (CP04, CP07, CP10 and CP14) and comprised the Cornbrash Formation, the Forest Marble Formation, the Blisworth Formation (divided into the Blisworth Clay Member and the underlying Blisworth Limestone Member) and the Rutland Formation.
- 4.2.8. The Forest Marble Formation was generally described to comprise a very stiff dark grey fissured clay with frequent to absent fossilised shells. The Blisworth Clay Formation was described as a very stiff yellow to black fissured clay with fossilised shells and as an extremely weak dark grey mudstone (CP14 only).
- 4.2.9. The underlying Blisworth Limestone Formation was described as a strong light grey limestone. The Rutland Formation was encountered in all rotary follow-on boreholes (except CP04) underlying the Blisworth Limestone Formation and was generally described as a very stiff dark grey fissured clay with pockets of organic matter and peat.

## GROUNDWATER CONDITIONS

- 4.2.10. Information on recorded groundwater levels taken from the Arcadis report (2023)<sup>19</sup> is provided in **Chapter 12: Water Resources (Volume 1)** Paragraph 12.5.27. Overall, the bedrock aquifers are considered to be confined by the overlying Peterborough Member, which provides substantial protection from surface pollution sources because of its low permeability.

## 4.3 HYDROGEOLOGY

### AQUIFER STATUS

- 4.3.1. The Alluvium Deposits are classified by the Environment Agency as a Secondary A Aquifer defined as *“permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers”*<sup>36</sup>.
- 4.3.2. The Head Deposits are classified by the Environment Agency as a Secondary Undifferentiated Aquifer defined as *“where it has not been possible to attribute either category A or B to a rock type. In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type”*<sup>36</sup>.
- 4.3.3. The bedrock of the Peterborough Member Mudstone is classified by the Environment Agency as an unproductive aquifer defined as *“these are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow”*<sup>36</sup>.
- 4.3.4. The bedrock of the Kellaways Sand Member is classified as a Secondary A Aquifer and Kellaways Clay Member is classified as unproductive aquifer.
- 4.3.5. The Cornbrash Member is classified as a Principal Aquifer.
- 4.3.6. The Groundsure Report (**Annex 4**) indicates that groundwater residing in the superficial aquifers is of medium to high vulnerability. Groundwater held within the underlying bedrock is less vulnerable due to the classification as an unproductive aquifer. However, it is noted that an unconfined aquifer was encountered within the Kellaways Sand Member during previous ground investigation.
- 4.3.7. No areas of the Site are located within a published groundwater Source Protection Zone (SPZ).

### GROUNDWATER ABSTRACTIONS

- 4.3.8. There is one historical groundwater abstraction located on-Site in the eastern portion of the Lake Zone. The abstraction is associated with London Brick Co and is dated from 1967. The licence’s expiry date is not noted. An off-Site historical groundwater abstraction is noted approximately 91m southeast of the Lake Zone associated with Supreme Concrete.
- 4.3.9. There are no active groundwater abstractions within 500m of the Site recorded within the Environmental Database Reports.

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<sup>36</sup> British Geological Survey (2023) *Aquifer Designation Data – Customer Information Note (England)*. <https://www.bgs.ac.uk/download/aquifer-designation-data-customer-information-note-england/> [Accessed: 11 June 2025].



## 4.4 HYDROLOGY

### SURFACE WATER FEATURES

- 4.4.1. There are a number of surface water features noted by both the Groundsure Report (**Annex 4**) and OS mapping present on and around the Site's areas of interest.
- 4.4.2. The Groundsure Report (**Annex 4**) highlights the presence of an unnamed stream, running through the West Gateway Zones from south to north, along the western boundary of the Core Zone and Lake Zone. This stream is known to be the Elstow Brook, which is tributary of the River Great Ouse.
- 4.4.3. Minor field drains are noted throughout the whole Site. A series of unnamed lakes/ponds are noted on-Site throughout the Lake Zone. A narrow unnamed stream runs through the Core Zone, from an unnamed lake in the Lake Zone. A large unnamed Lake is noted adjacent to the east of the Lake Zone.
- 4.4.4. The closest off-Site water feature comprises an unnamed lake immediately to the east of the Lake Zone.
- 4.4.5. The Site lies across two surface water catchments, the Elstow Brook (US Shortstown) (Water body ID: GB105033038050) and the Harrowden Brook (Water body ID: GB105033038010). The hydromorphological designation for both catchments are "*heavily modified*"<sup>37</sup>.
- 4.4.6. The Elstow Brook surface water catchments, as defined on the Environment Agency Catchment Data Explorer<sup>29</sup> interactive map, has historically been assessed with a "*moderate*" ecological rating and a "*good*" physico-chemical quality (Cycle 3, 2022); in (Cycle 3, 2019) the water body had a failing chemical quality<sup>37</sup>. The chemical status in 2019 was reported as a "*fail*" due to the presence of priority hazardous substance Polybrominated diphenyl ethers (PBDEs)<sup>37</sup>. No chemical status was provided for 2022.
- 4.4.7. The Harrowden surface water catchments, as defined on the Environment Agency Catchment Data Explorer<sup>29</sup> interactive map, has historically been assessed with a "*bad*" ecological rating and a "*good*" physico-chemical quality<sup>38</sup>. The chemical status in 2019 was reported as a "*fail*" due to the presence of priority hazardous substances Perfluorooctane sulphonate and PBDEs<sup>38</sup>. No chemical status was provided for 2022.

### SURFACE WATER ABSTRACTIONS AND DISCHARGES

- 4.4.8. There are four historical licensed surface water abstractions recorded on-Site in the Lake Zone. There are no active surface water abstractions recorded within 500m of the Site.

<sup>37</sup> Department for Environment Food and Rural Affairs and Environment Agency (n.d.) *Elstow Brook (US Shortstown) Water Body*. Available at: <https://environment.data.gov.uk/catchment-planning/WaterBody/GB105033038050> [Accessed: 11 June 2025].

<sup>38</sup> Department for Environment Food and Rural Affairs and Environment Agency (n.d.) *Harrowden Brook Water Body*. Available at: <https://environment.data.gov.uk/catchment-planning/WaterBody/GB105033038010> [Accessed: 11 June 2025].

- 4.4.9. The Groundsure Report (**Annex 4**) notes 36 licensed discharges to controlled waters on-Site. Thirty-one of the on-Site records relate to sewage discharges to Elstow Brook, a seasonal soakaway, to land and to an unknown tributary. Three records are associated with trade discharges to Elstow Brook. The two remaining discharges are associated with unspecified agriculture to unknown tributary and a miscellaneous discharge to Elstow Brook. Most of the licenses are listed as having been revoked.

## 4.5 FLOODING

- 4.5.1. Reference to the Flood Map for Planning<sup>27</sup> webpage indicates that the Site is mostly situated within Flood Zone 1. Land within Flood Zone 1 has a low probability of flooding from rivers and the sea. However, a small area in the northwest of the Lake Zone and areas along the western and eastern edges of the West Gateway Zone are located in Flood Zones 2 and 3. Locations in Flood Zone 2 have a medium probability of flooding and those in Flood Zone 3 have a high probability of flooding.
- 4.5.2. A review of the long-term flood risk mapping<sup>28</sup> indicates that the majority of the Site is at a negligible risk of surface water flooding, with discrete spots across the Site at higher risk. The highest risk on-Site is a 1 in 30-year flood, 0.3m - 1.0m deep.
- 4.5.3. Upon review of the Groundsure Report (**Annex 4**), the Site appears to mostly be at a negligible risk of groundwater flooding with the areas in Flood Zones 2 and 3 at low risk. These areas cover the extent of the superficial deposits on-Site.
- 4.5.4. It was noted in the Arcadis (2023) report<sup>19</sup> that during ground investigation and a Site walk over, standing water had been identified in areas of the agricultural fields within the Lake and Core Zones, due to recent heavy rainfall and low permeability of the underlying strata.

## 4.6 PRELIMINARY HYDROGEOLOGICAL MODEL

- 4.6.1. Previous ground investigation completed within the Lake and Core Zones has confirmed the presence of Made Ground at varying thicknesses with a maximum layer of 10.80m encountered below the former Kempston Brickworks at the southern extent of the Lake Zone. Ground investigation completed across the wider area of the Lake Zone, beyond Kempston brickworks, encountered Made Ground up to 3.0m in thickness. Very limited recovery of Made Ground was recorded across the Core Zone, with a maximum thickness of 0.6m recorded.
- 4.6.2. The Peterborough Member of the Oxford Clay Formation was typically encountered immediately below the Made Ground with exception to where Alluvium or Head Deposits were present within the Core Zone.
- 4.6.3. The Kellaways Formation was encountered beneath the Peterborough Member at a thickness of approximately 5.0 to 5.5m, which in turn was sitting above the Cornbrash Formation, encountered at depths between 17.25m and 19.55m bgl.
- 4.6.4. Groundwater was observed to be in hydraulic connection with Made Ground and underlying natural deposits (water strikes were encountered between 1.3m and 3.2m during trial pitting within the Kempston Brickworks). Where superficial Alluvium and Head Deposits were encountered, a shallow groundwater table between 1.0 to 2.0m bgl that was in continuity with the Made Ground was observed.



- 4.6.5. A deeper aquifer within the Peterborough Member (Oxford Clay Formation) was encountered between 3.9m and 12.9m bgl. A confined groundwater body was recorded within the Kellaways Sand Member, which was evidenced by a significant rise in the groundwater level within a cable percussion borehole of 5.5m after 20 minutes.
- 4.6.6. It is possible that the local groundwater at the Site is flowing northwards towards the Elstow Brook and then into the River Great Ouse.

## 4.7 ECOLOGY AND ARCHAEOLOGY

- 4.7.1. The *NPPF*<sup>10</sup> mandates that consideration should be given to ecology and archaeology as part of planning policies and decisions.
- 4.7.2. Ecology is assessed in **Chapter 6: Ecology and Nature Conservation (Volume 1)**. Archaeology is assessed in **Chapter 10: Cultural Heritage (Volume 1)**.
- 4.7.3. Ecologically sensitive land uses that have been identified within 500m of the Site as a whole are noted below:
- The Site is partially located within four Sites of Special Scientific Interest (SSSIs) Impact Risk Zones (IRZs); 1) Kings Wood and Glebe Meadows, Houghton Conquest SSSI, 2) Hanger Wood SSSI, 3) Marston Thift SSSI, and 4) Maulden Wood and Pennyfather's Hill SSSI, Maulden Heath SSSI and Maulden Church Meadow. Whilst all these SSSIs are located more than 2km from the Site, IRZs require consideration of potential indirect effects upon SSSIs e.g. noise, water and air quality from all planning applications, particularly those relating to large infrastructure projects or similar large projects related to aviation and air pollution for livestock and slurry;
  - Two non-statutory County Wildlife Sites (CWSs); Kempston Hardwick Pits CWS and Coronation Pit CWS partially extend into the Site, both are designated a county level for standing water and scrub and woodland habitats they support (as detailed in **Chapter 6: Ecology and Nature Conservation (Volume 1)**); and
  - The Site is within three nitrate vulnerable zones: one for the Great Ouse surface water, the Stewartby Lake eutrophic water and one for the Huntingdon River Gravels groundwater.

## 4.8 CLIMATE CHANGE

### FUTURE CLIMATE CHANGE UNDER REPRESENTATIVE CONCENTRATION PATHWAY 8.5 SCENARIO

#### Sea Level Rise/Flood Risk

- 4.8.1. The Site is currently located approximately 95km from the English Channel and is at an elevation approximately 30m AOD. Under Representative Concentration Pathway 8.5, sea level along the coast in proximity to the Site is projected to rise by 1.13m by 2100 which could bring the sea within approximately 95km of the Site during spring tides or storm surges i.e. no change to the current situation.
- 4.8.2. Localised parts of the Site are located within Flood Zones 2 and 3 indicating they are at a high risk of flooding from rivers. Note that climate change may result in changes to the frequency of extreme weather events and associated flooding.

## Projected Changes to Groundwater Level

- 4.8.3. Far-future median projections for the nearest monitored borehole indicates no significant groundwater level changes for this bedrock aquifer.

## 4.9 UNEXPLODED ORDNANCE

- 4.9.1. WSP commissioned Zetica Limited to complete a Pre-Desk Study Assessment and a detailed unexploded ordnance (UXO) Desk Study and Risk Assessment to further assess UXO risks at the Site. The detailed assessment concluded that the risk of encountering UXO was assessed as Low, defined as “*no positive evidence that UXO is present, but its occurrence cannot be totally discounted*” (see **Annex 5**). The Zetica UXO awareness briefing will be followed for all construction staff involved with below ground excavations and is detailed in **Appendix 2.3: Outline Construction Environmental Management Plan (OCEMP) (Volume 3)**.
- 4.9.2. A copy of the WSP Technical Note with the full Zetica detailed UXO Desk Study and Risk Assessment is presented in **Annex 5**.

## 4.10 RADON

- 4.10.1. Review of both the Groundsure Report (**Annex 4**) and the UKHSA website<sup>31</sup> indicates that the Site is located within an area where less than 1% of properties would exceed the Radon Action Level.
- 4.10.2. Although the radon data used above is related to measurements in homes, the maps indicate the likely extent of the local radon hazard in all buildings. The information is therefore relevant to employers in assessing workplace risks. Under the *Health and Safety at Work Act 1974*<sup>39</sup>, employers must, so far as is reasonably practicable, ensure the health and safety of employees and others who have access to their work environment.
- 4.10.3. *The Management of Health and Safety at Work Regulations 1999*<sup>40</sup> require the assessment of health and safety risks, and this should include radon in the following circumstances:
- All below ground workplaces in the UK; and
  - All workplaces located in radon Affected Areas.
- 4.10.4. Radon mitigation measures are not expected to be required for the Proposed Development; however, this would be subject to agreement with the Local Authority.

## 4.11 MINING/NATURAL CAVITIES

- 4.11.1. The Mining Remediation Authority interactive map viewer<sup>26</sup> indicates that the Site is not located within a coal mining reporting area.
- 4.11.2. The Groundsure Report in **Annex 4** indicates that no natural cavities or mining cavities, have been reported on-Site or within 500m of the Site.
- 4.11.3. The Groundsure Report in **Annex 4** indicates four Brit Pits are present on-Site, with three located in the Lake Zone and one in the Core Zone. All were used for the extraction of clay and shale.

<sup>39</sup> HM Government (1974) *Health and Safety at Work etc. Act 1974*. Available at: <https://www.legislation.gov.uk/ukpga/1974/37/contents> [Accessed: 11 June 2025].

<sup>40</sup> HM Government (1999) *The Management of Health and Safety at Work Regulations 1999*. Available at: <https://www.legislation.gov.uk/uksi/1999/3242/contents> [Accessed: 11 June 2025].

- 4.11.4. The Groundsure Report in **Annex 4** reports a total of 96 records for surface workings at the Site relating to brick works, clay pits, cuttings, ponds, water bodies and various unspecified works.
- 4.11.5. The Site is within historical mineral planning areas for clay surface mineral working.

## 4.12 GROUND STABILITY

- 4.12.1. Information on potential ground stability hazards assessed by the BGS are included in the Groundsure Report in **Annex 4** and are summarised in **Table 4-1**. This information is only provided to support design and not the Environmental Impact Assessment (EIA) within the context of ground conditions.
- 4.12.2. Ground stability hazards at the Site as a whole, range from negligible to moderate.

**Table 4-1 - Summary of Ground Stability Hazards**

Feature	Hazard Rating
Shrink swell clays	Negligible to moderate
Running sands	Negligible to low
Compressible deposits	Negligible to moderate
Collapsible deposits	Negligible to very low
Landslides	Very Low to low
Ground dissolution of soluble rocks	Negligible

## 5 REGULATORY INFORMATION AND ENGAGEMENT

### 5.1 REGULATORY DATABASE

5.1.1. The Groundsure Report (**Annex 4**) includes information and data collected from several organisations including the Environment Agency, the Local Authority, the BGS, Department for Environment, Food and Rural Affairs and Health and Safety Executives. **Table 5-1** summarises this information. Due to the size of the Site, the Groundsure Report (**Annex 4**) has been split into three sections, causing duplication of some features.

**Table 5-1 - Summary of Database Searches**

Descriptor	On-Site	0-50 m	50-250 m	Details
Historical industrial land uses	61	17	112	On-Site historical land uses related to unspecified works, unspecified heaps, clay pits, tramway sidings, brickworks, railway buildings, unspecified ground workings, unspecified commercial/industrial, storage depots, railway sidings and cuttings. Off-Site land uses were present in all directions of the Site. Among these included records relating to unspecified ground workings, unspecified works, abattoir, clay pits, electrical substations, tanks, disused pits, unspecified kilns, cemetery, smithy, refuse heaps, unspecified heaps, disused windmill, sewage works, railway sidings, gravel pit, and brick works.
Historical Tanks	0	0	4	Four tanks were noted within 250m of the Site. The tanks were noted, 70m southeast, 100m southeast, 221m north and 249m north. The tanks were all noted as unspecified.
Historical energy features	4	11	2	Five energy features were noted within 10m of the Site and were 2m east, 8m east and 9m southeast. All of the recorded features were electrical substations.
Historical military land	1	0	0	The record relates to the Royal Ordnance Factory (ROF) Elstow, operated between 1942 to 1946. The Zetica Desk Study summarised in Section 4.9 indicates the ROF Elstow was adjacent to the east of the Site.
Active or recent landfill	0	1	1	One record located 21m west relating to Stewartby landfill Site is currently active for waste landfilling excluding inert waste. Another record relates to a Waste Site for Bedfordshire County Council, 159m northeast of the Site, for household, commercial and industrial waste.
Historical landfill Environment Agency/Natural Resources Wales records	1	3	1	One on-Site historical record pertained to a clay pit adjacent to the former Kempston Hardwick Brickworks. The licence holder was London Brick Landfill Limited. The landfill is recorded as operating between 31 December 1977 to 31 December 1993 and accepted inert, industrial, commercial and household waste when active. The three records related to L Field Clay Pit, 20m west of the Site, with three surrendered licences from 1978, 1984 and 1986 each taking inert, industrial, commercial, household, special and liquid sludge. One record related to the Elstow Brickworks, 159m northeast of the Site.

Descriptor	On-Site	0-50 m	50-250 m	Details
Historical waste Sites	1	2	0	The on-Site record related to a planning application for a waste transfer station on Manor Road. Planning application reference: 96/0293. Description: Erection of new building for use with Class C1 Waste. Submitted 1996. The two off-Site records are located 15m south and 28m east. Both records related to the development of waste transfer stations and were dated from 1996 to 1997.
Licensed Waste Sites	1	5	8	There is one on-Site record relating to Japanese Car Breakers for metal recycling. Three records 14m east of the Site relate to Paul Riches Skips, with one record expired and two modified. There are two records within 50m of the Site, located 18m south and 20m southeast relating to Kempston Court and Japanese Car Breakers.
Waste exemptions	1	5	22	The on-Site exemption relates to the storage of sludge. Off-Site exemptions are present between 12m south and 236m east, and relate to use of waste in construction, sorting and de-naturing of controlled drugs for disposal, burning of waste, use of waste, treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising, deposit of waste from dredging, cleaning washing spraying or coating relevant waste, storage of waste in a secure place, spreading of plant matter, use of depolluted end-of-life vehicles for vehicle parts, and use of waste in construction.
Recent Industrial land uses	6	10	45	On-Site records relate to tanks, concrete products, electrical substations and waste storage. Off-Site land uses are present between 5m southeast and 244m west.
Historical licenced industrial activities (integrated pollution control)	4	0	0	All records were related to Hanson Buildings Products Ltd for ceramic production. All of the records are superseded by variation or revoked.
Licensed industrial activities (Part A(a))	0	4	0	All of the records relate to C Jackson & Sons (Bedford), located between the Core Zone and Lake Zone. The activities ranged from temporary storage of hazardous waste and other waste disposal.
Licensed pollutant release (Part A(2)/B)	1	3	2	The on-Site record relates to Hanson Bricks for the manufacture of Clay. Off-Site records are located between 15m south and 236m northeast., and relate to the use of bulk cement, respraying of road vehicles, unloading of petrol into storage at Service Stations and a waste oil burner.
Pollutant release to surface waters (Red List)	2	0	0	Two records located on-Site relating to trade discharges of process effluent.
List 1 Dangerous Substances	1	0	0	There is a record on-Site relating to the Stewartby Landfill Site for taking mercury and cadmium.

Descriptor	On-Site	0-50 m	50-250 m	Details
List 2 Dangerous Substances	1	0	3	One record 3m southwest relating to Wrc “I” Field Landfill Site taking arsenic, chromium, copper, iron, lead and nickel. Two records located 192m south and one record located 216 m north are noted as not active.
Pollution incidents	7	6	11	The on-Site incidents related to landfill odour, other general biodegradable material or waste, algae and kerosene and aviation fuel. The off-Site records occurred between 7m south and 213m south and were related to landfill odour, dust, commercial waste, smoke and final effluent.

## 5.2 PLANNING HISTORY

5.2.1. A review of the Bedford Borough Council (BC) planning portal identified a number of planning applications relating to the Site or in close proximity to the Site. A summary of the environmentally pertinent applications is presented below:

- 22/01954/MDC3 - Construction of two railway platforms, footbridge and pedestrian lifts associated with a new railway station. Construction of facilities ancillary to the station including lighting, drainage, utilities and other services, boundary treatment and other associated works – permitted in 2022<sup>41</sup>;
- 20/02342/EIASCR - Request for Screening Opinion in respect of proposed railway station – EIA not required<sup>42</sup>;
- 18/02414/EIASCR - Request for screening opinion in respect of development on-Site for of a secondary education campus including two ten form entry secondary schools, associated playing fields and sporting facilities, supporting infrastructure including public transport facilities, areas for vehicular and cycle parking, accessible parkland, woodland planting and landscaping- details required<sup>43</sup>;
- 18/02940/EIA - Outline application with all matters reserved except access, for a commercial and industrial development providing up to 780,379 sqm of floorspace for B1, B2 and B8 uses and ancillary service uses (A1, A3, A4 and A5) and associated infrastructure including open space and landscaping – withdrawn<sup>44</sup>;

<sup>41</sup> Bedford Borough Council (n.d.) *Planning Application - 22/01954/MDC3*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=RHFAKCCUH0800> [Accessed: 11 June 2025].

<sup>42</sup> Bedford Borough Council (n.d.) *Planning Application - 20/02342/EIASCR*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=QHxGBHCU03600> [Accessed: 11 June 2025].

<sup>43</sup> Bedford Borough Council (n.d.) *Planning Application - 18/02414/EIASCR*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=PF7FYLCU03600> [Accessed: 11 June 2025].

<sup>44</sup> Bedford Borough Council (n.d.) *Planning Application - 18/02940/EIA*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=PIG85JCU03600> [Accessed: 11 June 2025].



- 17/00666/MAO - Variation of condition 37 wording to allow for existing electricity cable to be diverted (Hybrid application comprising full planning application for means of access, Plots 1E-F and 6 (Class B1c light industrial/B2 general industrial/B8 storage and distribution) access, parking, drainage, landscaping and associated works. Outline planning application for Plots 1A-D (Class A3 food and drink/A4 public house/C1 hotel/D1 crèche) Plots 2 and 3 (Class B1A office/B1B research and development/B1C light industrial) and Plots 4 and 5 (Class B1C light industrial/B2 general industrial/B8 storage and distribution) access, parking, drainage, landscaping and associated works. All other matters reserved.) – withdrawn<sup>45</sup>;
- 17/03340/EIASCP - Request for Scoping Opinion: Restoration of former clay pit through dewatering of Kempston Hardwick Lake and proposed importation of 3.9 million m<sup>3</sup> of inert fill to create an agricultural landform and a shallow lake to the south with woodland planting and public access – details required<sup>46</sup>;
- 11/00236/MAF - Ground modelling including infilling of existing ditch and land raising, excavation of four ponds, landscaping and associated infrastructure works – permitted in 2011<sup>47</sup>;
- 10/02805/MAF - New four platform railway station with associated access road, forecourt, station building and multi-storey/surface car parks, outline application for public square with ancillary retail units – permitted in 2011<sup>48</sup>;
- 09/01674/FULWM - Excavation of clay for use as engineering material in the A421 Improvement Scheme to create environmental/noise bunds, including use of waste material. Provision of informal cycle/pedestrian access – permitted in 2009<sup>49</sup>;
- 03/00187/FUL - Construction of motor vehicle auction centre, vehicle storage and parking areas, ancillary buildings for vehicle wash, valeting and inspection, roundabout and access road – permitted in 2003<sup>50</sup>;
- 03/01996/FUL - Construction of a four-arm roundabout, Site access road and pumping station – permitted 2003<sup>51</sup>;

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<sup>45</sup> Bedford Borough Council (n.d.) *Planning Application - 17/00666/MAO*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=OMG9RUCUMCT00> [Accessed: 11 June 2025].

<sup>46</sup> Bedford Borough Council (n.d.) *Planning Application - 17/03340/EIASCP*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=P04I2RCU00C00> [Accessed: 11 June 2025].

<sup>47</sup> Bedford Borough Council (n.d.) *Planning Application - 11/00236/MAF*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=LGCWV1CU03200> [Accessed: 11 June 2025].

<sup>48</sup> Bedford Borough Council (n.d.) *Planning Application - 10/02805/MAF*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=LBS2VICU03200> [Accessed: 11 June 2025].

<sup>49</sup> Bedford Borough Council (n.d.) *Planning Application - 09/01674/FULWM*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=KNLB28CU00C00> [Accessed: 11 June 2025].

<sup>50</sup> Bedford Borough Council (n.d.) *Planning Application - 03/00187/FUL*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0300187FUL> [Accessed: 11 June 2025].

<sup>51</sup> Bedford Borough Council (n.d.) *Planning Application - 03/01996/FUL*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0301996FUL> [Accessed: 11 June 2025].

- 03/02423/FUL - Construction of surface water outfall – permitted in 2003<sup>52</sup>;
- 02/00007/FUL - Remediation of land, restoration and landscaping - permitted 2002<sup>53</sup>;
- 02/00492/COM - Brick factory with ancillary storage and operational areas<sup>54</sup>. County Council application BC/CM/2002/06 – refused;
- 02/01013/MAO - A mixed use development including the erection of dwellings, local convenience store and community facilities; provision of recreational facilities and open space and associated works – disposed of<sup>55</sup>;
- 02/01322/MAO - Residential and employment development with ancillary open space recreational facilities and associated works. – disposed of<sup>56</sup>;
- 01/02607/FUL - Full decontamination remediation of Site to remove all material identified as unsuitable to a development after-use; to off-Site location, subsequent restoration and landscaping, possible relocation of existing tenants to on-Site 'enclave' – permitted in 2002<sup>57</sup>;
- 00/00624/COM - Application under the Environment Act 1995 for the review of conditions attached to the extant planning permission/s for mineral extraction and restoration<sup>58</sup>. County Council application BC/CM/2000/05 – disposed of;
- 99/01645/OUT - Built development consisting of building and engineering works for a mixed use development of residential, employment, retail (A1, A2, A3) leisure and community uses, open space and associated uses together with supporting infrastructure (roads, paths, cycleways, pumping stations, electricity substations), public transport, interchange and car parking - Permitted subject to Planning Obligation<sup>59</sup>; and

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<sup>52</sup> Bedford Borough Council (n.d.) *Planning Application - 03/02423/FUL*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0302423FUL> [Accessed: 11 June 2025].

<sup>53</sup> Bedford Borough Council (n.d.) *Planning Application - 02/00007/FUL*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0200007FUL> [Accessed: 11 June 2025].

<sup>54</sup> Bedford Borough Council (n.d.) *Planning Application - 02/00492/COM*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0200492COM> [Accessed: 11 June 2025].

<sup>55</sup> Bedford Borough Council (n.d.) *Planning Application - 02/01013/MAO*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0201013OUT> [Accessed: 11 June 2025].

<sup>56</sup> Bedford Borough Council (n.d.) *Planning Application - 02/01322/MAO*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0201322OUT> [Accessed: 11 June 2025].

<sup>57</sup> Bedford Borough Council (n.d.) *Planning Application - 01/02607/FUL*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0102607FUL> [Accessed: 11 June 2025].

<sup>58</sup> Bedford Borough Council (n.d.) *Planning Application - 00/00624/COM*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=0000624COM> [Accessed: 11 June 2025].

<sup>59</sup> Bedford Borough Council (n.d.) *Planning Application - 99/01645/OUT*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=9901645OUT> [Accessed: 11 June 2025].



- 99/01215/FUL- Upgrading of part of A421 to dual carriageway; junction improvements to form two roundabouts with two sections of new road – withdrawn<sup>60</sup>.

### 5.3 LOCAL AUTHORITY ENQUIRY

5.3.1. Bedford BC was contacted via email on 20 March 2024 regarding environmentally pertinent records held relating to the Site. A response was received on 26 March 2024 and is included in **Annex 6**. Bedford BC provided the following pertinent information:

- Records indicate that the northern section of the Site was used as a clay pit and brickworks and then the was used as a landfill until 1993;
- Bedford BC indicated multiple reports were available relating to the Site and under planning application ref:18/02940/EIA<sup>44</sup>, which have been summarised in Section 2.2;
- Eleven authorised processes were noted within proximity to the Site under the Local Air Pollution Prevention and Control from activities that include: mobile crushing, concrete plant, di-isocyanate, roadstone coating and a petrol station;
- Two records for historical fuel tanks were noted on-Site:
  - IBETT engineering, Stanley Works, Kempston Hardwick, which was a manufacturer of trailers. One tank installed in 1967 is recorded with a capacity 4,546 litres (1000 GALLON) of petroleum spirit, this was converted to diesel use in 1986. A survey conducted in 1992 showed the tank was no longer in use; and
  - Marsh Leys Ltd. Leys Farm, Kempston. A farm. One tank installed in 1958 with a capacity of 2,273 Litres (500 gallon) of petroleum spirit. The tank changed use to diesel in 1991. There were no records of either tank being permanently filled and subsequently removed, nor was the location of the tanks able to be identified.
- Additionally, Bedford BC reviewed historical maps for the Site. The pertinent land uses identified were included in their response; and
- It is noted that the area of land included in Bedford BC's searches was not the same as the current Site boundary and therefore may have missed information relating to the East and West Gateway Zones.

### 5.4 ENVIRONMENT AGENCY ENQUIRY

5.4.1. Information on the Site's geoenvironmental background was presented to the Environment Agency during a meeting with WSP in May 2024. To date, the Environment Agency has not provided any formal correspondence regarding contaminated land information for the Site.

### 5.5 PETROLEUM OFFICER/FIRE BRIGADE ENQUIRY

5.5.1. The confidentiality of this report means that no correspondence with the petroleum officer/fire brigade was undertaken.

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<sup>60</sup> Bedford Borough Council (n.d.) *Planning Application - 99/01215/FUL*. Available at: <https://publicaccess.bedford.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=9901215FUL> [Accessed: 11 June 2025].

## 6 PRELIMINARY CONCEPTUAL SITE MODEL

### 6.1 INTRODUCTION

- 6.1.1. The CSM is based upon the environmental conditions of the Site as described in the previous sections. The methods used in this assessment followed a risk-based approach with the potential environmental risk assessed qualitatively using the 'source-pathway-receptor' contaminant linkages concept introduced in the guidance document (principally the Environment Agency's *LCRM Guidance*<sup>11</sup>) on the practical implementation of the *Environmental Protection Act 1990*<sup>2</sup>.
- 6.1.2. Environmental risk can be defined as the combination of the consequence of a harmful effect and the probability of its occurrence. The existence of a contaminant linkage is primarily dependant on-Site usage and environmental conditions.
- 6.1.3. The environmental risk assessment has been carried out by identifying and evaluating the significance of the following:
- **Potential Sources of Contamination:** these include any actual or activities of concern, located either on or in the vicinity of the Site;
  - **Potential Pathways:** these are the routes or mechanisms by which Contaminants of Concern (CoC) may migrate from the source to the receptor; and
  - **Potential Receptors:** these include current or future land users, activities or persons at the Site that could be harmed by CoC.

### 6.2 POTENTIAL SOURCES OF CONTAMINATION

- 6.2.1. **Table 6-1** provides a summary of the potential sources of contamination that may be present at the Site, as well as the likely distribution of such sources.

**Table 6-1 - Potential Sources of Contamination**

Potential Source	Potential Contaminants of Concern	Likely/Anticipated Distribution
<b>ON-SITE</b>		
Made Ground associated with infilled river channel, former brickworks (including ASTs and underground storage tanks (USTs)), clay pits, infilled land, spoil heaps, historical landfill sites and surrounding on-Site roads and railway	Inorganics, Polycyclic Aromatic Hydrocarbons (PAHs), Total Petroleum Hydrocarbons (TPHs), metals, asbestos, Volatile Organic Compounds (VOCs), Benzene Toluene Ethylbenzene Xylene (BTEX), Semi Volatile Organic Compounds (SVOCs) and ground gases/vapours.	Lake Zone, East Gateway Zone, West Gateway Zone
Electrical Substations	Polychlorinated biphenyls (PCBs), mineral oils and Asbestos Containing Materials (ACMs).	Southern boundary of the Lake Zone and Southern boundary of East Gateway Zone.
Structurally bound asbestos within the fabric of remaining buildings.	ACMs.	Site wide

Potential Source	Potential Contaminants of Concern	Likely/Anticipated Distribution
Agricultural Practices and use of pesticides and herbicides	Petroleum hydrocarbons, PAHs, BTEX, oils, fertilisers, herbicides and pesticides.	Northern area of Lake Zone, Core Zone and West Gateway Zone
<b>OFF-SITE</b>		
Made Ground	Asbestos fibres, metals, PAHs, TPH, BTEX, VOCs, SVOCs fuel oils, ground gases (methane and carbon dioxide).	All directions
Railway sidings	Asbestos, metals, inorganics, PAHs, TPHs, BTEX compounds, VOCs, hazardous ground gases (methane and carbon dioxide) and vapours.	All directions
Disused pits converted to landfill	Mercury, cadmium, arsenic, chromium, copper, iron, lead and nickel	Immediately south of the Site
Cement Plants	Inorganics, metals, TPH, PAHs, SVOCs and VOCs.	Between the Core Zone and Lake Zone and on the eastern boundary of the Lake Zone.

## 6.3 POTENTIAL PATHWAYS

6.3.1. In the context of the Proposed Development of the Site as an entertainment resort complex, the following potential exposure or migration pathways associated with the identified potential source(s) have been identified:

- Pathways to Human Health receptors:
  - Dermal contact with soils and groundwater;
  - Ingestion of dusts/soil particles;
  - Inhalation of dusts and fibres (on and off-Site receptors); and
  - Inhalation of hazardous ground gases/vapours (on and off-Site receptors).
- Pathways to Controlled Water receptors:
  - Overland flow to on-Site and off-Site surface water features;
  - Leaching of contaminants through the unsaturated zone and subsequent impact to groundwater within the underlying aquifers; and
  - Lateral migration of contaminants within groundwater and subsequent impact of surface water receptors.
- Pathways applicable to Site infrastructure:
  - Direct contact with contaminants (e.g., sulphates and hydrocarbons) in the soil and groundwater with below ground structures (underground potable water pipes and buried concrete); and
  - Accumulation of hazardous gases within below ground structures in the future development (explosive risk).

- Pathways applicable to future flora within soft landscaping:
  - Direct contact with contaminants in the soil, groundwater and surface waters.

## 6.4 POTENTIAL RECEPTORS

6.4.1. In the context of the Proposed Development, the following potential receptors were identified:

### HUMAN HEALTH

- Third-party neighbours.

### CONTROLLED WATERS

- Superficial Head deposits (Secondary Undifferentiated Aquifer);
- Superficial Alluvium deposits (Secondary A Aquifer);
- Kellaways Sand Member (Secondary A Aquifer);
- Cornbrash Formation (Principal Aquifer);
- Elstow Brook;
- On-Site drains/ditches; and
- Multiple lakes throughout the Lake Zone.

### SERVICES AND BUILDING FABRIC

- Future below ground services (e.g. potable water supply pipes); and
- Future building structures.

6.4.2. The bedrock of the Peterborough Member (Oxford Clay Formation) has been excluded as a receptor as the Environment Agency classifies this bedrock as unproductive strata. The Kellaways Formation (Sand and Clay members), the Cornbrash Formations, the Forest Marble formation, the Blisworth Formation and the Ruthland Formation are confined by the above Peterborough Member Mudstone. However, ground investigation by others has proven that a confined groundwater body is present within the underlying sands of the Kellaways Formation. The Kellaways Sand Member is a Secondary A Aquifer and the underlying Cornbrash Formation is a Principal Aquifer. These are therefore included as controlled waters receptors within the CSM.

### RECEPTORS EXCLUDED FROM ASSESSMENT

- 6.4.3. Future site users are not included as potential human health receptors on the basis that any contamination identified during the Construction Phase will be remediated prior to the Proposed Development coming into operation.
- 6.4.4. Construction and maintenance workers are not included as potential human health receptors within this assessment as potential risks will be covered with appropriate work control procedures. These are legal requirements under the *CDM Regulations 2015*<sup>4</sup> to ensure suitable health and safety controls are in place during construction works.
- 6.4.5. New areas of soft landscaping and associated plant life are not considered as a receptor on the basis that a suitable growing medium will be provided for soft landscaped areas as part of the Proposed Development.

## 6.5 PRELIMINARY CONCEPTUAL SITE MODEL

### **BASELINE CONTAMINATED LAND RISK ASSESSMENT (PCSM)**

- 6.5.1. The PCSM identifies the potential contamination sources, receptors, and the exposure pathways by which they may be linked. A Source-Pathway-Receptor linkage (SPRL) is present if a viable pathway exists between a potential source and an identified receptor. Based on the available Desk Study information, a PCSM has been prepared with respect to the Proposed Development and produced as **Table 6-2**.

### **CONSTRUCTION PHASE CONTAMINATED LAND RISK ASSESSMENT**

- 6.5.2. The principles have been prepared and set out in **Appendix 2.3: OCEMP (Volume 3)**. These mitigation procedures will be further developed and during construction will be implemented in accordance with the **Appendix 2.3: OCEMP (Volume 3)**.
- 6.5.3. Construction and maintenance workers are not included as potential human health receptors within this assessment as potential risks will be covered with appropriate work control procedures. These are legal requirements under the *CDM Regulations 2015*<sup>4</sup> to ensure suitable health and safety controls are in place during construction works.

**Table 6-2 - SPRLs Based on Proposed End Use**

**Key:** HH1 – Third-party neighbours; CW1 – Secondary A Aquifer in Superficial Deposits; CW2 – Confined bedrock aquifers (Kellaways Sands Secondary A Aquifer; Cornbrash Formation Principal Aquifer); CW3 – Elstow Brook and on-Site drains; CW4 – Off-Site surface water features; B1- Future below ground services

SPRL	Potential Source	Pathway	Receptor	Probability	Severity	Preliminary Risk Rating	Comments
<b>ON-SITE</b>							
SPRL1	Made Ground associated with infilled river channel, former brickworks (including ASTs and USTs), clay pits, infilled land, spoil heaps, historical landfill sites and surrounding on-Site roads and railway.	Inhalation of dusts and fibres.	HH1	Likely	Medium	<b>Moderate risk</b>	<p>The generation and mobilisation of dusts/fibres is most likely to occur during the Construction Phase. Occupants of neighbouring land are considered to be at a <b>Moderate risk</b> from fugitive dust and fibres.</p> <p>During the Construction Phase, potential risks posed to receptors should be managed by the Principal Contractor by applying appropriate health and safety control measures as per <i>CDM Regulations 2015</i><sup>4</sup>.</p> <p>An OCEMP would mitigate against the creation of potential pollution pathways during the project's construction such as mud being transported on to local roads from construction plant/vehicles. The principles are set out in the in <b>Appendix 2.3: OCEMP (Volume 3)</b>.</p> <p>As such, the risk posed to third party neighbours would be reduced to <b>low</b>.</p>

SPRL	Potential Source	Pathway	Receptor	Probability	Severity	Preliminary Risk Rating	Comments
SPRL2	Made Ground associated with infilled river channel, former brickworks (including ASTs and USTs), clay pits, infilled land, spoil heaps, historical landfill sites and surrounding on-Site roads and railway.	Inhalation of hazardous ground gases/vapours	HH1	Low likelihood	Severe	<b>Moderate risk</b>	Ground gas and vapours have the potential to accumulate in confined spaces and may pose a risk of asphyxiation. Limited ground gas assessment has been completed for the Site to date. The risk from ground gas and vapours to off-Site users is considered to be <b>moderate</b> .
SPRL3	Made Ground associated with infilled river channel, former brickworks (including ASTs and USTs), clay pits, infilled land, spoil heaps, historical landfill sites and surrounding on-Site roads and railway.	Overland flow to on-Site and off-Site surface water features; Leaching of contaminants through the unsaturated zone and subsequent impact to groundwater within the underlying aquifers; and Lateral migration of contaminants within groundwater and subsequent impact of surface water receptors.	CW1 CW2 CW3 CW4	Likely	Medium	<b>Moderate risk</b>	Previous ground investigation by others has indicated that groundwater bodies are present within the Made Ground and superficial deposits along with a deeper groundwater body within the Oxford Clay Formation and within the Kellaway Sands confined aquifer. Vertical migration of contaminants from shallow groundwater to depth is considered possible. Lateral contaminant migration will be able to occur where groundwater bodies are in hydraulic continuity with local surface water bodies. The risk to groundwater is considered to be <b>moderate</b> .
SPRL4	Made Ground associated with infilled river channel, former brickworks (including ASTs and USTs), clay pits, infilled land, spoil heaps, historical landfill sites and	Direct contact with contaminants (e.g., sulphates and hydrocarbons) in the soil and groundwater with below ground	B1	Likely	Medium	<b>Moderate risk</b>	The potential presence of Made Ground deposits can impact on the durability of buried services/utilities due to aggressive ground conditions. An assessment of the aggressive ground conditions is required to

SPRL	Potential Source	Pathway	Receptor	Probability	Severity	Preliminary Risk Rating	Comments
	surrounding on-Site roads and railway.	structures (underground potable water pipes and buried concrete)					determine the level of mitigation required. Some contaminants can taint a new water supply. It is likely that a water pipe selection assessment would be required prior to placing a new drinking water supply. A <b>moderate</b> level of risk is considered to be appropriately conservative.
SPRL5	Made Ground associated with infilled river channel, former brickworks (including ASTs and USTs), clay pits, infilled land, spoil heaps, historical landfill sites and surrounding on-Site roads and railway	Accumulation of hazardous gases within below ground structures in the future development (explosive risk).	B1	Low likelihood	Severe	<b>Moderate</b>	Ground gases have the potential to accumulate in confined spaces and may pose a risk of explosion. Limited ground gas assessment has been completed for the Site to date. The risk from ground gas and vapours to future Site users, works and visitors is considered to be <b>moderate</b> .
SPRL6	Electrical Substations	Inhalation of dusts and fibres.	HH1	Low likelihood	Medium	<b>Moderate/low risk</b>	The generation and mobilisation of dusts/fibres is most likely to occur during the Construction Phase. Occupants of neighbouring land are considered to be at a <b>moderate/low Risk</b> from fugitive dust and fibres. If the Proposed Development requires the removal of the substations, potential risks posed to receptors should be managed by the Principal Contractor during the Construction Phases by applying appropriate health and safety control measures as per <i>CDM Regulations 2015</i> <sup>4</sup> .



SPRL	Potential Source	Pathway	Receptor	Probability	Severity	Preliminary Risk Rating	Comments
							As such, the risk posed to third party neighbours would be reduced to <b>low</b> .
SPRL7	Electrical Substations	Overland flow to on-Site and off-Site surface water features; Leaching of contaminants through the unsaturated zone and subsequent impact to groundwater within the underlying aquifers; and Lateral migration of contaminants within groundwater and subsequent impact of surface water receptors.	CW1 CW2 CW3 CW4	Low likelihood	Medium	<b>Moderate/low risk</b>	Unknown PCB contamination associated with the electrical substations is likely to be localised to the source. The risk to controlled waters is considered to be <b>moderate/low</b> .
SPRL8	Electrical Substations	Direct contact with contaminants (e.g., PCBs and hydrocarbons) in the soil and groundwater with below ground structures (underground potable water pipes and buried concrete)	B1	Low likelihood	Medium	<b>Moderate/low risk</b>	PCBs and oils could potentially enter buried utilities, particularly where aggressive ground conditions exist and impact on the durability of buried construction materials. If the Proposed Development requires the removal of the existing substations, an assessment of the local ground conditions is required to determine the level of any remediation required.  A <b>moderate/low</b> level of risk is considered to be appropriately conservative.

SPRL	Potential Source	Pathway	Receptor	Probability	Severity	Preliminary Risk Rating	Comments
SPRL9	Structurally bound asbestos within the fabric of remaining buildings.	Inhalation of dusts and fibres.	HH1	Low likelihood	Severe	<b>Moderate risk</b>	<p>The generation and mobilisation of dusts/fibres is most likely to occur during the Construction Phase.</p> <p>Prior to the Construction Phase a re-demolition survey should be undertaken to help identify and design appropriate risk mitigation measures.</p> <p>During the Construction Phase, potential risks posed to receptors should be managed by the Principal Contractor by applying appropriate health and safety control measures as per <i>CDM Regulations 2015</i><sup>4</sup>.</p> <p>As such, the risk posed to future human health receptors is considered to be <b>moderate</b>.</p>
SPRL10	Agricultural Practices and use of pesticides and herbicides	Inhalation of dusts.	HH1	Likely	Medium	<b>Moderate risk</b>	<p>The generation and mobilisation of dusts/fibres is most likely to occur during the Construction Phase. Occupants of neighbouring land are considered to be at a <b>moderate/low risk</b> from fugitive dust and fibres.</p> <p>During the Construction Phase, potential risks posed to off-Site receptors should be managed by the Principal Contractor by applying appropriate health and safety control measures as per <i>CDM Regulations 2015</i><sup>4</sup>.</p>

SPRL	Potential Source	Pathway	Receptor	Probability	Severity	Preliminary Risk Rating	Comments
							An OCEMP would mitigate against the creation of potential pollution pathways during the project's construction such as mud being transported on to local roads from construction plant/vehicles. The principles are set out in the in <b>Appendix 2.3: OCEMP (Volume 3)</b> . As such, the risk posed to third party neighbours would be reduced to <b>low</b> .
<b>OFF-SITE</b>							
SPRL11	Off-Site sources of contamination identified within 250m including: <ul style="list-style-type: none"> <li>■ Made Ground from off-Site developments and land uses;</li> <li>■ Railway sidings;</li> <li>■ Disused pits converted to landfills; and</li> <li>■ Cement Plants</li> </ul>	Migration of hazardous gases/vapours in the unsaturated zone with subsequent inhalation.					Contaminant impact and the presence of artificial deposits may pose a gas and vapour risk to any future enclosed spaces or structures developed across the Site via existing and new buried utilities. Completion of a ground investigation with follow-up monitoring of the ground gas regime is required to further assess risks posed to future structures/enclosed spaces.
SPRL12		Migration of hazardous gases/vapours in the unsaturated zone with subsequent accumulation of hazardous gases within below ground structures in the future development (explosive risk).	B1	Unlikely	Severe	<b>Low/moderate risk</b>	
SPRL13		Lateral migration of contaminants within groundwater to Site.	CW1 CW2 CW3	Low likelihood	Medium	<b>Moderate risk</b>	

SPRL	Potential Source	Pathway	Receptor	Probability	Severity	Preliminary Risk Rating	Comments
		Lateral migration of contaminants within groundwater and subsequent impact of surface water receptors.					the potential to present an unacceptable risk to groundwater and surface water at the Site. A site wide package of further ground investigation is planned to refine understanding of relevant contaminant linkages and the necessary land remediation measures such as those related to the protection of ground water as set out in <b>Appendix 11.4: Outline Land Remediation Strategy (Volume 3)</b> .

## 7 CONCLUSIONS AND RECOMMENDATIONS

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### 7.1 CONCLUSIONS

- 7.1.1. This PRA has been prepared in support of the planning proposal for the Proposed Development as described in **Chapter 2: Description of the Proposed Development (Volume 1)** of the ES and is an appendix of the ES for the Proposed Development.
- 7.1.2. In 1882, the Site was primarily undeveloped agricultural lands, intersected by railways including the London Western Railway Cambridge and the London Midlands and Scottish Railway, as well as various trackways. Notable features included residential buildings in the Core Zone and the Elstow Brook in the West Gateway Zone and Lake Zone. Later, the Elstow Brook was diverted from its original course, with the area understood to be infilled and repurposed for agricultural farming.
- 7.1.3. The Kempston Brickworks, established by 1938 in the Lake Zone, expanded with multiple buildings, tanks, spoil heaps and clay pits. By 2010, the works and associated clay pits had been demolished, with the Site now comprising a network of roads, foundations and infilled/flooded clay pits.
- 7.1.4. A trackway was noted in 1948 on the eastern boundary of the Site. This was later designated as the A418, subsequently becoming the B530. The London Western Railway Cambridge and London Midlands and Scottish Railway on the west and east boundaries of the Site are now part of the Thameslink and West Midland Railway lines.
- 7.1.5. From 1968, electrical substations were constructed in the Lake Zone and East Gateway Zone. No significant land use changes were noted in the Core Zone, which has remained undeveloped agricultural land from 1882 until the present day.
- 7.1.6. A series of desk studies and two site investigation reports have previously been completed for land within the Site boundary. The ground investigations encountered varying depths of Made Ground across the Lake Zone up to a maximum thickness of 10m. A significantly thinner layer of Made Ground has been encountered within the Core Zone. The underlying natural geology encountered included Alluvium and Head Deposits. Bedrock consisted of the Peterborough Member (Oxford Clay Formation) over the Kellaways Formation, over the Cornbrash Formation. Groundwater bodies were recorded within the Made Ground and natural soils including both superficial (Alluvium and Head) and bedrock soils (Pulborough Member and Kellaways Sand Member (Kellaways Formation)).
- 7.1.7. Some visual/olfactory evidence of contamination was noted during the site investigations. Human health and controlled waters generic quantitative risk assessments reported several exceedances of generic acceptance criteria based on a residential land use as well as environmental quality standards for surface and groundwaters. It is understood that no ground investigation has been completed to date within the East or West Gateway Zones.
- 7.1.8. The Site is not located in a designated groundwater SPZ and no active licensed groundwater abstractions are recorded within 500m of the Site.
- 7.1.9. Based on the information contained in this report, the following potentially contaminative sources have been identified at the Site:
  - Structurally bound asbestos within existing on-Site buildings;

- Made Ground around infilled river channel, former brickworks, clay pits, infilled land, historical landfill Sites and surrounding on-Site roads and railway;
- Electrical Substation; and
- Agricultural practices and use of pesticides and herbicides.

7.1.10. The following potentially contaminative sources have been identified off-Site:

- Made Ground;
- Railway sidings;
- Disused pits converted to landfill; and
- Cement plants.

7.1.11. Overall, the risks posed to human health, controlled waters receptors and future infrastructure from the potential sources of contamination identified are considered to be **moderate and moderate/low**.

## 7.2 RECOMMENDATIONS

7.2.1. WSP has completed a PRA (Phase 1 Desk Study) and assessment of previous ground investigation work by others. As per the Environment Agency LCRM guidance Stage 1 Risk Assessment<sup>61</sup>, to conclude the PRA, it must be decided if:

- There are no unacceptable risks and no further work is required;
- Further assessment, site investigation and monitoring are required to address uncertainties and complete the risk assessment; and
- There are unacceptable risks and so progress to the options appraisal stage.

7.2.2. Based on the identified risks under Paragraph 7.1.10 above, further ground investigation along with a quantitative risk assessment will be required to address ground risk uncertainties at the Site as per LCRM Tier 2: Generic quantitative risk assessment process<sup>61</sup>, delivered via the requirements set out in the Outline Land Remediation Strategy (see **Appendix 11.4: Outline Land Remediation Strategy (Volume 3)**).

7.2.3. On completion of LCRM Tier 2<sup>61</sup>, WSP will decide if:

- The assessment (by others) has shown the risks are low enough that no further action is needed, and no further work is required;
- Further assessment, site investigation and monitoring are required to address uncertainties and complete the risk assessment; and
- There are unacceptable risks and so proceed to the detailed quantitative risk assessment or direct to the options appraisal stage.

7.2.4. LCRM Tier 3: Detailed quantitative risk assessment<sup>61</sup> would include additional phase(s) of ground investigation to further refine any data gaps in the ground risk assessment.

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<sup>61</sup> Environment Agency (2025) *LCRM: Stage 1 risk assessment*. Available at: <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm/lcrm-stage-1-risk-assessment> [Accessed: 12 June 2025].

- 7.2.5. An Outline Land Remediation Strategy has been produced, following LCRM: Stage 2 Options Appraisal<sup>62</sup>, outlining the mitigation measures required in order to manage any residual risks to human health receptors (see **Appendix 11.4: Outline Land Remediation Strategy (Volume 3)**).
- 7.2.6. Any remediation undertaken would be validated and reported on within a Verification Report to provide confidence that it has been undertaken with the agreed strategy.

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<sup>62</sup> Environment Agency (2025) *LCRM: Stage 2 options appraisal*. Available at: <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm/lcrm-stage-2-options-appraisal> [Accessed: 12 June 2025].

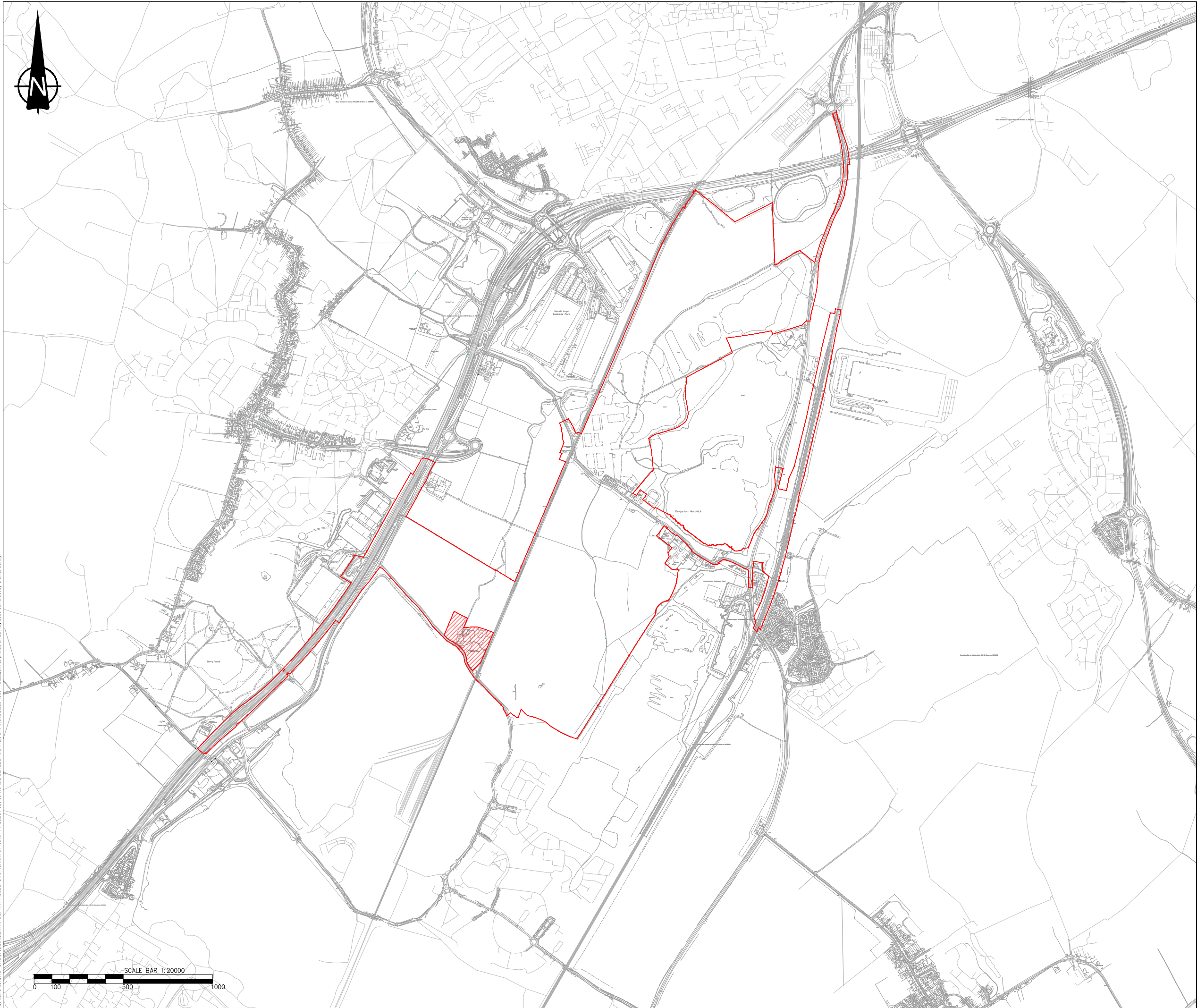


# Annex 1

FIGURES



File name: LUK-WSP-GROUP-COM-CENTRAL-DATA\PROJECTS\7011600\70116516-PROJECT-32003-WP-DEVELOPMENT\03-DRAWINGS\3203-100-P-QEZZ-DWG, printed on 22 May 2025 08:45:35, by Clarke, Danny



ARCHITECT/ENGINEER STAMP:

Approved by: <b>se</b>		Drawn by: <b>pc</b>
Latest Revision Date: 21/05/2025		
Issuance and Revision History		
Rev.	Date	Issuance and Revision Description
00	21/05/2025	First Issue

Legend

— Site Boundary

▨ Excluded from Site Boundary

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Project Name: Universal Destinations & Experiences UK Project	
Site Address: Former Kempston Hardwick Brickworks and adjoining land, Bedford	
Scale: 1:20,000 © A3	
Project Locator: 320 — 100 — SDO	
Sheet Name: Figure 1 Site Location Plan	
Sheet No.: 1.6.0	Rev #: 





ARCHITECT/ENGINEER STAMP:		
Approved by: jo		Drawn by: ac
Latest Revision Date: 21/05/2025		
Issuance and Revision History		
Rev.	Date	Issuance and Revision Description
00	21/05/2025	First Issue
Legend		
Site Boundary		
Excluded from Site Boundary		
Core Zone		
Lake Zone		
East Gateway Zone		
West Gateway Zone		

Project Name: Universal Destinations & Experiences UK Project

Site Address: Former Kempston Hardwick Brickworks and adjoining land, Bedford

Scale: 1:5,000 @ A0

Project Locator:  
320 – 100 – SDO

Sheet Name:

**Figure 2 - Zonal Plan**

Sheet No.:  1.8.0	Rev #: 
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# Annex 2

CIRIA DEFINITIONS

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## CIRIA RISK DEFINITIONS

**Table A1 - Classifications of Probability**

Classification	Definition
High Likelihood	There is a pollution linkage / identified geotechnical hazard and an event that either appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution.
Likely	There is a pollution linkage and all the elements are present and in the right place, which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short term and likely over the long term.
Low Likelihood	There is a pollution linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a longer period such event would take place, and is less likely in the shorter term.
Unlikely	There is a pollution linkage but circumstances are such that it is improbable that an event would occur even in the very long term

**Table A2 - Classifications of Consequence**

Classification	Definition
Severe	Short-term (acute) risk to human health likely to result in "significant harm" as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution of sensitive water resource. Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem, or organism forming part of such ecosystem.
Medium	Chronic damage to Human Health ("significant harm" as defined in DETR, 2000). Pollution of sensitive water resources. A significant change in a particular ecosystem, or organism forming part of such ecosystem.
Mild	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services (significant harm as defined in the Draft Circular on Contaminated Land, DETR, 2000). Damage to sensitive buildings/structures/services or the environment.
Minor	Harm, although not necessarily significant harm, which may result in a financial loss, or expenditure to resolve, Non-permanent health effects to human health (easily prevented by means such as personal protective clothing etc.). Easily repairable effects of damage to buildings, structures and services

The risk categories presented in this report, taking into account both probability and severity, are based on the matrix presented in **Table A3** below, following CIRIA C552.

**Table A3 - Adopted Risk Categories / Comparison of Consequence Against Probability**

Probability	Consequence			
	Severe	Medium	Mild	Minor
High Likelihood	Very High Risk	High Risk	Moderate Risk	Low to Moderate Risk
Likely	High Risk	Moderate Risk	Low to Moderate Risk	Low Risk
Low Likelihood	Moderate Risk	Low to Moderate Risk	Low Risk	Very Low Risk
Unlikely	Low to Moderate Risk	Low Risk	Very Low Risk	Very Low Risk

# Annex 3

## LIMITATIONS

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## REPORT LIMITATIONS - GROUND AND WATER

### GENERAL

1. WSP UK Limited has prepared this report solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed and outlined in the body of the report.
2. Unless explicitly agreed otherwise, in writing, this report has been prepared under WSP UK Limited standard Terms and Conditions as included within our proposal to the Client.
3. Project specific appointment documents may be agreed at our discretion and a charge may be levied for both the time to review and finalise appointments documents and also for associated changes to the appointment terms. WSP UK Limited reserves the right to amend the fee should any changes to the appointment terms create an increase risk to WSP UK Limited.
4. The report needs to be considered in the light of the WSP UK Limited proposal and associated limitations of scope. The report needs to be read in full and isolated sections cannot be used without full reference to other elements of the report and any previous works referenced within the report.

### PHASE 1 GEO ENVIRONMENTAL AND PRELIMINARY RISK ASSESSMENTS

**Coverage:** *This section covers reports with the following titles or combination of titles: phase 1; desk top study; geo environmental assessment; development appraisal; preliminary environmental risk assessment; constraints report; due diligence report; geotechnical development review; environmental statement; environmental chapter; project scope summary report (PSSR), program environmental impact report (PEIR), geotechnical development risk register; and, baseline environmental assessment.*

5. The works undertaken to prepare this report comprised a study of available and easily documented information from a variety of sources (including the Client), together with (where appropriate) a brief walk over inspection of the Site and correspondence with relevant authorities and other interested parties. Due to the short timescales associated with these projects responses may not have been received from all parties. WSP UK Limited cannot be held responsible for any disclosures that are provided post production of our report and will not automatically update our report.
6. The opinions given in this report have been dictated by the finite data on which they are based and are relevant only for the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in this report, WSP UK Limited reserves the right to review such information and, if warranted, to modify the opinions accordingly.
7. It should be noted that any risks identified in this report are perceived risks based on the information reviewed. Actual risks can only be assessed following intrusive investigations of the site.
8. WSP UK Limited does not warrant work / data undertaken / provided by others.





## REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

### INTRUSIVE INVESTIGATION REPORTS

**Coverage:** *The following report titles (or combination) may cover this category of work: geo environmental site investigation; geotechnical assessment; GIR (Ground Investigation reports); preliminary environmental and geotechnical risk assessment; and, geotechnical risk register.*

9. The investigation has been undertaken to provide information concerning either:
  - i. The type and degree of contamination present at the site in order to allow a generic quantitative risk assessment to be undertaken; or
  - ii. Information on the soil properties present at the site to allow for geotechnical development constraints to be considered.
10. The scope of the investigation was selected on the basis of the specific development and land use scenario proposed by the Client and may be inappropriate to another form of development or scheme. If the development layout was not known at the time of the investigation the report findings may need revisiting once the development layout is confirmed.
11. For contamination purposes, the objectives of the investigation are limited to establishing the risks associated with potential contamination sources with the potential to cause harm to human health, building materials, the environment (including adjacent land), or controlled waters.
12. For geotechnical investigations the purpose is to broadly consider potential development constraints associated with the physical property of the soils underlying the site within the context of the proposed future or continued use of the site, as stated within the report.
13. The amount of exploratory work, soil property testing and chemical testing undertaken has necessarily been restricted by various factors which may include accessibility, the presence of services; existing buildings; current site usage or short timescales. The exploratory holes completed assess only a small percentage of the area in relation to the overall size of the Site, and as such can only provide a general indication of conditions.
14. The number of sampling points and the methods of sampling and testing do not preclude the possible existence of contamination where concentrations may be significantly higher than those actually encountered or ground conditions that vary from those identified. In addition, there may be exceptional ground conditions elsewhere on the site which have not been disclosed by this investigation and which have therefore not been taken into account in this report.
15. The inspection, testing and monitoring records relate specifically to the investigation points and the timeframe that the works were undertaken. They will also be limited by the techniques employed. As part of this assessment, WSP UK Limited has used reasonable skill and care to extrapolate conditions between these points based upon assumptions to develop our interpretation and conclusions. The assumption made in forming our conclusions is that the ground and groundwater conditions (both chemically and physically) are the same as have been encountered during the works undertaken at the specific points of investigation. Conditions can change between investigation points and these interpretations should be considered indicative.
16. The risk assessment and opinions provided are based on currently available guidance relating to acceptable contamination concentrations; no liability can be accepted for the retrospective effects of any future changes or amendments to these values. Specific assumptions associated

## REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

with the WSP UK Limited risk assessment process have been outlined within the body or associated appendix of the report.

17. Additional investigations may be required in order to satisfy relevant planning conditions or to resolve any engineering and environmental issues.
18. Where soil contamination concentrations recorded as part of this investigation are used for commentary on potential waste classification of soils for disposal purposes, these should be classed as indicative only. Due consideration should be given to the variability of contaminant concentrations taken from targeted samples versus bulk excavated soils and the potential variability of contaminant concentrations between sampling locations. Where major waste disposal operations are considered, targeted waste classification investigations should be designed.
19. The results of the asbestos testing are factually reported and interpretation given as to how this relates to the previous use of the site, the types of ground encountered and site conceptualisation. This does not however constitute a formal asbestos assessment. These results should be treated cautiously and should not be relied upon to provide detailed and representative information on the delineation, type and extent of bulk ACMs and / or trace loose asbestos fibres within the soil matrix at the site.
20. If costs have been included in relation to additional site works, and / or site remediation works these must be considered as indicative only and must be confirmed by a qualified quantity surveyor.

## EUROCODE 7: GEOTECHNICAL DESIGN

21. On 1st April 2010, BS EN 1997-1:2004 (Eurocode 7: Geotechnical Design – Part 1) became the mandatory baseline standard for geotechnical ground investigations.
22. In terms of geotechnical design for foundations, slopes, retaining walls and earthworks, EC7 sets guidance on design procedures including specific guidance on the numbers and spacings of boreholes for geotechnical design, there are limits to methods of ground investigation and the quality of data obtained and there are also prescriptive methods of assessing soil strengths and methods of design. Unless otherwise explicitly stated, the work has not been undertaken in accordance with EC7. A standard geotechnical interpretative report will not meet the requirements of the Geotechnical Design Report (GDR) under Eurocode 7. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. The report is likely to represent a Ground Investigation Report (GIR) under the Eurocode 7 guidance.

## DETAILED QUANTITATIVE RISK ASSESSMENTS AND REMEDIAL STRATEGY REPORTS

23. These reports build upon previous report versions and associated notes. The scope of the investigation, further testing and monitoring and associated risk assessments were selected on the basis of the specific development and land use scenario proposed by the Client and may not be appropriate to another form of development or scheme layout. The risk assessment and opinions provided are based on currently available approaches in the generation of Site Specific Assessment Criteria relating to contamination concentrations and are not considered to represent a risk in a specific land use scenario to a specific receptor. No liability can be accepted for the retrospective effects of any future changes or amendments to these values, associated models or associated guidance.



## REPORT LIMITATIONS - GROUND RISK AND REMEDIATION

- 24. The outputs of the Detailed Quantitative Risk Assessments are based upon WSP UK Limited manipulation of standard risk assessment models. These are our interpretation of the risk assessment criteria.
- 25. Prior to adoption on site they will need discussing and agreeing with the Regulatory Authorities prior to adoption on site. The regulatory discussion and engagement process may result in an alternative interpretation being determined and agreed. The process and timescales associated with the Regulatory Authority engagement are not within the control of WSP UK Limited. All costs and programmes presented as a result of this process should be validated by a quantity surveyor and should be presumed to be indicative.

### GEOTECHNICAL DESIGN REPORT (GDR)

- 26. The GDR can only be prepared following confirmation of all structural loads and serviceability requirements. All the relevant information needs to be provided to allow for a GDR to be produced.

### MONITORING (INCLUDING REMEDIATION MONITORING REPORTS)

- 27. These reports are factual in nature and comprise monitoring, normally groundwater and ground gas and data provided by contractors as part of an earthworks or remedial works.
- 28. The data is presented and will be compared with assessment criteria.

# Annex 4

## GROUNDSURE REPORT

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70116516 Rev B

## Order Details

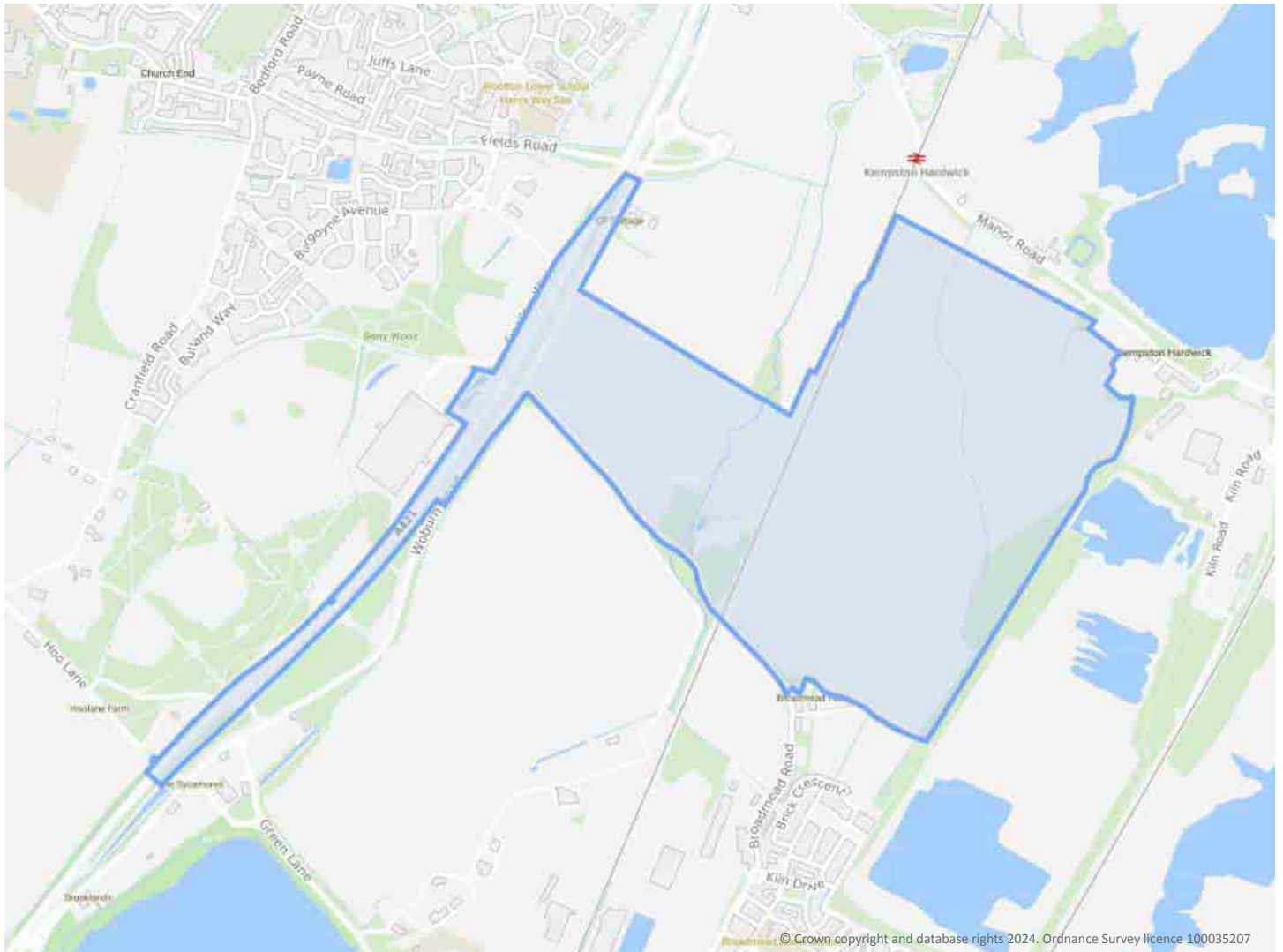
**Date:** 28/03/2024  
**Your ref:** 70116516 Rev B  
**Our Ref:** GSIP-2024-14754-18113\_A

## Site Details

**Location:** 502047 243782

**Area:** 141.44 ha

**Authority:** [Bedford Council \(Unitary\)](#) ↗, [Central Bedfordshire Council](#) ↗



## Summary of findings

p. 2 > Aerial image

p. 9 >

## OS MasterMap site plan

N/A: >10ha [groundsure.com/insightuserguide](https://groundsure.com/insightuserguide) ↗

Contact us with any questions at:

[info@groundsurre.com](mailto:info@groundsurre.com) ↗

01273 257 755

## Summary of findings

Page	Section	<a href="#">Past land use &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">14 &gt;</a>	<a href="#">1.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	7	8	27	58	-
<a href="#">18 &gt;</a>	<a href="#">1.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	0	0	0	2	-
<a href="#">19 &gt;</a>	<a href="#">1.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	0	2	2	4	-
19	1.4	Historical petrol stations	0	0	0	0	-
20	1.5	Historical garages	0	0	0	0	-
20	1.6	Historical military land	0	0	0	0	-
Page	Section	<a href="#">Past land use - un-grouped &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">21 &gt;</a>	<a href="#">2.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	8	12	38	73	-
<a href="#">26 &gt;</a>	<a href="#">2.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	0	0	0	2	-
<a href="#">27 &gt;</a>	<a href="#">2.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	0	3	4	4	-
27	2.4	Historical petrol stations	0	0	0	0	-
28	2.5	Historical garages	0	0	0	0	-
Page	Section	<a href="#">Waste and landfill &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">29 &gt;</a>	<a href="#">3.1 &gt;</a>	<a href="#">Active or recent landfill &gt;</a>	0	1	0	0	-
30	3.2	Historical landfill (BGS records)	0	0	0	0	-
30	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
<a href="#">30 &gt;</a>	<a href="#">3.4 &gt;</a>	<a href="#">Historical landfill (EA/NRW records) &gt;</a>	0	3	1	1	-
<a href="#">31 &gt;</a>	<a href="#">3.5 &gt;</a>	<a href="#">Historical waste sites &gt;</a>	0	1	2	0	-
<a href="#">32 &gt;</a>	<a href="#">3.6 &gt;</a>	<a href="#">Licensed waste sites &gt;</a>	0	3	9	24	-
<a href="#">41 &gt;</a>	<a href="#">3.7 &gt;</a>	<a href="#">Waste exemptions &gt;</a>	1	1	22	3	-
Page	Section	<a href="#">Current industrial land use &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">44 &gt;</a>	<a href="#">4.1 &gt;</a>	<a href="#">Recent industrial land uses &gt;</a>	1	7	15	-	-
46	4.2	Current or recent petrol stations	0	0	0	0	-
46	4.3	Electricity cables	0	0	0	0	-
46	4.4	Gas pipelines	0	0	0	0	-
47	4.5	Sites determined as Contaminated Land	0	0	0	0	-



47 >	4.6 >	<a href="#">Control of Major Accident Hazards (COMAH) &gt;</a>	0	0	0	1	-
47	4.7	Regulated explosive sites	0	0	0	0	-
47	4.8	Hazardous substance storage/usage	0	0	0	0	-
48 >	4.9 >	<a href="#">Historical licensed industrial activities (IPC) &gt;</a>	0	0	0	4	-
48 >	4.10 >	<a href="#">Licensed industrial activities (Part A(1)) &gt;</a>	0	4	0	0	-
49 >	4.11 >	<a href="#">Licensed pollutant release (Part A(2)/B) &gt;</a>	0	0	3	0	-
50	4.12	Radioactive Substance Authorisations	0	0	0	0	-
50 >	4.13 >	<a href="#">Licensed Discharges to controlled waters &gt;</a>	10	0	42	4	-
59 >	4.14 >	<a href="#">Pollutant release to surface waters (Red List) &gt;</a>	2	0	0	0	-
59	4.15	Pollutant release to public sewer	0	0	0	0	-
59 >	4.16 >	<a href="#">List 1 Dangerous Substances &gt;</a>	1	0	0	0	-
60 >	4.17 >	<a href="#">List 2 Dangerous Substances &gt;</a>	1	0	2	0	-
60 >	4.18 >	<a href="#">Pollution Incidents (EA/NRW) &gt;</a>	6	2	12	7	-
63	4.19	Pollution inventory substances	0	0	0	0	-
63	4.20	Pollution inventory waste transfers	0	0	0	0	-
64	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<a href="#">Hydrogeology &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
65 >	5.1 >	<a href="#">Superficial aquifer &gt;</a>	Identified (within 500m)				
67 >	5.2 >	<a href="#">Bedrock aquifer &gt;</a>	Identified (within 500m)				
69 >	5.3 >	<a href="#">Groundwater vulnerability &gt;</a>	Identified (within 50m)				
75	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
75	5.5	Groundwater vulnerability- local information	None (within 0m)				
76 >	5.6 >	<a href="#">Groundwater abstractions &gt;</a>	0	0	0	0	2
77 >	5.7 >	<a href="#">Surface water abstractions &gt;</a>	0	0	0	4	4
79	5.8	Potable abstractions	0	0	0	0	0
80	5.9	Source Protection Zones	0	0	0	0	-
80	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<a href="#">Hydrology &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
81 >	6.1 >	<a href="#">Water Network (OS MasterMap) &gt;</a>	47	12	46	-	-





90 >	6.2 >	<a href="#">Surface water features &gt;</a>	1	9	28	-	-
90 >	6.3 >	<a href="#">WFD Surface water body catchments &gt;</a>	2	-	-	-	-
90 >	6.4 >	<a href="#">WFD Surface water bodies &gt;</a>	1	0	1	-	-
91	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	<a href="#">River and coastal flooding &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
92 >	7.1 >	<a href="#">Risk of flooding from rivers and the sea &gt;</a>	High (within 50m)				
93	7.2	Historical Flood Events	0	0	0	-	-
93	7.3	Flood Defences	0	0	0	-	-
93	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
93	7.5	Flood Storage Areas	0	0	0	-	-
94 >	7.6 >	<a href="#">Flood Zone 2 &gt;</a>	Identified (within 50m)				
95 >	7.7 >	<a href="#">Flood Zone 3 &gt;</a>	Identified (within 50m)				
Page	Section	<a href="#">Surface water flooding &gt;</a>					
96 >	8.1 >	<a href="#">Surface water flooding &gt;</a>	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	<a href="#">Groundwater flooding &gt;</a>					
98 >	9.1 >	<a href="#">Groundwater flooding &gt;</a>	Low (within 50m)				
Page	Section	<a href="#">Environmental designations &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
99	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
100	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
100	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
100	10.4	Special Protection Areas (SPA)	0	0	0	0	0
100	10.5	National Nature Reserves (NNR)	0	0	0	0	0
101	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
101 >	10.7 >	<a href="#">Designated Ancient Woodland &gt;</a>	0	0	0	0	2
101	10.8	Biosphere Reserves	0	0	0	0	0
101	10.9	Forest Parks	0	0	0	0	0
102	10.10	Marine Conservation Zones	0	0	0	0	0
102	10.11	Green Belt	0	0	0	0	0
102	10.12	Proposed Ramsar sites	0	0	0	0	0



102	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
102	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
103	10.15	Nitrate Sensitive Areas	0	0	0	0	0
<a href="#">103</a> >	<a href="#">10.16</a> >	<a href="#">Nitrate Vulnerable Zones</a> >	3	0	0	0	10
<a href="#">104</a> >	<a href="#">10.17</a> >	<a href="#">SSSI Impact Risk Zones</a> >	1	-	-	-	-
105	10.18	SSSI Units	0	0	0	0	0
Page	Section	<a href="#">Visual and cultural designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
106	11.1	World Heritage Sites	0	0	0	-	-
107	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
107	11.3	National Parks	0	0	0	-	-
107	11.4	Listed Buildings	0	0	0	-	-
107	11.5	Conservation Areas	0	0	0	-	-
<a href="#">108</a> >	<a href="#">11.6</a> >	<a href="#">Scheduled Ancient Monuments</a> >	0	0	1	-	-
108	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	<a href="#">Agricultural designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">109</a> >	<a href="#">12.1</a> >	<a href="#">Agricultural Land Classification</a> >	Grade 3b (within 250m)				
110	12.2	Open Access Land	0	0	0	-	-
110	12.3	Tree Felling Licences	0	0	0	-	-
<a href="#">111</a> >	<a href="#">12.4</a> >	<a href="#">Environmental Stewardship Schemes</a> >	0	0	1	-	-
111	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	<a href="#">Habitat designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">112</a> >	<a href="#">13.1</a> >	<a href="#">Priority Habitat Inventory</a> >	9	3	18	-	-
114	13.2	Habitat Networks	0	0	0	-	-
<a href="#">114</a> >	<a href="#">13.3</a> >	<a href="#">Open Mosaic Habitat</a> >	0	1	1	-	-
115	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	<a href="#">Geology 1:10,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">116</a> >	<a href="#">14.1</a> >	<a href="#">10k Availability</a> >	Identified (within 500m)				
<a href="#">117</a> >	<a href="#">14.2</a> >	<a href="#">Artificial and made ground (10k)</a> >	1	3	8	6	-
<a href="#">119</a> >	<a href="#">14.3</a> >	<a href="#">Superficial geology (10k)</a> >	8	0	2	6	-



120	14.4	Landslip (10k)	0	0	0	0	-
<a href="#">121</a> >	<a href="#">14.5</a> >	<a href="#">Bedrock geology (10k)</a> >	3	0	1	2	-
<a href="#">122</a> >	<a href="#">14.6</a> >	<a href="#">Bedrock faults and other linear features (10k)</a> >	4	0	0	0	-
Page	Section	<a href="#">Geology 1:50,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">123</a> >	<a href="#">15.1</a> >	<a href="#">50k Availability</a> >	Identified (within 500m)				
<a href="#">124</a> >	<a href="#">15.2</a> >	<a href="#">Artificial and made ground (50k)</a> >	0	3	4	0	-
<a href="#">125</a> >	<a href="#">15.3</a> >	<a href="#">Artificial ground permeability (50k)</a> >	0	3	-	-	-
<a href="#">126</a> >	<a href="#">15.4</a> >	<a href="#">Superficial geology (50k)</a> >	8	0	1	2	-
<a href="#">127</a> >	<a href="#">15.5</a> >	<a href="#">Superficial permeability (50k)</a> >	Identified (within 50m)				
128	15.6	Landslip (50k)	0	0	0	0	-
128	15.7	Landslip permeability (50k)	None (within 50m)				
<a href="#">129</a> >	<a href="#">15.8</a> >	<a href="#">Bedrock geology (50k)</a> >	3	0	0	0	-
<a href="#">130</a> >	<a href="#">15.9</a> >	<a href="#">Bedrock permeability (50k)</a> >	Identified (within 50m)				
<a href="#">130</a> >	<a href="#">15.10</a> >	<a href="#">Bedrock faults and other linear features (50k)</a> >	2	0	0	0	-
Page	Section	<a href="#">Boreholes</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">131</a> >	<a href="#">16.1</a> >	<a href="#">BGS Boreholes</a> >	30	26	75	-	-
Page	Section	<a href="#">Natural ground subsidence</a> >					
<a href="#">137</a> >	<a href="#">17.1</a> >	<a href="#">Shrink swell clays</a> >	Moderate (within 50m)				
<a href="#">138</a> >	<a href="#">17.2</a> >	<a href="#">Running sands</a> >	Low (within 50m)				
<a href="#">140</a> >	<a href="#">17.3</a> >	<a href="#">Compressible deposits</a> >	Moderate (within 50m)				
<a href="#">142</a> >	<a href="#">17.4</a> >	<a href="#">Collapsible deposits</a> >	Very low (within 50m)				
<a href="#">143</a> >	<a href="#">17.5</a> >	<a href="#">Landslides</a> >	Low (within 50m)				
<a href="#">145</a> >	<a href="#">17.6</a> >	<a href="#">Ground dissolution of soluble rocks</a> >	Negligible (within 50m)				
Page	Section	<a href="#">Mining and ground workings</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">147</a> >	<a href="#">18.1</a> >	<a href="#">BritPits</a> >	1	0	3	5	-
<a href="#">149</a> >	<a href="#">18.2</a> >	<a href="#">Surface ground workings</a> >	22	22	33	-	-
152	18.3	Underground workings	0	0	0	0	0
152	18.4	Underground mining extents	0	0	0	0	-
<a href="#">153</a> >	<a href="#">18.5</a> >	<a href="#">Historical Mineral Planning Areas</a> >	2	0	4	2	-



153	18.6	Non-coal mining	0	0	0	0	0
153	18.7	JPB mining areas	None (within 0m)				
154	18.8	The Coal Authority non-coal mining	0	0	0	0	-
<a href="#">154</a> >	<a href="#">18.9</a> >	<a href="#">Researched mining</a> >	0	2	2	0	-
154	18.10	Mining record office plans	0	0	0	0	-
155	18.11	BGS mine plans	0	0	0	0	-
155	18.12	Coal mining	None (within 0m)				
155	18.13	Brine areas	None (within 0m)				
155	18.14	Gypsum areas	None (within 0m)				
155	18.15	Tin mining	None (within 0m)				
156	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
157	19.1	Natural cavities	0	0	0	0	-
157	19.2	Mining cavities	0	0	0	0	0
157	19.3	Reported recent incidents	0	0	0	0	-
157	19.4	Historical incidents	0	0	0	0	-
158	19.5	National karst database	0	0	0	0	-
Page	Section	<a href="#">Radon</a> >					
<a href="#">159</a> >	<a href="#">20.1</a> >	<a href="#">Radon</a> >	Less than 1% (within 0m)				
Page	Section	<a href="#">Soil chemistry</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">161</a> >	<a href="#">21.1</a> >	<a href="#">BGS Estimated Background Soil Chemistry</a> >	67	7	-	-	-
165	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
165	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	<a href="#">Railway infrastructure and projects</a> >	On site	0-50m	50-250m	250-500m	500-2000m
166	22.1	Underground railways (London)	0	0	0	-	-
166	22.2	Underground railways (Non-London)	0	0	0	-	-
167	22.3	Railway tunnels	0	0	0	-	-
<a href="#">167</a> >	<a href="#">22.4</a> >	<a href="#">Historical railway and tunnel features</a> >	4	2	13	-	-
168	22.5	Royal Mail tunnels	0	0	0	-	-



168	22.6	Historical railways	0	0	0	-	-
<a href="#">168</a> >	<a href="#">22.7</a> >	<a href="#">Railways</a> >	8	1	5	-	-
169	22.8	Crossrail 1	0	0	0	0	-
169	22.9	Crossrail 2	0	0	0	0	-
169	22.10	HS2	0	0	0	0	-

## Recent aerial photograph



Capture Date: 15/04/2020

Site Area: 141.44ha





## Recent site history - 2017 aerial photograph



Capture Date: 21/06/2017

Site Area: 141.44ha



Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024



## Recent site history - 2006 aerial photograph



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Capture Date: 01/07/2006

Site Area: 141.44ha



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01273 257 755

Date: 28 March 2024



## Recent site history - 2000 aerial photograph



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Capture Date: 10/06/2000

Site Area: 141.44ha



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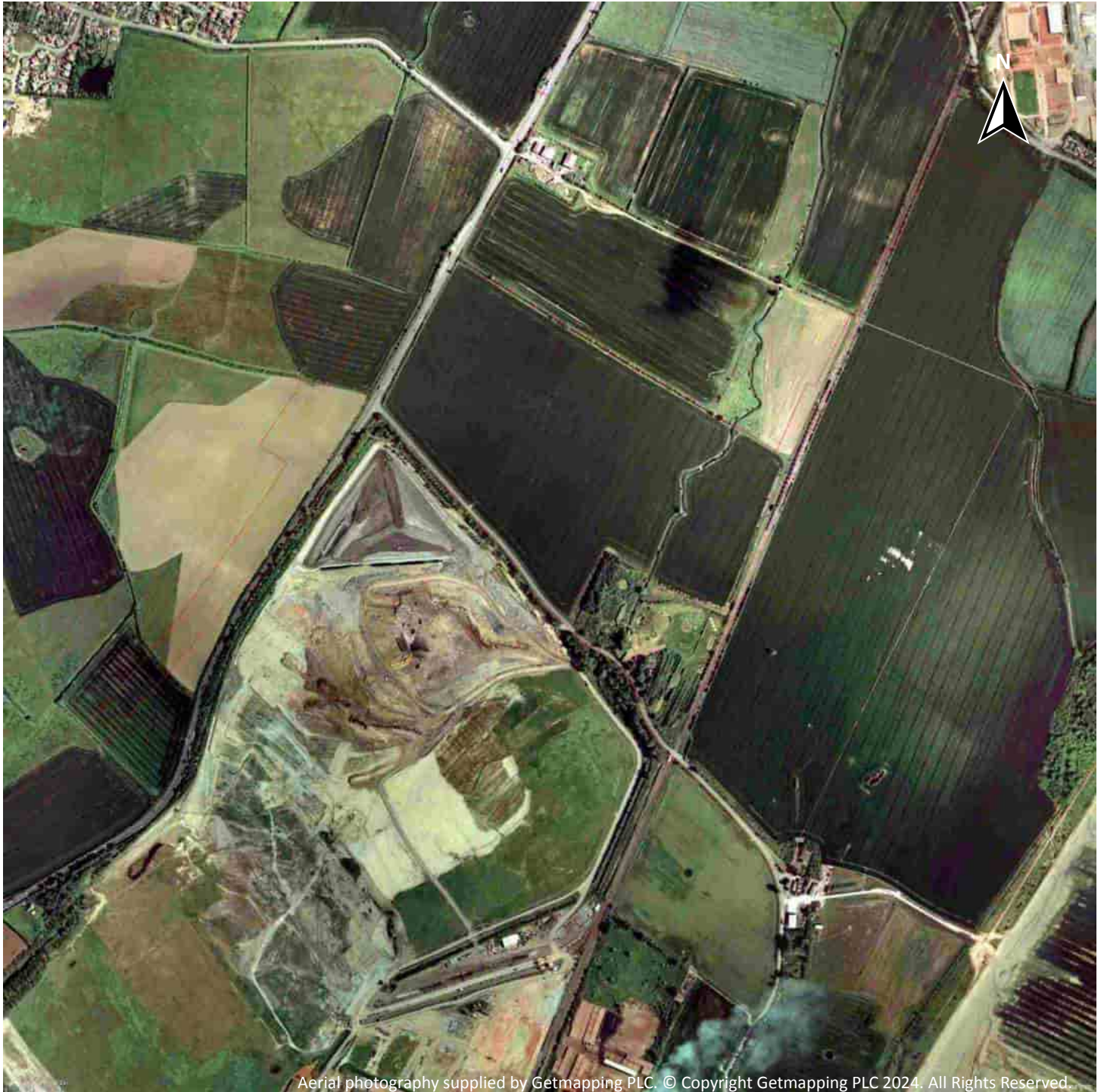
[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024



## Recent site history - 1999 aerial photograph



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Capture Date: 01/05/1999

Site Area: 141.44ha



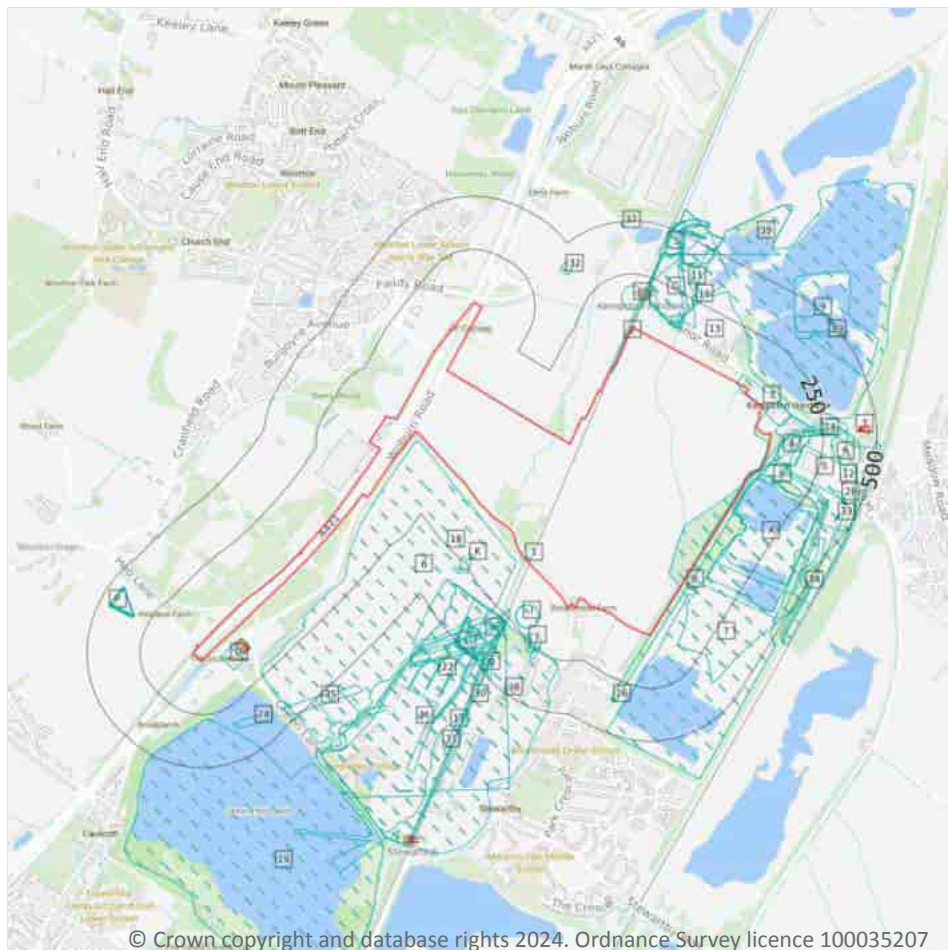
Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024

## 1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

### 1.1 Historical industrial land uses

Records within 500m

100

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
1	On site	Railway Building	1959	2051486



ID	Location	Land use	Dates present	Group ID
2	On site	Cuttings	1882	2061444
3	On site	Unspecified Works	1980 - 1989	2086450
4	On site	Railway Sidings	1980	2114587
A	On site	Tramway Sidings	1959	2052185
A	On site	Brick Works	1948	2066509
A	On site	Unspecified Works	1959	2122589
5	2m E	Brick Works	1980	2100587
A	13m E	Unspecified Pit	1948	2041045
A	15m E	Clay Pit	1959	2048208
C	22m E	Bricks Works	1938	2081316
6	22m W	Unspecified Disused Pit	1980 - 1989	2116491
7	23m E	Unspecified Disused Pit	1980 - 1989	2096934
B	24m SE	Electric Substation	1980 - 1989	2067565
D	46m SW	Brick Field	1882	2063539
E	53m SW	Electric Substation	1980 - 1989	2076649
8	55m E	Unspecified Heap	1948	2053931
9	70m NE	Unspecified Disused Pit	1980 - 1989	2114565
D	73m SW	Unspecified Kiln	1882	2045740
10	83m N	Railway Station	1980 - 1989	2083773
F	92m E	Unspecified Tank	1980	2044078
G	94m NE	Unspecified Works	1959	2046254
11	100m NE	Bricks Works	1938	2094376
H	101m NE	Brick Works	1978 - 1989	2064290
G	104m NE	Brick Works	1948	2121667
C	104m E	Unspecified Tank	1948	2044077
F	107m E	Unspecified Tank	1948	2044079
G	112m NE	Railway Sidings	1959	2087313
12	117m E	Railway Sidings	1948 - 1959	2111154





ID	Location	Land use	Dates present	Group ID
I	127m S	Railway Sidings	1948	2116390
I	127m S	Railway Sidings	1882 - 1900	2116862
14	159m E	Railway Sidings	1989	2112083
15	181m E	Chimney	1980	2058682
J	189m S	Unspecified Works	1959	2046252
K	206m SW	Unspecified Ground Workings	1920	2060272
16	220m NE	Unspecified Heap	1948	2053933
L	222m SW	Railway Sidings	1980 - 1989	2107998
K	229m SW	Old Gravel Pit	1920	2057653
17	229m S	Brick Works	1980 - 1989	2112572
J	237m S	Sewage Works	1980 - 1989	2076251
J	243m S	Unspecified Tanks	1948 - 1959	2086329
18	245m SW	Disused Windmill	1920	2043339
M	270m SW	Unspecified Works	1959	2046251
19	271m SW	Clay Pit	1959	2048210
M	271m SW	Brick Works	1924	2110352
N	273m SW	Brick Field	1882	2063535
20	274m SW	Brick Works	1938 - 1947	2121942
N	274m SW	Brick Works	1900	2067444
21	276m SW	Tramway Sidings	1924	2052187
22	277m SW	Railway Sidings	1959	2070424
O	289m E	Unspecified Old Quarry	1920	2056739
O	289m E	Chimney	1980	2058683
23	294m SW	Unspecified Old Quarry	1920	2056733
P	325m W	Unspecified Ground Workings	1924	2119434
P	325m W	Unspecified Pit	1900	2077013
P	325m W	Unspecified Pit	1924 - 1938	2120143
P	326m W	Unspecified Pit	1959	2081916



ID	Location	Land use	Dates present	Group ID
24	327m SW	Unspecified Pit	1959	2041035
Q	329m SW	Cuttings	1882	2074054
N	330m SW	Unspecified Kiln	1882	2045741
25	333m NE	Clay Pit	1959	2048205
R	333m E	Unspecified Tank	1948	2044076
R	334m E	Unspecified Kilns	1980	2057485
26	339m S	Railway Building	1980	2051480
P	343m W	Unspecified Ground Workings	1882	2086656
27	361m NE	Unspecified Pit	1948	2041046
S	366m N	Railway Sidings	1959	2092166
R	368m E	Unspecified Kilns	1980	2057483
R	372m E	Unspecified Kilns	1980	2057484
28	372m E	Unspecified Ground Workings	1948	2060264
H	375m NE	Unspecified Ground Workings	1959	2096069
S	376m N	Brick Works	1971	2107269
S	376m NE	Unspecified Ground Workings	1948	2076602
29	378m NE	Unspecified Heap	1948	2053932
L	380m SW	Unspecified Pit	1938	2107700
30	382m SW	Railway Sidings	1900	2096999
Q	382m SW	Cuttings	1900 - 1924	2087379
L	383m SW	Unspecified Pit	1924	2091873
L	383m SW	Unspecified Ground Workings	1900	2060270
31	387m SW	Tramway Sidings	1924	2094600
32	388m N	Cemetery	1920	2047446
Q	390m SW	Cuttings	1924	2066714
N	390m SW	Unspecified Heap	1924	2120501
Q	390m SW	Cuttings	1938	2102356
Q	391m SW	Cuttings	1959	2100888





ID	Location	Land use	Dates present	Group ID
N	393m SW	Unspecified Heap	1924	2076548
N	393m SW	Unspecified Heap	1938	2105326
S	419m N	Railway Sidings	1971	2086766
S	420m NE	Unspecified Heap	1959	2053934
Q	422m SW	Railway Sidings	1959	2110283
33	424m E	Unspecified Ground Workings	1948	2060265
34	425m E	Unspecified Ground Workings	1948 - 1959	2114957
35	426m SW	Unspecified Pit	1959	2041034
Q	439m SW	Chimney	1959 - 1989	2091616
S	444m N	Railway Sidings	1948	2065517
36	446m SW	Unspecified Kilns	1980 - 1989	2072321
37	469m N	Smithy	1920	2059241
38	470m S	Railway Sidings	1980 - 1989	2115516
39	481m NE	Clay Pit	1978	2048209
40	496m SW	Refuse Heap	1980 - 1989	2121129

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.2 Historical tanks

### Records within 500m

2

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
N	298m SW	Unspecified Tank	1974	343530
N	321m SW	Unspecified Tank	1974	343531

*This data is sourced from Ordnance Survey / Groundsure.*



### 1.3 Historical energy features

**Records within 500m**
**8**

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
B	21m SE	Electricity Substation	1974 - 1993	230235
E	48m SW	Electricity Substation	1974	235693
E	86m SW	Electricity Substation	1993 - 1998	236334
13	130m NE	Electricity Substation	1968 - 1993	234047
T	415m E	Electricity Substation	1979	228341
T	417m E	Electricity Substation	1988	228407
T	420m E	Electricity Substation	1997	228091
T	430m E	Electricity Substation	1968	227812

*This data is sourced from Ordnance Survey / Groundsure.*

### 1.4 Historical petrol stations

**Records within 500m**
**0**

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*



## 1.5 Historical garages

Records within 500m

0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.6 Historical military land

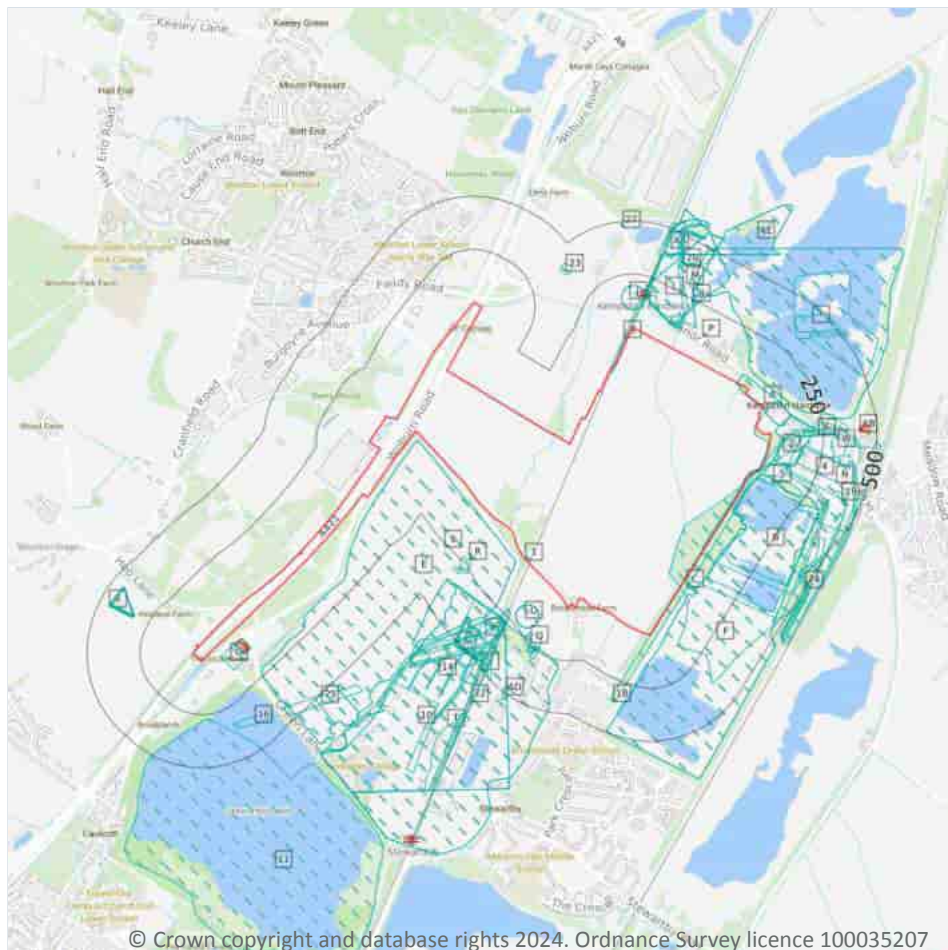
Records within 500m

0

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

*This data is sourced from Ordnance Survey / Groundsure / other sources.*

## 2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

### 2.1 Historical industrial land uses

Records within 500m

131

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 21](#) >

ID	Location	Land Use	Date	Group ID
1	On site	Railway Building	1959	2051486
2	On site	Railway Sidings	1980	2114587
3	On site	Cuttings	1882	2061444



ID	Location	Land Use	Date	Group ID
A	On site	Unspecified Works	1989	2086450
A	On site	Unspecified Works	1980	2086450
B	On site	Unspecified Works	1959	2122589
B	On site	Tramway Sidings	1959	2052185
B	On site	Brick Works	1948	2066509
4	2m E	Brick Works	1980	2100587
B	13m E	Unspecified Pit	1948	2041045
B	15m E	Clay Pit	1959	2048208
D	22m E	Bricks Works	1938	2081316
D	22m E	Bricks Works	1938	2081316
E	22m W	Unspecified Disused Pit	1989	2116491
E	22m W	Unspecified Disused Pit	1980	2116491
F	23m E	Unspecified Disused Pit	1989	2096934
F	23m E	Unspecified Disused Pit	1980	2096934
C	24m SE	Electric Substation	1989	2067565
C	24m SE	Electric Substation	1980	2067565
G	46m SW	Brick Field	1882	2063539
H	53m SW	Electric Substation	1989	2076649
H	53m SW	Electric Substation	1980	2076649
5	55m E	Unspecified Heap	1948	2053931
I	70m NE	Unspecified Disused Pit	1989	2114565
I	70m NE	Unspecified Disused Pit	1980	2114565
G	73m SW	Unspecified Kiln	1882	2045740
J	83m N	Railway Station	1989	2083773
J	83m N	Railway Station	1980	2083773
K	92m E	Unspecified Tank	1980	2044078
L	94m NE	Unspecified Works	1959	2046254
M	100m NE	Bricks Works	1938	2094376



ID	Location	Land Use	Date	Group ID
M	100m NE	Bricks Works	1938	2094376
L	101m NE	Brick Works	1989	2064290
L	101m NE	Brick Works	1980	2064290
L	104m NE	Brick Works	1948	2121667
D	104m E	Unspecified Tank	1948	2044077
K	107m E	Unspecified Tank	1948	2044079
L	112m NE	Railway Sidings	1959	2087313
N	117m E	Railway Sidings	1959	2111154
O	127m S	Railway Sidings	1900	2116862
O	127m S	Railway Sidings	1882	2116862
O	127m S	Railway Sidings	1948	2116390
N	137m E	Railway Sidings	1948	2111154
6	159m E	Railway Sidings	1989	2112083
7	181m E	Chimney	1980	2058682
Q	189m S	Unspecified Works	1959	2046252
R	206m SW	Unspecified Ground Workings	1920	2060272
8	220m NE	Unspecified Heap	1948	2053933
S	222m SW	Railway Sidings	1989	2107998
S	222m SW	Railway Sidings	1980	2107998
R	229m SW	Old Gravel Pit	1920	2057653
T	229m S	Brick Works	1989	2112572
T	229m S	Brick Works	1980	2112572
Q	237m S	Sewage Works	1989	2076251
Q	237m S	Sewage Works	1980	2076251
Q	243m S	Unspecified Tanks	1948	2086329
9	245m SW	Disused Windmill	1920	2043339
Q	248m S	Unspecified Tanks	1959	2086329
10	270m SW	Unspecified Works	1959	2046251



ID	Location	Land Use	Date	Group ID
11	271m SW	Clay Pit	1959	2048210
12	271m SW	Brick Works	1924	2110352
U	273m SW	Brick Field	1882	2063535
V	274m SW	Brick Works	1938	2121942
V	274m SW	Brick Works	1938	2121942
U	274m SW	Brick Works	1900	2067444
13	276m SW	Tramway Sidings	1924	2052187
14	277m SW	Railway Sidings	1959	2070424
W	289m E	Unspecified Old Quarry	1920	2056739
W	289m E	Chimney	1980	2058683
15	294m SW	Unspecified Old Quarry	1920	2056733
X	325m W	Unspecified Ground Workings	1924	2119434
X	325m W	Unspecified Pit	1924	2120143
X	325m W	Unspecified Pit	1900	2077013
X	326m W	Unspecified Pit	1959	2081916
X	327m W	Unspecified Pit	1938	2120143
X	327m W	Unspecified Pit	1938	2120143
16	327m SW	Unspecified Pit	1959	2041035
Y	329m SW	Cuttings	1882	2074054
U	330m SW	Unspecified Kiln	1882	2045741
17	333m NE	Clay Pit	1959	2048205
Z	333m E	Unspecified Tank	1948	2044076
Z	334m E	Unspecified Kilns	1980	2057485
18	339m S	Railway Building	1980	2051480
X	343m W	Unspecified Ground Workings	1882	2086656
I	361m NE	Unspecified Pit	1948	2041046
AA	366m N	Railway Sidings	1959	2092166
Z	368m E	Unspecified Kilns	1980	2057483





ID	Location	Land Use	Date	Group ID
Z	372m E	Unspecified Kilns	1980	2057484
19	372m E	Unspecified Ground Workings	1948	2060264
20	375m NE	Unspecified Ground Workings	1959	2096069
AA	376m N	Brick Works	1971	2107269
AA	376m N	Brick Works	1987	2064290
AA	376m N	Brick Works	1978	2064290
AA	376m NE	Unspecified Ground Workings	1948	2076602
21	378m NE	Unspecified Heap	1948	2053932
S	380m SW	Unspecified Pit	1938	2107700
S	380m SW	Unspecified Pit	1938	2107700
22	382m SW	Railway Sidings	1900	2096999
Y	382m SW	Cuttings	1924	2087379
Y	382m SW	Cuttings	1900	2087379
S	383m SW	Unspecified Pit	1924	2091873
S	383m SW	Unspecified Ground Workings	1900	2060270
T	387m SW	Tramway Sidings	1924	2094600
23	388m N	Cemetery	1920	2047446
Y	390m SW	Cuttings	1924	2066714
U	390m SW	Unspecified Heap	1924	2120501
Y	390m SW	Cuttings	1938	2102356
Y	391m SW	Cuttings	1959	2100888
U	393m SW	Unspecified Heap	1924	2076548
U	393m SW	Unspecified Heap	1938	2105326
U	393m SW	Unspecified Heap	1938	2105326
AA	419m N	Railway Sidings	1971	2086766
AA	420m NE	Unspecified Heap	1959	2053934
Y	422m SW	Railway Sidings	1959	2110283
N	424m E	Unspecified Ground Workings	1948	2060265



ID	Location	Land Use	Date	Group ID
24	425m E	Unspecified Ground Workings	1948	2114957
25	426m SW	Unspecified Pit	1959	2041034
Y	439m SW	Chimney	1989	2091616
Y	439m SW	Chimney	1959	2091616
Y	439m SW	Chimney	1980	2091616
26	443m SE	Unspecified Ground Workings	1959	2114957
AA	444m N	Railway Sidings	1948	2065517
AC	446m SW	Unspecified Kilns	1989	2072321
AC	446m SW	Unspecified Kilns	1980	2072321
27	469m N	Smithy	1920	2059241
AD	470m S	Railway Sidings	1989	2115516
AD	470m S	Railway Sidings	1980	2115516
AE	481m NE	Clay Pit	1978	2048209
AE	481m NE	Unspecified Disused Pit	1987	2114565
AF	496m SW	Refuse Heap	1989	2121129
AF	496m SW	Refuse Heap	1980	2121129

This data is sourced from Ordnance Survey / Groundsure.

## 2.2 Historical tanks

### Records within 500m

2

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 21 >](#)

ID	Location	Land Use	Date	Group ID
U	298m SW	Unspecified Tank	1974	343530
U	321m SW	Unspecified Tank	1974	343531

This data is sourced from Ordnance Survey / Groundsure.



## 2.3 Historical energy features

<b>Records within 500m</b>	<b>11</b>
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Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 21 >](#)

ID	Location	Land Use	Date	Group ID
C	21m SE	Electricity Substation	1993	230235
C	21m SE	Electricity Substation	1974	230235
H	48m SW	Electricity Substation	1974	235693
H	86m SW	Electricity Substation	1998	236334
H	86m SW	Electricity Substation	1993	236334
P	130m NE	Electricity Substation	1993	234047
P	130m NE	Electricity Substation	1968	234047
AB	415m E	Electricity Substation	1979	228341
AB	417m E	Electricity Substation	1988	228407
AB	420m E	Electricity Substation	1997	228091
AB	430m E	Electricity Substation	1968	227812

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.4 Historical petrol stations

<b>Records within 500m</b>	<b>0</b>
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Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.5 Historical garages

Records within 500m

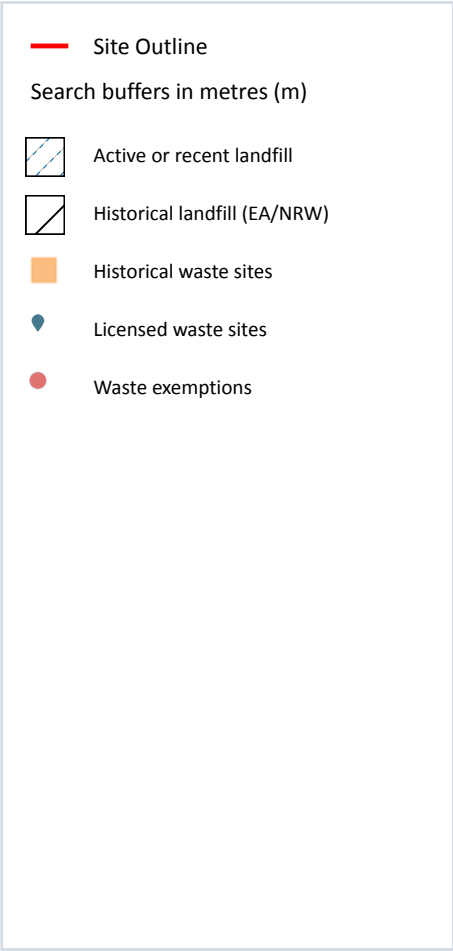
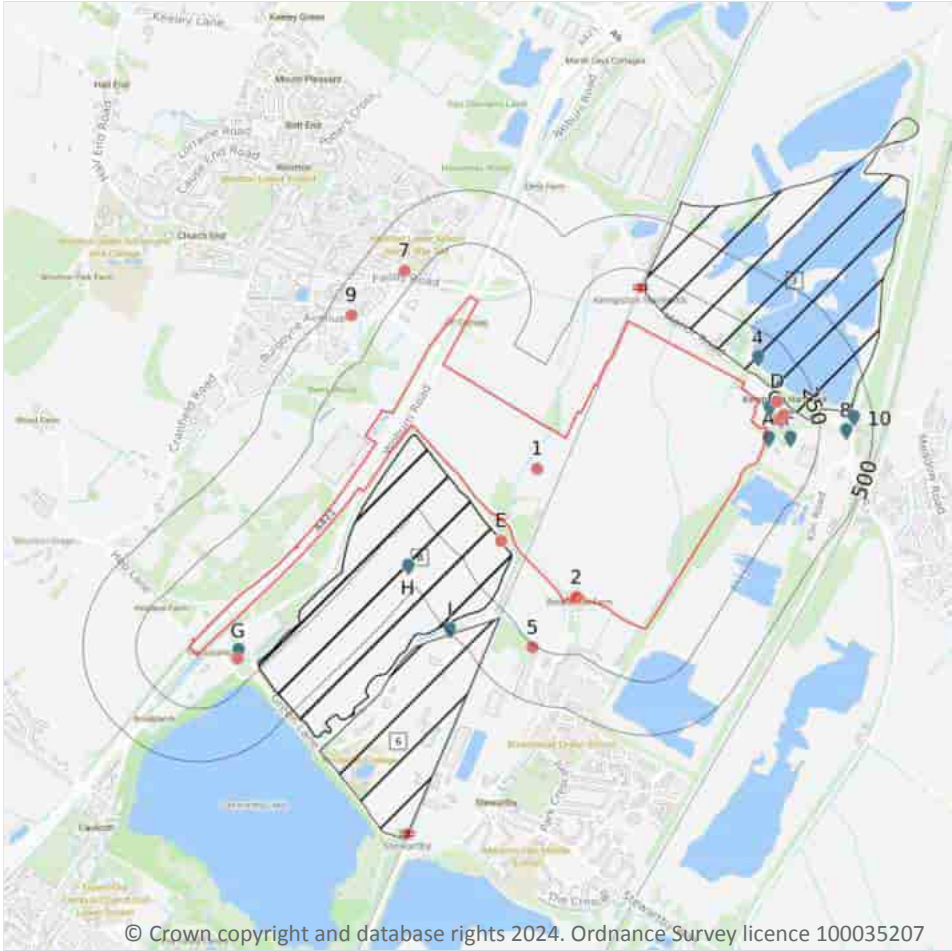
0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*



### 3 Waste and landfill



#### 3.1 Active or recent landfill

Records within 500m

1

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation. Features are displayed on the Waste and landfill map on [page 29 >](#)

ID	Location	Details	
B	21m W	Operator: FCC Waste Services (UK) Limited Site Address: Stewartby Lanfill Site, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY	WML Number: 0 EPR Reference: - Landfill type: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Status: Effective IPPC Reference: - EPR Number: -

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.2 Historical landfill (BGS records)

Records within 500m	0
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Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

*This data is sourced from the British Geological Survey.*

### 3.3 Historical landfill (LA/mapping records)

Records within 500m	0
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Landfill sites identified from Local Authority records and high detail historical mapping.

*This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.*

### 3.4 Historical landfill (EA/NRW records)

Records within 500m	5
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Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on [page 29 >](#)

ID	Location	Details		
B	20m W	Site Address: L Field Clay Pit, Vicarage Farm, Stewartby Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 9/1977, PIT 61 Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 05/12/1977 Licence Surrender: 15/05/1978	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 17/07/1952 Last Recorded: 01/01/1988
B	20m W	Site Address: L Field Clay Pit, Stewartby Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 2/1978 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 15/05/1978 Licence Surrender: 29/06/1984	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 17/07/1952 Last Recorded: 01/01/1988



ID	Location	Details		
B	20m W	Site Address: Clay Pit known as L Field, Stewartby Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 4/1984 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 29/06/1984 Licence Surrender: 06/11/1986	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 17/07/1952 Last Recorded: 06/11/1986
3	54m NE	Site Address: Clay Pit, Adjacent Kempston Hardwick Works, Kempston Hardwick, Bedfordshire Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 18/1977, PIT 63 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 05/12/1977 Licence Surrender: 28/04/1994	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 31/12/1977 Last Recorded: 31/12/1993
6	287m SW	Site Address: Stewartby, Bedfordshire Licence Holder Address: -	Waste Licence: - Site Reference: PIT 62 Waste Type: - Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: London Brick Company Licence Holder: - First Recorded - Last Recorded: -

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.5 Historical waste sites

<b>Records within 500m</b>	<b>3</b>
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Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on [page 29](#) >

ID	Location	Address	Further Details	Date
C	28m E	Site Address: Kempston Court, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9PQ	Type of Site: Waste Transfer Station (Extension) - Planning application reference: 97/00999 Description: Project comprises the erection of an extension of 146 sqm. An application (ref: 97/00999) for Detailed Planning permission was submitted to Bedford B.C. on 3rd July 1997. Data source: Historic Planning Application Data Type: Point	





ID	Location	Address	Further Details	Date
D	58m E	Site Address: Manor Road, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9NT	Type of Site: Waste Transfer Station Planning application reference: 96/0293 Description: Erection of new building for use with Class C1 waste. An application (ref: 96/0293) for Detailed Planning permission was submitted to Bedford B.C. on 7th March 1996.  Data source: Historic Planning Application Data Type: Point	-
C	71m E	Site Address: Kempston Court (Land Off, Manor Road, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9PQ	Type of Site: Waste Transfer Station Planning application reference: 96/0977 Description: Formation of new waste transfer station for Categories A, B and C(1) waste involving the erection of a new building with associated car parking and landscaping works. Construction - roller shutter x 2 doors. An application (ref: 96/0977) for Detailed Pnn ing permission was submitted to Bedford B.C. on 12th August 1996. Data source: Historic Planning Application Data Type: Point	-

*This data is sourced from Ordnance Survey/Groundsure and Local Authority records.*

### 3.6 Licensed waste sites

<b>Records within 500m</b>	<b>36</b>
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on [page 29 >](#)

ID	Location	Details		
A	14m E	Site Name: Paul Riches Skips Site Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: Kempston Court, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: - Operator: Paul Riches Skips Waste Management licence No: 70069 Annual Tonnage: 0	Issue Date: 26/07/1995 Effective Date: - Modified: 02/08/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified



ID	Location	Details		
A	14m E	Site Name: Paul Riches Skips Site Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: EA/EPR/GP3290NZ/V002 Operator: Riches Paul Waste Management licence No: 70069 Annual Tonnage: 25000	Issue Date: 26/07/1995 Effective Date: - Modified: 02/08/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	14m E	Site Name: Paul Riches Skips Site Address: Manor Road, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 635114 EPR reference: EA/EPR/GP3290NZ Operator: Paul Riches Waste Management licence No: 70069 Annual Tonnage: 25000	Issue Date: 26/07/1995 Effective Date: 26/07/1995 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
D	56m E	Site Name: G Moore ( Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 648024 EPR reference: EA/EPR/FP3598NH Operator: G Moore Haulage Limited Waste Management licence No: 71053 Annual Tonnage: 15000	Issue Date: 20/10/1997 Effective Date: 20/10/1997 Modified: 20/10/1997 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
C	71m E	Site Name: Kempston Court Site Address: Kempston Court, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 645650 EPR reference: EA/EPR/LP3796NV Operator: Paul Riches Skips Limited Waste Management licence No: 75120 Annual Tonnage: 75000	Issue Date: 25/10/2004 Effective Date: 25/10/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
F	113m E	Site Name: G Moore ( Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMO001 EPR reference: EA/EPR/FP3598NH/A001 Operator: G Moore Haulage Ltd Waste Management licence No: 71053 Annual Tonnage: 75000	Issue Date: 20/10/1997 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
F	113m E	Site Name: G Moore ( Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMO001 EPR reference: EA/EPR/FP3598NH/V002 Operator: G Moore Haulage Ltd Waste Management licence No: 71053 Annual Tonnage: 15000	Issue Date: 20/10/1997 Effective Date: - Modified: 01/06/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
G	119m SW	Site Name: Universal Salvage - Acrey Fields Site Address: Acrey Fields, Woburn Road, Wootton, Beds, MK43 9ES Correspondence Address: Acrey Fields, Woburn Road, Wootton, Beds, MK43 9ES	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: UNI003 EPR reference: - Operator: Universal Salvage Ltd Waste Management licence No: 70064 Annual Tonnage: 0	Issue Date: 13/07/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
G	119m SW	Site Name: Universal Salvage - Acrey Fields Site Address: Acrey Fields, Woburn Road, Wootton, Bedfordshire, MK43 9ES Correspondence Address: Acrey Fields, Woburn Road, Wootton, Bedfordshire, MK43 9EJ	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: USE003 EPR reference: - Operator: Userve Ltd Waste Management licence No: 70064 Annual Tonnage: 5000	Issue Date: 13/07/1993 Effective Date: 12/05/2008 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred



ID	Location	Details		
G	119m SW	Site Name: Universal Salvage - Acrey Fields Site Address: Acrey Fields, Woburn Road, Wootton, Bedfordshire, MK43 9ES Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: USE003 EPR reference: EA/EPR/GP3990NL/T001 Operator: Copart Limited Waste Management licence No: 70064 Annual Tonnage: 5000	Issue Date: 13/07/1993 Effective Date: 12/05/2008 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
G	119m SW	Site Name: Copart U K - Acrey Fields Site Address: Acrey Fields, Woburn Road, Wootton, Bedfordshire, MK43 9ES Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 651576 EPR reference: EA/EPR/GP3990NL Operator: Copart Uk Limited Waste Management licence No: 70064 Annual Tonnage: 5000	Issue Date: 13/07/1993 Effective Date: 13/07/1993 Modified: 13/07/1993 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
4	130m NE	Site Name: Kempston Court Site Address: Kempston Court, Manor Road, Kempston, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: EA/EPR/LP3796NV/A001 Operator: Paul Riches Skips Limited Waste Management licence No: 75120 Annual Tonnage: 75000	Issue Date: 25/10/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
8	370m E	Site Name: Japanese Car Breakers Site Address: Opp Chimney Corner Pub, Kempston Hardwick, Bedford, Bedfordshire, MK45 3JE Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 643655 EPR reference: EA/EPR/UP3896NL Operator: Mr Ghulam Mustafa & Mr Saraj Ahmed Waste Management licence No: 75140 Annual Tonnage: 2500	Issue Date: 24/09/2004 Effective Date: 24/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
H	409m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Co-Disposal Landfill Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: EA/EPR/XP3490NH/V002 Operator: W R G Waste Services Ltd Waste Management licence No: 70053 Annual Tonnage: 150000	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC
H	409m SW	Site Name: Shanks & Mcewan Site Address: L Field, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: Shanks & McEwan (Southern Waste Services) Ltd Waste Management licence No: 70053 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
H	409m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Bedford, Beds, MK43 9LY Correspondence Address: Charleston Road, Hardley, Hythe, Southampton, SO45 3NX	Type of Site: Co-Disposal Landfill Site Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: W R G Waste Services Limited Waste Management licence No: 70053 Annual Tonnage: 150000	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC
H	409m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: 3, Sidings Court, White Rose Way, Doncaster, DN4 5NU	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: W R G Waste Services Limited Waste Management licence No: 70053 Annual Tonnage: 150000	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC



ID	Location	Details		
H	409m SW	Site Name: Shanks Waste Services - L Field Stewartby Site Address: L Field, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: Shanks Waste Services Ltd Waste Management licence No: 70053 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 09/04/2001 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
H	409m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: 3, Sidings Court, White Rose Way, Doncaster, DN4 5NU	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA011 EPR reference: - Operator: W R G Waste Services Limited Waste Management licence No: 70053 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 27/05/2004 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
H	409m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA012 EPR reference: - Operator: Shanks Waste Solutions Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 21/11/1991 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
H	409m SW	Site Name: Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Bedford, Beds, MK43 9LY Correspondence Address: Norwood Industrial Estate, Rotherham Road, Killamarsh, Sheffield, Derbyshire, S21 2DR	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO002 EPR reference: - Operator: Veolia Es Onyx Ltd Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: 11/04/2006 Modified: 27/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred





ID	Location	Details		
H	409m SW	Site Name: Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: Veolia Environmental Services, Norwood Industrial Estate, Rotherham Road, Killamars, Sheffield, Derbyshire, S21 2DR	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEO001 EPR reference: - Operator: Veolia Es Onyx Ltd Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: 11/04/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
H	409m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA012 EPR reference: - Operator: Wrg Waste Services Ltd Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 27/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
H	409m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Dunedin House, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA008 EPR reference: - Operator: Wrg Waste Services Ltd Waste Management licence No: 75018 Annual Tonnage: 75000	Issue Date: 29/05/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
H	409m SW	Site Name: Shanks Waste Services - Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA012 EPR reference: - Operator: Shanks Waste Services Ltd Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: - Modified: 21/11/1991 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
H	409m SW	Site Name: Shanks Waste Services - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Buckinghamshire, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA008 EPR reference: - Operator: Shanks Waste Services Limited Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
H	409m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Dunedin House, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA008 EPR reference: - Operator: Shanks Waste Solutions Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
H	409m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Beds, MK43 9LY Correspondence Address: Jo Lewis, Dunedin House, Auckland Park, Mount Farm, Milton Keynes, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA026 EPR reference: - Operator: Shanks Chemical Services Ltd Waste Management licence No: 70059 Annual Tonnage: 0	Issue Date: 06/11/1986 Effective Date: 31/03/2005 Modified: 27/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
H	409m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Jo Lewis, Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 000018 EPR reference: - Operator: Shanks Chemical Services Ltd Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: 31/03/2005 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred



ID	Location	Details		
H	409m SW	Site Name: Shanks Waste Solutions - Stewartby Treatment Plant Site Address: Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: Dunedin House, Auckland Park, Mount Farm, Milton Keynes, Bucks, MK1 1BU	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA028 EPR reference: - Operator: Shanks Chemical Services Ltd Waste Management licence No: 75018 Annual Tonnage: 0	Issue Date: 29/05/2002 Effective Date: 31/03/2005 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
H	409m SW	Site Name: W R G - L Field Site Address: L Field, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 644249 EPR reference: EA/EPR/XP3490NH Operator: Fcc Waste Services (Uk) Limited Waste Management licence No: 70053 Annual Tonnage: 150000	Issue Date: 06/11/1986 Effective Date: 06/11/1986 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
H	409m SW	Site Name: Stewartby Treatment Plant Site Address: Treatment Plant, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 648890 EPR reference: EA/EPR/XP3790NV Operator: Veolia Es (Uk) Limited Waste Management licence No: 70059 Annual Tonnage: 75000	Issue Date: 06/11/1986 Effective Date: 06/11/1986 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
H	409m SW	Site Name: Stewartby Treatment Plant Site Address: Land/premises At, Green Lane, Stewartby, Bedford, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 658496 EPR reference: EA/EPR/DP3092NH Operator: Veolia Es (Uk) Limited Waste Management licence No: 75018 Annual Tonnage: 301600	Issue Date: 29/05/2002 Effective Date: 29/05/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
10	409m E	Site Name: Japanese Car Breakers Site Address: Opp Chimney Corner Pub, Kempston Hardwick, Bedford, MK45 3JE Correspondence Address: Opp Chimney Corner Pub, Kempston Hardwick, Bedford, MK45 3JE	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: JAP001 EPR reference: - Operator: Mr Ghulam Mustafa & Mr Saraj Ahmed Waste Management licence No: 75140 Annual Tonnage: 2500	Issue Date: 24/09/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
I	493m SW	Site Name: Marston Vale Leachate Treatment Plant Site Address: Wrg Waste Services, Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Biological Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SHA022 EPR reference: EA/EPR/SP3796NQ/A001 Operator: W R G Waste Services Ltd Waste Management licence No: 75110 Annual Tonnage: 219000	Issue Date: 01/08/2005 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC
I	493m SW	Site Name: Marston Vale Leachate Treatment Plant Site Address: Wrg Waste Services, Green Lane, Stewartby, Bedfordshire, MK43 9LY Correspondence Address: -	Type of Site: Biological Treatment Facility Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 628320 EPR reference: EA/EPR/SP3796NQ Operator: Fcc Waste Services (UK) Limited Waste Management licence No: 75110 Annual Tonnage: 219000	Issue Date: 01/08/2005 Effective Date: 01/08/2005 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.7 Waste exemptions

<b>Records within 500m</b>	<b>27</b>
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Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on [page 29 >](#)



ID	Location	Site	Reference	Category	Sub-Category	Description
1	On site	Land at TL0211043960	EPR/KE5444U F/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
2	12m S	BROADMEAD FARM, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	WEX300630	Using waste exemption	On a Farm	Use of waste in construction
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from a portable sanitary convenience
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in a secure place
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from dredging of inland waters
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Disposing of waste exemption	Agricultural Waste Only	Deposit of waste from a portable sanitary convenience
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Storing waste exemption	Agricultural Waste Only	Storage of waste in a secure place
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Treating waste exemption	Agricultural Waste Only	Cleaning, washing, spraying or coating relevant waste
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Treating waste exemption	Agricultural Waste Only	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising



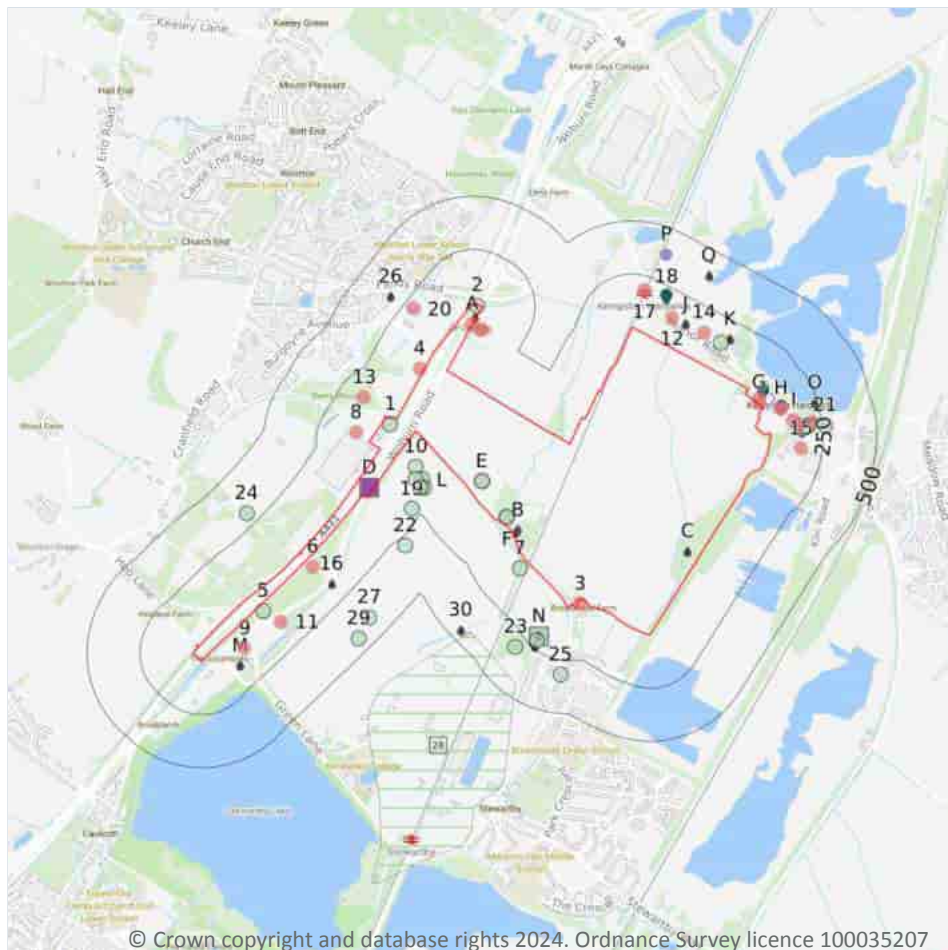
ID	Location	Site	Reference	Category	Sub-Category	Description
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Using waste exemption	Agricultural Waste Only	Spreading of plant matter to confer benefit
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Using waste exemption	Agricultural Waste Only	Use of waste for a specified purpose
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/UF0409V B/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
E	57m SW	Lodge Farm PETERBOROUGH PE8 5DE	EPR/ME5859N B/A001	Disposing of waste exemption	Agricultural Waste Only	Burning waste in the open
C	72m E	Kempston Court Manor Road Bedford Bedfordshire MK43 9NT	EPR/JH0879BZ /A001	Storing waste exemption	Non- Agricultural Waste Only	Storage of waste in a secure place
D	83m E	Kempston Court, Manor Road, Kempston Hardwick, Bedford, MK43 9NT	WEX012998	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	83m E	MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, MK43 9NT	WEX254567	Using waste exemption	Not on a farm	Use of waste in construction
C	97m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, MK43 9PQ	WEX309205	Storing waste exemption	Not on a farm	Storage of waste in a secure place
C	97m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, MK43 9PQ	WEX172222	Storing waste exemption	Not on a farm	Storage of waste in a secure place
G	144m SW	-	WEX220967	Using waste exemption	Not on a farm	Use of depolluted end-of-life vehicles for vehicle parts
5	264m S	Vale House Broadmead Road Bedford Bedford MK43 9ND	EPR/AF0708C N/A001	Using waste exemption	Non- Agricultural Waste Only	Use of waste in construction
7	315m NW	UNIT 2, FOLKES ROAD, WOOTTON, BEDFORD, MK43 9TE	WEX330886	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
9	394m NW	-	WEX313567	Using waste exemption	Not on a farm	Use of waste in construction

*This data is sourced from the Environment Agency and Natural Resources Wales.*





## 4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Control of Major Accident Hazards
- Historical licensed industrial activities
- Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollutant release to surface waters
- List 1 Dangerous Substances
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

### 4.1 Recent industrial land uses

Records within 250m

23

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 44](#) >

ID	Location	Company	Address	Activity	Category
A	On site	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
G	7m E	Mast	Bedfordshire, MK43	Telecommunications Features	Infrastructure and Facilities
3	12m S	C & J Mobile Tyre Service	Broadmead Farm, Broadmead Road, Stewartby, Bedfordshire, MK43 9ND	Vehicle Parts and Accessories	Motoring



ID	Location	Company	Address	Activity	Category
4	21m NW	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
G	25m NE	Works	Bedfordshire, MK43	Unspecified Works Or Factories	Industrial Features
6	42m W	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
A	47m NW	Kempston Scaffolding Services Ltd	C P Farm, Woburn Road, Wootton, Bedfordshire, MK43 9EJ	Construction and Tool Hire	Hire Services
A	47m NW	Vmsp 2015	Unit 4a C P Farm, Woburn Road, Wootton, Bedford, Bedfordshire, MK43 9EJ	Vehicle Repair, Testing and Servicing	Repair and Servicing
8	77m W	Electricity Sub Stations	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
H	83m E	G Moore Haulage	-, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Distribution and Haulage	Transport, Storage and Delivery
H	83m E	Cemex Bedford Concrete Plant & Dry Silo Mortar Concrete Sales	-, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Concrete Products	Industrial Products
9	97m SW	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
11	122m SW	G R T Builders	Redcrest House, Woburn Road, Wootton, Bedfordshire, MK43 9EJ	Construction and Tool Hire	Hire Services
I	127m E	Specialist Power Systems	3-4, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Electrical Production and Manipulation Equipment	Industrial Products
12	129m NE	Cemex UK	Hanson Brick, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Concrete Products	Industrial Products
13	133m W	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
I	134m E	Gapp Automation	6, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Measurement and Inspection Equipment	Industrial Products
14	137m NE	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
I	138m E	Advanced Vehicle Glazing	7, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
15	150m E	Coronation Business Park	Bedfordshire, MK43	Business Parks and Industrial Estates	Industrial Features
17	182m N	Kempston Hardwick Rail Station	Bedfordshire, MK43	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
20	205m NW	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
I	208m E	Paul Riches Skips Ltd	1 Vine Cottage, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Waste Storage, Processing and Disposal	Infrastructure and Facilities

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

<b>Records within 500m</b>	<b>0</b>
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Open, closed, under development and obsolete petrol stations.

*This data is sourced from Experian.*

## 4.3 Electricity cables

<b>Records within 500m</b>	<b>0</b>
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High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*

## 4.4 Gas pipelines

<b>Records within 500m</b>	<b>0</b>
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High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*



## 4.5 Sites determined as Contaminated Land

**Records within 500m****0**

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

*This data is sourced from Local Authority records.*

## 4.6 Control of Major Accident Hazards (COMAH)

**Records within 500m****1**

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

Features are displayed on the Current industrial land use map on [page 44](#) >

ID	Location	Company	Address	Operational status	Tier
28	420m SW	London Brick Products Ltd	London Brick Products Ltd, Stewartby, Bedford	Historical NIHHS Site	-

*This data is sourced from the Health and Safety Executive.*

## 4.7 Regulated explosive sites

**Records within 500m****0**

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

*This data is sourced from the Health and Safety Executive.*

## 4.8 Hazardous substance storage/usage

**Records within 500m****0**

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

*This data is sourced from Local Authority records.*



## 4.9 Historical licensed industrial activities (IPC)

### Records within 500m

4

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

Features are displayed on the Current industrial land use map on [page 44](#) >

ID	Location	Details	
P	378m N	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AI0012	Original Permit Number: IPCAIRAPP Date Approved: 30-6-1993 Effective Date: 30-6-1993 Status: Superseded By Variation
P	378m N	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AJ3476	Original Permit Number: IPCMINVAR Date Approved: 12-7-1993 Effective Date: 12-7-1993 Status: Superseded By Variation
P	378m N	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: AL9513	Original Permit Number: IPCMINVAR Date Approved: 1-2-1994 Effective Date: 1-2-1994 Status: Superseded By Variation
P	378m N	Operator: Hanson Building Products Ltd Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR Process: Ceramic Production Permit Number: BC8031	Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.10 Licensed industrial activities (Part A(1))

### Records within 500m

4

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 44](#) >



ID	Location	Details	
G	39m E	Operator: C JACKSON & SONS BEDFORD LIMITED Installation Name: Manor Road Hazardous Waste Transfer Station EPR/SP3932KH Process: TEMPORARY STORAGE OF HAZ WASTE NOT UNDER S 5.2 PENDING ACTIVITIES LISTED IN S 5.1, 5.2, 5.3 AND PARAGRAPH (B) OF THIS SECTION WITH A TOTAL CAPACITY > 50 TONNES, EXCL TEMP STORAGE WHERE GENERATED Permit Number: SP3932KH Original Permit Number: SP3932KH	EPR Reference: EPR/SP3932KH Issue Date: 10/01/2014 Effective Date: 10/01/2014 Last date noted as effective: 23/11/2023 Status: Effective
G	39m E	Operator: C Jackson & Sons (Bedford) Ltd Installation Name: Manor Road Hazardous Waste Transfer Station EPR/SP3932KH Process: TEMPORARY STORAGE OF HAZ WASTE NOT UNDER S 5.2 PENDING ACTIVITIES LISTED IN S 5.1, 5.2, 5.3 AND PARAGRAPH (B) OF THIS SECTION WITH A TOTAL CAPACITY > 50 TONNES, EXCL TEMP STORAGE WHERE GENERATED Permit Number: NP3034ET Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 10/01/2014 Effective Date: 10/01/2014 Last date noted as effective: 21/03/2023 Status: Effective
G	39m E	Operator: C Jackson & Sons (Bedford) Ltd Installation Name: Manor Road Hazardous Waste Transfer Station Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: YP3331TF Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 28/06/2010 Effective Date: 28/06/2010 Last date noted as effective: 21/03/2023 Status: Superseded
G	39m E	Operator: C Jackson & Sons (Bedford) Ltd Installation Name: Manor Road Hazardous Waste Transfer Station Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: SP3932KH Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 10/06/2010 Effective Date: 10/06/2010 Last date noted as effective: 21/03/2023 Status: Superseded

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.11 Licensed pollutant release (Part A(2)/B)

**Records within 500m**

**3**

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 44 >](#)





ID	Location	Address	Details	
G	56m NE	Cemex Bedford Concrete Plant (RMC), Manor Road, Kempston Hardwick, Bedford, MK43 9NT	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
H	81m E	G Moore Haulage Ltd, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Process: Waste Oil Burner 0.4 MW Status: Surrendered Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
18	201m NE	Hanson Bricks	Process: Manufacture of Clay Status: Historical Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

<b>Records within 500m</b>	<b>0</b>
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Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.13 Licensed Discharges to controlled waters

<b>Records within 500m</b>	<b>56</b>
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Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on [page 44 >](#)

ID	Location	Address	Details	
A	On site	COTTAGE FARM, WOOTTON.	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1784 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/01/1985 Effective Date: 30/01/1985 Revocation Date: 18/02/1992
B	On site	RANDALLS FARM, STEWARTBY, BEDS., MK43 9NE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NFG0884 Permit Version: 1 Receiving Water: Unknown Trib.	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 27/05/1963 Effective Date: 27/05/1963 Revocation Date: 20/02/1991



ID	Location	Address	Details	
B	On site	RANDALLS FARM, STEWARTBY, BEDS., MK43 9NE	Effluent Type: AGRICULTURE - UNSPECIFIED Permit Number: PR1NFG0884 Permit Version: 1 Receiving Water: Unknown Trib.	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 27/05/1963 Effective Date: 27/05/1963 Revocation Date: 20/02/1991
B	On site	RANDALLS FARM EDUCATION CENTRE, BROADMEAD ROAD, STEWARTBY, BUCKS, MK43 9NE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF17917 Permit Version: 1 Receiving Water: SEASONAL SOAKAWAY	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 10/10/2006 Effective Date: 10/10/2006 Revocation Date: 13/12/2011
B	On site	RANDALLS FARM EDUCATION CENTRE, BROADMEAD ROAD, STEWARTBY, BUCKS, MK43 9NE	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF17917 Permit Version: 2 Receiving Water: SEASONAL SOAKAWAY	Status: VARIED UNDER EPR 2010 Issue date: 14/12/2011 Effective Date: 14/12/2011 Revocation Date: -
C	On site	CORONATION CLAY PIT, BROADMEAD RD, STEWARTBY, BEDS, BEDS, MK43 9PR	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF05628 Permit Version: 1 Receiving Water: tributary Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 10/04/1996 Effective Date: 10/04/1996 Revocation Date: 28/07/1998
C	On site	CORONATION CLAY PIT, BROADMEAD RD, STEWARTBY, BEDS, BEDS, MK43 9PR	Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: PRCNF05628 Permit Version: 2 Receiving Water: tributary Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 29/07/1998 Effective Date: 29/07/1998 Revocation Date: -
D	On site	L FIELD L'FILL SITE, BEDS	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1821 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/01/1985 Effective Date: 30/01/1985 Revocation Date: 22/03/1992
D	On site	L FIELD L'FILL SITE, BEDS	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1821 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 23/03/1992 Effective Date: 23/03/1992 Revocation Date: 26/04/2005



ID	Location	Address	Details	
D	On site	L FIELD L'FILL SITE, BEDS	<b>Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY</b> <b>Permit Number: PR1NF1821</b> <b>Permit Version: 2</b> <b>Receiving Water: Trib Elstow Brook</b>	<b>Status: REVOKED (WRA 91, S88 &amp; SCHED 10 AS AMENDED BY ENV ACT 1995)</b> <b>Issue date: 23/03/1992</b> <b>Effective Date: 23/03/1992</b> <b>Revocation Date: 26/04/2005</b>
I	116m E	LOWE BROS PREMISES AT MANOR ROAD, KEMPSTON HARDWICK, BEDFORDSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: PR1NF1425 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 22/12/1983 Effective Date: 22/12/1983 Revocation Date: 18/02/1992
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012



ID	Location	Address	Details	
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012



ID	Location	Address	Details	
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -



ID	Location	Address	Details	
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
J	128m NE	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
M	142m SW	ACREY FIELDS, WOBURN ROAD, WOOTON, BEDFORD, BEDS, MK43 9EJ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF04503 Permit Version: 1 Receiving Water: Old Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 03/09/1991 Effective Date: 03/09/1991 Revocation Date: 02/02/1992
M	142m SW	ACREY FIELDS, WOBURN ROAD, WOOTON, BEDFORD, BEDS, MK43 9EJ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF04503 Permit Version: 2 Receiving Water: Old Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 03/02/1992 Effective Date: 03/02/1992 Revocation Date: 28/06/1998
I	146m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF00800 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/05/1989 Effective Date: 19/05/1989 Revocation Date: 16/01/1992



ID	Location	Address	Details	
I	146m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF04495 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 09/09/1991 Effective Date: 09/09/1991 Revocation Date: 23/01/1992
I	146m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PRCNF00799 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/05/1989 Effective Date: 19/05/1989 Revocation Date: -
I	146m E	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF00800 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 17/01/1992 Effective Date: 17/01/1992 Revocation Date: -
16	161m SW	A421 MAIN COMPOUND AREA, HOO LANE, WOOTTON, BEDFORD, BEDFORDSHIRE, MK43 9EH	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: NPSWQD006033 Permit Version: 1 Receiving Water: A TRIB OF STEWARTBY LAKE	Status: SURRENDERED UNDER EPR 2010 Issue date: 06/04/2009 Effective Date: 06/04/2009 Revocation Date: 24/01/2011
K	165m NE	ASKERN HOUSE, MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, BEDFORDSHIRE, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1780 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/01/1985 Effective Date: 30/01/1985 Revocation Date: 25/02/1992
K	165m NE	ASKERN HOUSE, MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, BEDFORDSHIRE, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1780 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/02/1992 Effective Date: 26/02/1992 Revocation Date: 30/10/1996
N	191m S	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF448A Permit Version: 2 Receiving Water: Trib of Estow Brook River Grea	Status: VARIED BY APPLICATION - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/03/1987 Effective Date: 14/09/2000 Revocation Date: 18/11/2007





ID	Location	Address	Details	
N	191m S	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF448A Permit Version: 1 Receiving Water: Trib of Estow Brook River Grea	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 19/03/1987 Effective Date: 19/03/1987 Revocation Date: 13/09/2000
I	211m E	THE COTTAGE, MANOR ROAD, KEMPSTONE HARDWICKE, BEDFORD, BEDS, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2047 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 26/04/1985 Effective Date: 26/04/1985 Revocation Date: 24/03/1992
N	242m S	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF448A Permit Version: 3 Receiving Water: Trib of Estow Brook River Grea	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/11/2007 Effective Date: 19/11/2007 Revocation Date: 31/03/2009
N	242m S	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: AW1NF448A Permit Version: 3 Receiving Water: Trib of Estow Brook River Grea	Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 19/11/2007 Effective Date: 19/11/2007 Revocation Date: 31/03/2009
N	242m S	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF448A Permit Version: 4 Receiving Water: Trib of Estow Brook River Grea	Status: SURRENDERED UNDER EPR 2010 Issue date: 14/10/2008 Effective Date: 01/04/2009 Revocation Date: 28/08/2015
N	242m S	STEWARTBY STW, BROADMEAD ROAD, STEWARTBY, BEDFORD, MK43 9ND	Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: AW1NF448A Permit Version: 4 Receiving Water: Trib of Estow Brook River Grea	Status: SURRENDERED UNDER EPR 2010 Issue date: 14/10/2008 Effective Date: 01/04/2009 Revocation Date: 28/08/2015



ID	Location	Address	Details	
O	243m E	2 MANOR ROAD, KEMPSTON HARDWICKE, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2047 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 25/03/1992 Effective Date: 25/03/1992 Revocation Date: 30/10/1996
O	243m E	2 MANOR ROAD, KEMPSTON HARDWICKE, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2173 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 02/11/1985 Effective Date: 02/11/1985 Revocation Date: 09/03/1992
26	323m NW	FIELDS ROAD, WOOTTON, BEDS	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PRCNF00725 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 25/04/1989 Effective Date: 25/04/1989 Revocation Date: 10/02/1992
Q	383m NE	LONDON BRICK COMPANT LTD, MANOR ROAD, KEMPSTON, HARDWICK, BEDS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2614 Permit Version: 1 Receiving Water: trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 06/04/1987 Effective Date: 06/04/1987 Revocation Date: 17/02/1992
Q	383m NE	LONDON BRICK COMPANT LTD, MANOR ROAD, KEMPSTON, HARDWICK, BEDS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2614 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 18/02/1992 Effective Date: 18/02/1992 Revocation Date: 20/10/2005
30	451m SW	WORKSHOP, LAND ADJ TO RAIL TERMINAL.L FIE, STEWARTBY	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF04079 Permit Version: 1 Receiving Water: Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 27/02/1991 Effective Date: 27/02/1991 Revocation Date: 20/02/1992

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4.14 Pollutant release to surface waters (Red List)

Records within 500m	2
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Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

Features are displayed on the Current industrial land use map on [page 44](#) >

ID	Location	Address	Details	
D	On site	SHANKS AND MCEWAN, L FIELD L'FILL SITE, BEDS	Permit Number: PR1NF1821 Permit Version: 2 Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Discharge Type: Undefined or Other	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Catchment: MID R.OUSE / ELSTOW BRK Approval Date: 23/03/1992
D	On site	SHANKS AND MCEWAN, L FIELD L'FILL SITE, BEDS	Permit Number: PR1NF1821 Permit Version: 2 Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Discharge Type: Undefined or Other	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Catchment: MID R.OUSE / ELSTOW BRK Approval Date: 23/03/1992

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.15 Pollutant release to public sewer

Records within 500m	0
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Discharges of Special Category Effluents to the public sewer.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.16 List 1 Dangerous Substances

Records within 500m	1
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Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on [page 44](#) >

ID	Location	Name	Status	Receiving Water	Authorised Substances
D	On site	Stewartby Landfill Site	Not Active	Elstow Brook, River Ouse	Mercury (other), Cadmium

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4.17 List 2 Dangerous Substances

### Records within 500m

3

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on [page 44 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
D	On site	Wrc "I" Field Landfill	Active	Trib Elstow Bk R Gt Ouse	Arsenic, Chromium, Copper, Iron, Lead, Nickel
N	192m S	Stewartby Stw	Not Active	-	-
N	192m S	Stewartby Stw	Not Active	-	-

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.18 Pollution Incidents (EA/NRW)

### Records within 500m

27

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 44 >](#)

ID	Location	Details	
1	On site	Incident Date: 25/01/2002 Incident Identification: 54405 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
2	On site	Incident Date: 02/09/2003 Incident Identification: 186835 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
E	On site	Incident Date: 10/03/2002 Incident Identification: 62997 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 2 (Significant) Air Impact: Category 4 (No Impact)



ID	Location	Details	
E	On site	<b>Incident Date: 10/03/2002</b> <b>Incident Identification: 62997</b> <b>Pollutant: General Biodegradable Materials and Wastes</b> <b>Pollutant Description: Other General Biodegradable Material or Waste</b>	<b>Water Impact: Category 4 (No Impact)</b> <b>Land Impact: Category 2 (Significant)</b> <b>Air Impact: Category 4 (No Impact)</b>
F	On site	<b>Incident Date: 08/07/2002</b> <b>Incident Identification: 90058</b> <b>Pollutant: General Biodegradable Materials and Wastes</b> <b>Pollutant Description: Algae</b>	<b>Water Impact: Category 1 (Major)</b> <b>Land Impact: Category 4 (No Impact)</b> <b>Air Impact: Category 4 (No Impact)</b>
F	On site	<b>Incident Date: 08/07/2002</b> <b>Incident Identification: 90058</b> <b>Pollutant: General Biodegradable Materials and Wastes</b> <b>Pollutant Description: Algae</b>	<b>Water Impact: Category 1 (Major)</b> <b>Land Impact: Category 4 (No Impact)</b> <b>Air Impact: Category 4 (No Impact)</b>
5	27m SW	Incident Date: 06/01/2002 Incident Identification: 50758 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
7	48m SW	Incident Date: 09/05/2002 Incident Identification: 77585 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
10	102m W	Incident Date: 28/03/2002 Incident Identification: 68144 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
K	133m NE	Incident Date: 19/08/2003 Incident Identification: 183354 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
L	133m W	Incident Date: 15/01/2002 Incident Identification: 52651 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
L	139m W	Incident Date: 10/04/2002 Incident Identification: 70622 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
L	153m W	Incident Date: 18/03/2002 Incident Identification: 64881 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)



ID	Location	Details	
L	168m W	Incident Date: 06/03/2002 Incident Identification: 62303 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
L	168m W	Incident Date: 06/03/2002 Incident Identification: 62303 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
I	174m E	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
I	174m E	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
I	174m E	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Atmospheric Pollutants and Effects:Specific Waste Materials Pollutant Description: Smoke:Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
19	202m W	Incident Date: 16/05/2002 Incident Identification: 79107 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
N	213m S	Incident Date: 09/09/2002 Incident Identification: 106621 Pollutant: Sewage Materials Pollutant Description: Final Effluent	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
21	257m E	Incident Date: 29/06/2001 Incident Identification: 12280 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
22	289m W	Incident Date: 07/01/2002 Incident Identification: 50853 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
23	307m S	Incident Date: 18/06/2001 Incident Identification: 9912 Pollutant: Sewage Materials Pollutant Description: Sludge	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)





ID	Location	Details	
24	310m W	Incident Date: 21/08/2002 Incident Identification: 101978 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
25	318m S	Incident Date: 08/05/2002 Incident Identification: 77395 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
27	398m SW	Incident Date: 08/01/2002 Incident Identification: 51143 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
29	434m SW	Incident Date: 03/01/2002 Incident Identification: 50319 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.19 Pollution inventory substances

<b>Records within 500m</b>	<b>0</b>
----------------------------	----------

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*

## 4.20 Pollution inventory waste transfers

<b>Records within 500m</b>	<b>0</b>
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The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*



## 4.21 Pollution inventory radioactive waste

Records within 500m

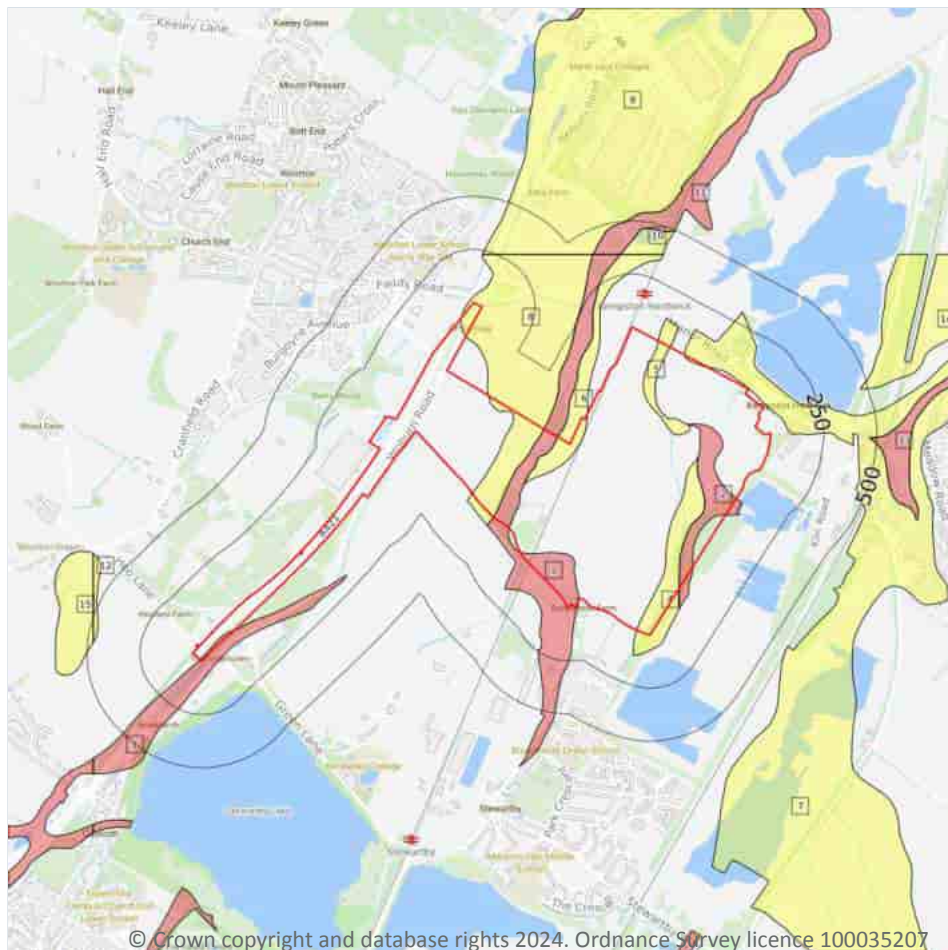
0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*



## 5 Hydrogeology - Superficial aquifer



- Site Outline**
- Search buffers in metres (m)**
- Principal
  - Secondary A
  - Secondary B
  - Secondary Undifferentiated
  - Unproductive
  - Unknown

### 5.1 Superficial aquifer

Records within 500m

15

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 65](#) >

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

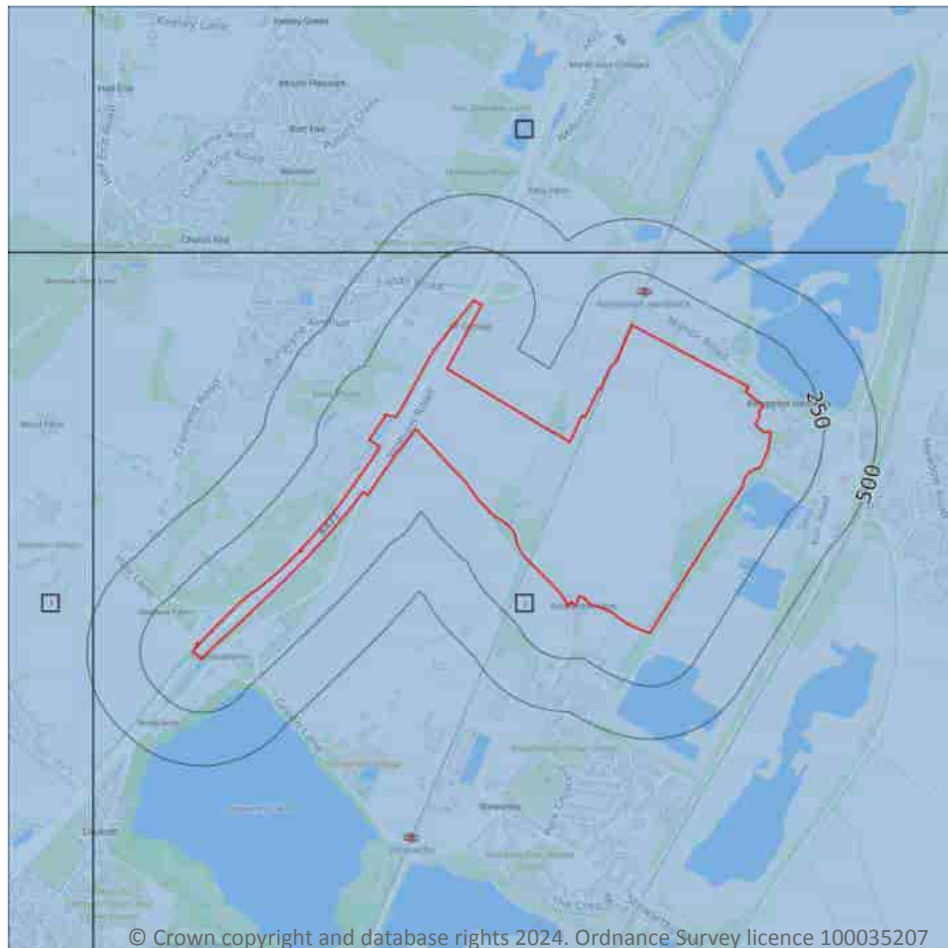


ID	Location	Designation	Description
3	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
8	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
9	231m NW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
10	343m N	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
11	347m N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
12	461m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
13	466m E	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
14	467m E	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
15	473m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*



## Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
  - Secondary A
  - Secondary B
  - Secondary Undifferentiated
  - Unproductive

### 5.2 Bedrock aquifer

Records within 500m

3

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 67](#) >

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	227m NW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
3	471m W	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

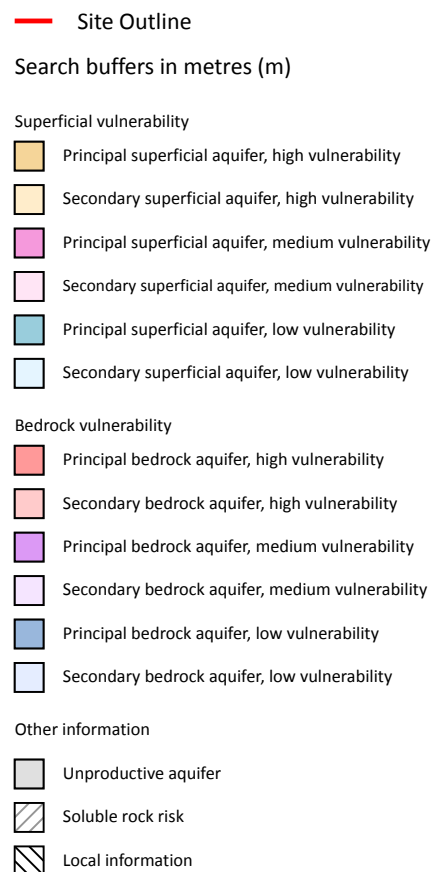
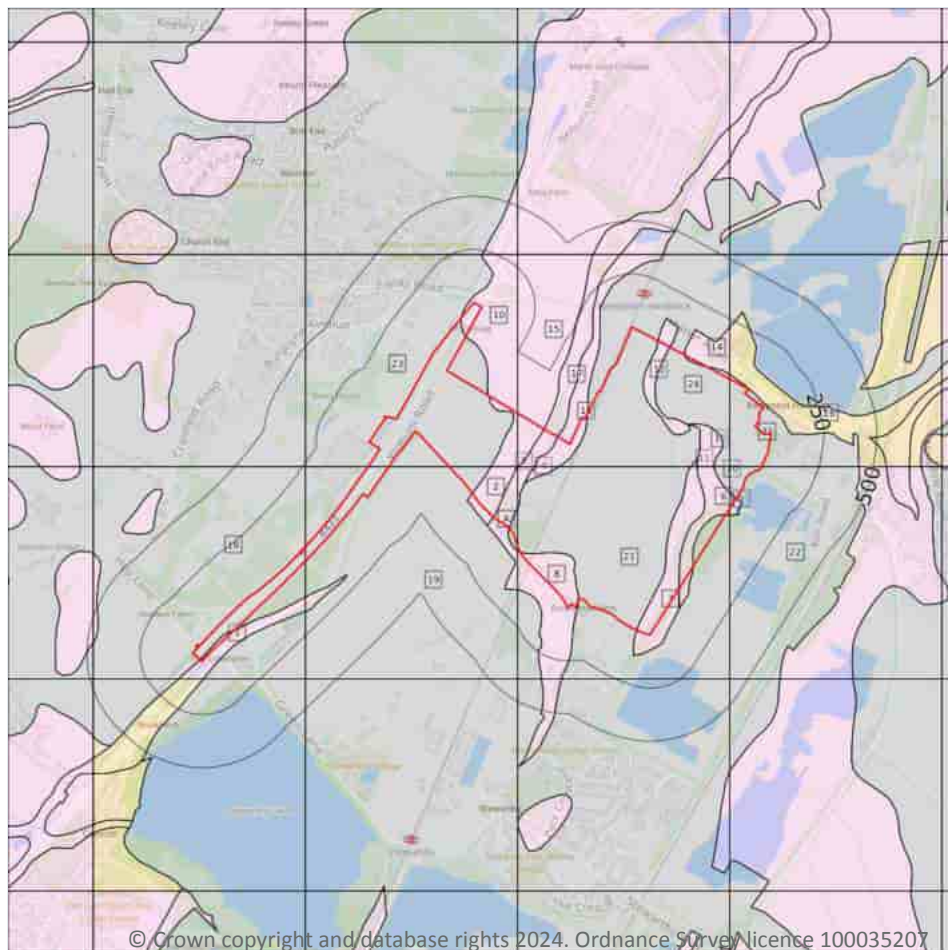


*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*





## Groundwater vulnerability



### 5.3 Groundwater vulnerability

Records within 50m

28

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 69](#) >



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
6	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
7	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
11	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
12	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
13	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
14	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
15	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
16	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
17	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
18	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
19	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
20	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
21	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
22	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
23	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
24	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
25	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
A	On site	<b>Summary Classification:</b> Secondary superficial aquifer - Medium Vulnerability <b>Combined classification:</b> Unproductive Bedrock Aquifer, Productive Superficial Aquifer	<b>Leaching class:</b> Intermediate <b>Infiltration value:</b> 40-70% <b>Dilution value:</b> <300mm/year	<b>Vulnerability:</b> Medium <b>Aquifer type:</b> Secondary <b>Thickness:</b> 3-10m <b>Patchiness value:</b> <90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures
A	On site	<b>Summary Classification:</b> Unproductive aquifer (may have productive aquifer beneath) <b>Combined classification:</b> Unproductive Bedrock Aquifer, No Superficial Aquifer	<b>Leaching class:</b> Intermediate <b>Infiltration value:</b> 40-70% <b>Dilution value:</b> <300mm/year	<b>Vulnerability:</b> - <b>Aquifer type:</b> - <b>Thickness:</b> 3-10m <b>Patchiness value:</b> <90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures
26	1m NE	<b>Summary Classification:</b> Secondary superficial aquifer - High Vulnerability <b>Combined classification:</b> Unproductive Bedrock Aquifer, Productive Superficial Aquifer	<b>Leaching class:</b> Intermediate <b>Infiltration value:</b> >70% <b>Dilution value:</b> <300mm/year	<b>Vulnerability:</b> High <b>Aquifer type:</b> Secondary <b>Thickness:</b> <3m <b>Patchiness value:</b> <90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*

## 5.4 Groundwater vulnerability- soluble rock risk

### Records on site

0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

*This data is sourced from the British Geological Survey and the Environment Agency.*

## 5.5 Groundwater vulnerability- local information

### Records on site

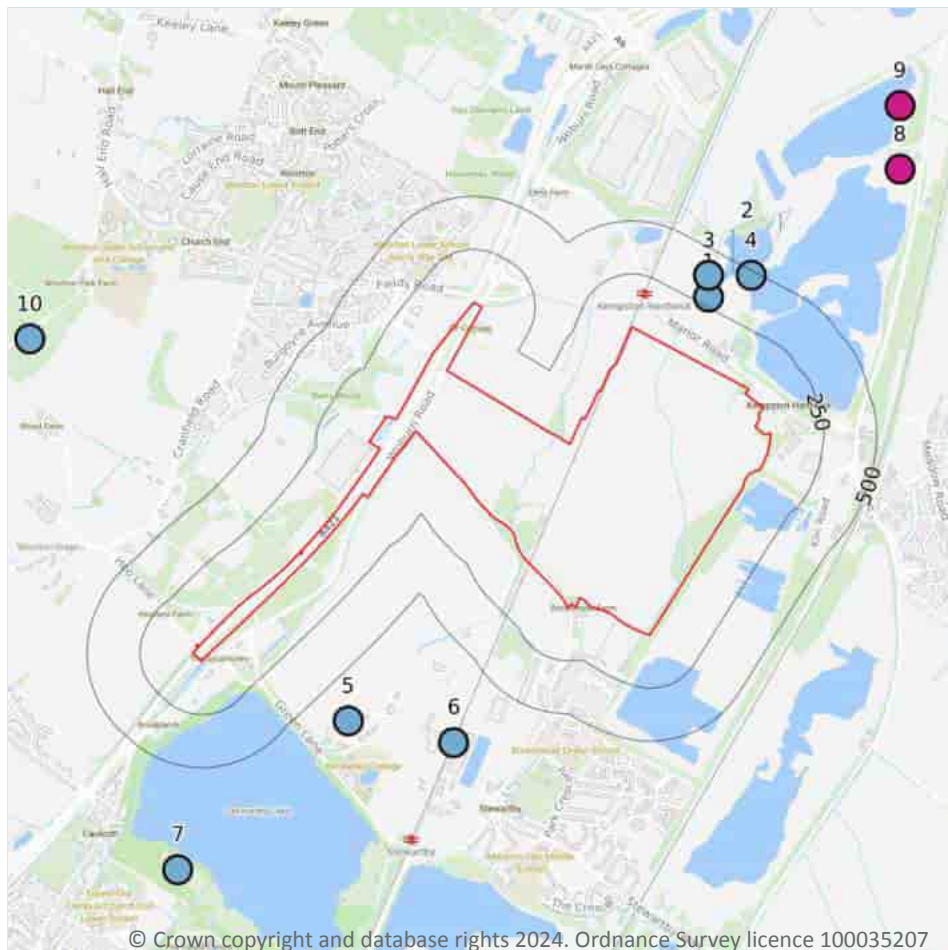
0

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk) ↗.

*This data is sourced from the British Geological Survey and the Environment Agency.*



## Abstractions and Source Protection Zones



### 5.6 Groundwater abstractions

#### Records within 2000m

2

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 76 >](#)

ID	Location	Details	
8	1255m NE	Status: Historical Licence No: 6/33/12/*G/0139 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT KEMPSTON HARDWICK Data Type: Point Name: SUPREME CONCRETE LTD Easting: 503800 Northing: 245400	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 30/11/1996 Expiry Date: - Issue No: 102 Version Start Date: 13/07/2004 Version End Date: -
9	1512m NE	Status: Historical Licence No: 6/33/12/*G/0031 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL-RACEMEADOW FARM Data Type: Point Name: LONDON BRICK CO LTD Easting: 503800 Northing: 245700	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/06/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/06/1967 Version End Date: -

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.7 Surface water abstractions

<b>Records within 2000m</b>	<b>8</b>
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Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 76 >](#)

ID	Location	Details	
1	295m NE	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 502900 Northing: 244800	Annual Volume (m <sup>3</sup> ): 5164 Max Daily Volume (m <sup>3</sup> ): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -



ID	Location	Details	
2	366m NE	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: FLOODED KNOTHOLE-KEMPSTON HARD Data Type: Poly4 Name: HANSON BRICK LTD Easting: 503290 Northing: 245210	Annual Volume (m <sup>3</sup> ): 30000 Max Daily Volume (m <sup>3</sup> ): 150 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 20/10/2003 Version End Date: -
3	383m NE	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 502900 Northing: 244900	Annual Volume (m <sup>3</sup> ): 5164 Max Daily Volume (m <sup>3</sup> ): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
4	477m NE	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 503100 Northing: 244900	Annual Volume (m <sup>3</sup> ): 5164 Max Daily Volume (m <sup>3</sup> ): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
5	679m SW	Status: Historical Licence No: 6/33/12/*S/0080 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT STEWARTBY Data Type: Point Name: HANSON BRICK LTD Easting: 501200 Northing: 242800	Annual Volume (m <sup>3</sup> ): 613710 Max Daily Volume (m <sup>3</sup> ): 2945.8 Original Application No: - Original Start Date: 01/10/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1995 Version End Date: -



ID	Location	Details	
6	831m SW	Status: Historical Licence No: 6/33/12/*S/0080 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT STEWARTBY Data Type: Point Name: HANSON BRICK LTD Easting: 501700 Northing: 242700	Annual Volume (m <sup>3</sup> ): 613710 Max Daily Volume (m <sup>3</sup> ): 2945.8 Original Application No: - Original Start Date: 01/10/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1995 Version End Date: -
7	987m SW	Status: Historical Licence No: 6/33/12/*S/0142 Details: Make-Up Or Top Up Water Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STEWARTBY PIT Data Type: Point Name: MARSTON VALE SERVICES Easting: 500400 Northing: 242100	Annual Volume (m <sup>3</sup> ): 150000 Max Daily Volume (m <sup>3</sup> ): 12000 Original Application No: - Original Start Date: 19/11/1999 Expiry Date: 31/03/2024 Issue No: 1 Version Start Date: 19/11/1999 Version End Date: -
10	1595m W	Status: Historical Licence No: 18/54/17/0332 Details: Spray Irrigation - Direct Direct Source: Surface Water Midlands Region Point: CROPTHORNE - UNNAMED BROOK Data Type: Point Name: ALLEN Easting: 499700 Northing: 244600	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 08/09/1966 Expiry Date: - Issue No: 100 Version Start Date: 08/09/1966 Version End Date: -

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.8 Potable abstractions

<b>Records within 2000m</b>	<b>0</b>
-----------------------------	----------

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.10 Source Protection Zones (confined aquifer)

Records within 500m

0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

*This data is sourced from the Environment Agency and Natural Resources Wales.*





## 6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

### 6.1 Water Network (OS MasterMap)

Records within 250m

105

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 81](#) >

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
8	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
9	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
I	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
P	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
P	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
P	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
P	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
S	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
T	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
O	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
V	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	1m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
16	2m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
W	4m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
B	4m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	5m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	9m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	11m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Y	13m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Y	21m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
18	66m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	66m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
20	71m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
21	83m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
22	90m NE	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
AB	114m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AA	115m NE	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-





ID	Location	Type of water feature	Ground level	Permanence	Name
AB	147m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AC	162m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AD	162m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AE	165m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AE	165m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
28	179m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AG	180m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
30	181m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
31	181m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AH	185m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AI	187m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AI	187m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AI	187m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
AH	188m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AI	188m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AH	189m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AH	189m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AH	190m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AH	194m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AJ	195m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AK	196m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AH	196m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AL	197m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AI	202m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AM	205m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AN	205m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
32	210m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AO	210m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
33	216m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
34	235m NW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AP	236m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
35	237m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
37	237m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
AQ	238m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AR	242m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AS	242m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AT	245m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AU	245m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
AT	249m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

*This data is sourced from the Ordnance Survey.*



## 6.2 Surface water features

### Records within 250m

**38**

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 81](#) >

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

### Records on site

**2**

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on [page 81](#) >

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
13	On site	River	Harrowden Brook	GB105033038010	Great Ouse Bedford	Ouse Upper and Bedford
14	On site	River	Elstow Brook (US Shortstown)	GB105033038050	Great Ouse Bedford	Ouse Upper and Bedford

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 6.4 WFD Surface water bodies

### Records identified

**3**

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 81](#) >



ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
15	On site	River	Elstow Brook (US Shortstown)	<a href="#">GB105033038050 ↗</a>	Moderate	Fail	Moderate	2019
AF	223m SW	Lake	Stewartby Lake	<a href="#">GB30539450 ↗</a>	Moderate	Fail	Moderate	2019
-	602m E	River	Harrowden Brook	<a href="#">GB105033038010 ↗</a>	Bad	Fail	Bad	2019

*This data is sourced from the Environment Agency and Natural Resources Wales.*

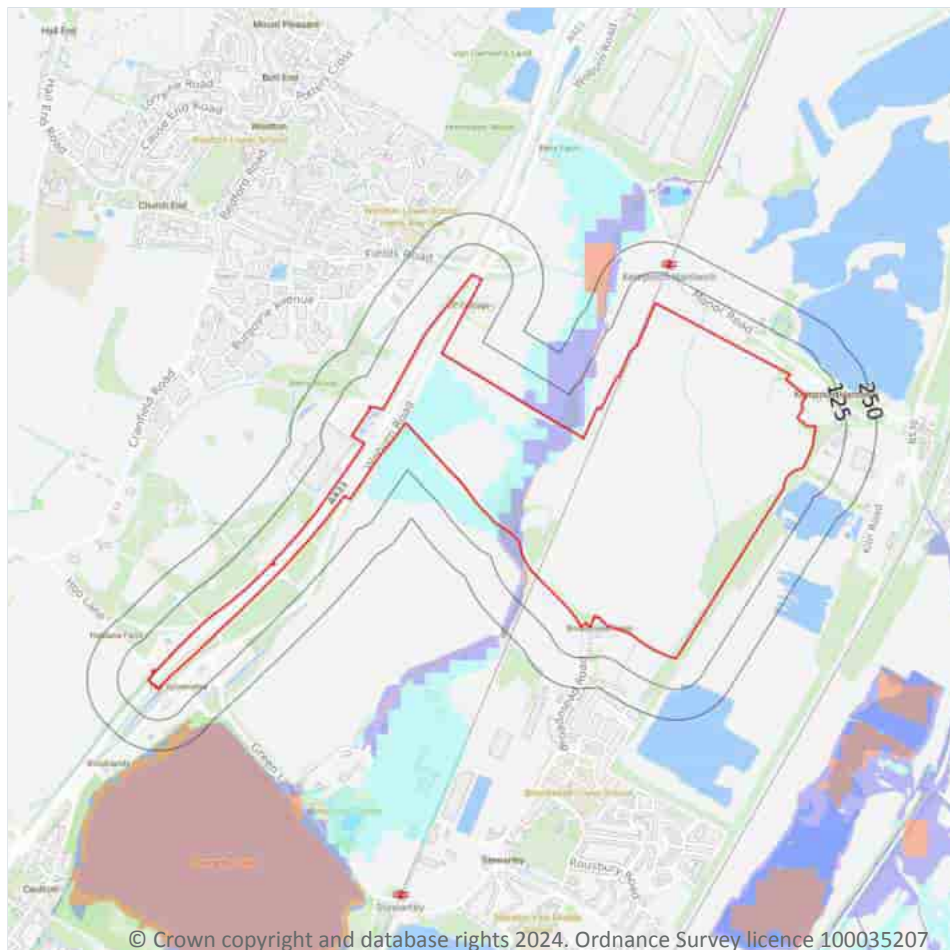
## 6.5 WFD Groundwater bodies

<b>Records on site</b>	<b>0</b>
------------------------	----------

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7 River and coastal flooding



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- Site Outline
- Search buffers in metres (m)
- River and coastal flooding:
- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

### 7.1 Risk of flooding from rivers and the sea

#### Records within 50m

15

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on [page 92 >](#)





Distance	Flood risk category
<b>On site</b>	<b>High</b>
0 - 50m	High

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.2 Historical Flood Events

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.3 Flood Defences

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.4 Areas Benefiting from Flood Defences

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.5 Flood Storage Areas

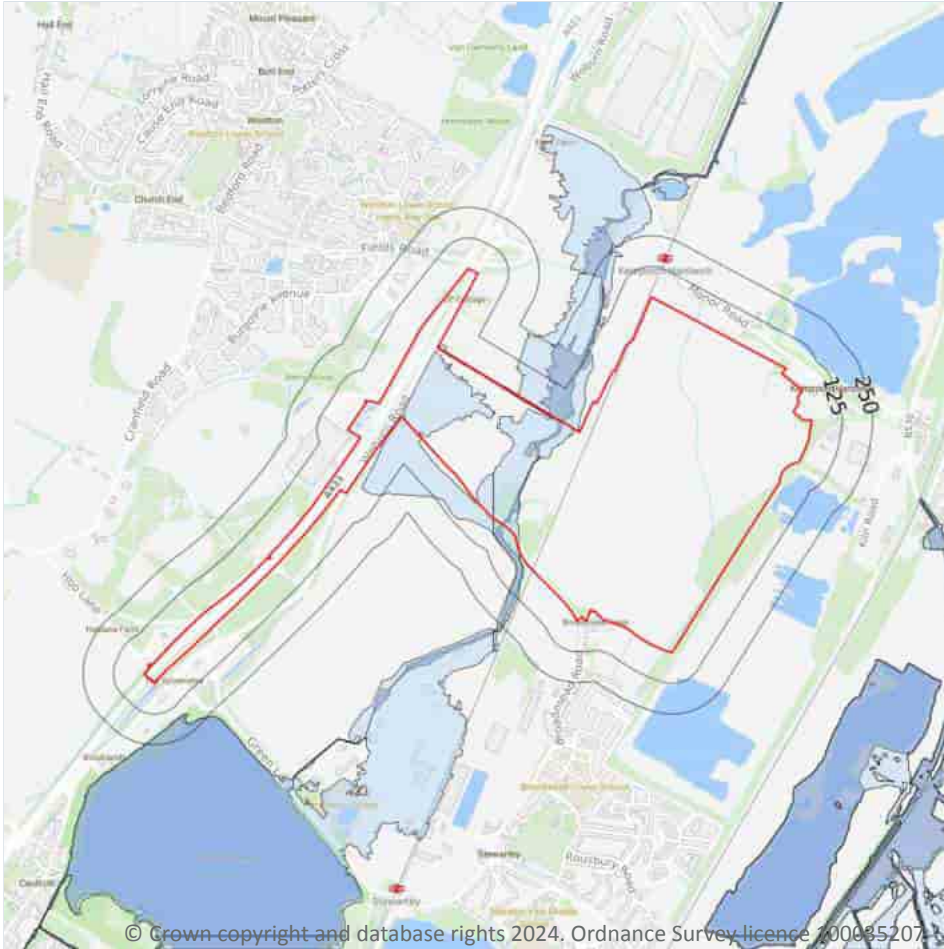
<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## River and coastal flooding - Flood Zones



— Site Outline  
Search buffers in metres (m)

□ Flood zone 2

■ Flood zone 3

### 7.6 Flood Zone 2

Records within 50m

1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on [page 92 >](#)

Location	Type
On site	Zone 2 - (Fluvial /Tidal Models)

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.7 Flood Zone 3

### Records within 50m

**1**

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

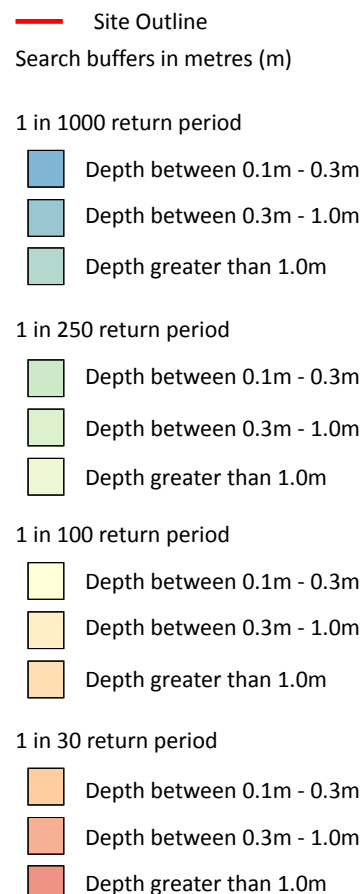
Features are displayed on the River and coastal flooding map on [page 92 >](#)

Location	Type
On site	Zone 3 - (Fluvial Models)

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 8 Surface water flooding



### 8.1 Surface water flooding

**Highest risk on site**

**1 in 30 year, Greater than 1.0m**

**Highest risk within 50m**

**1 in 30 year, Greater than 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 96](#) >

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

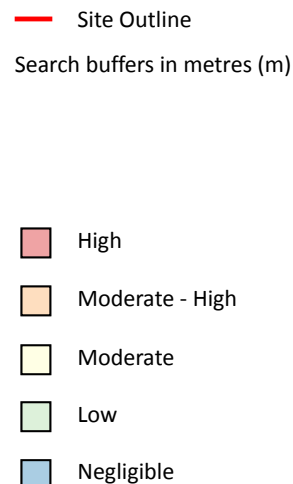
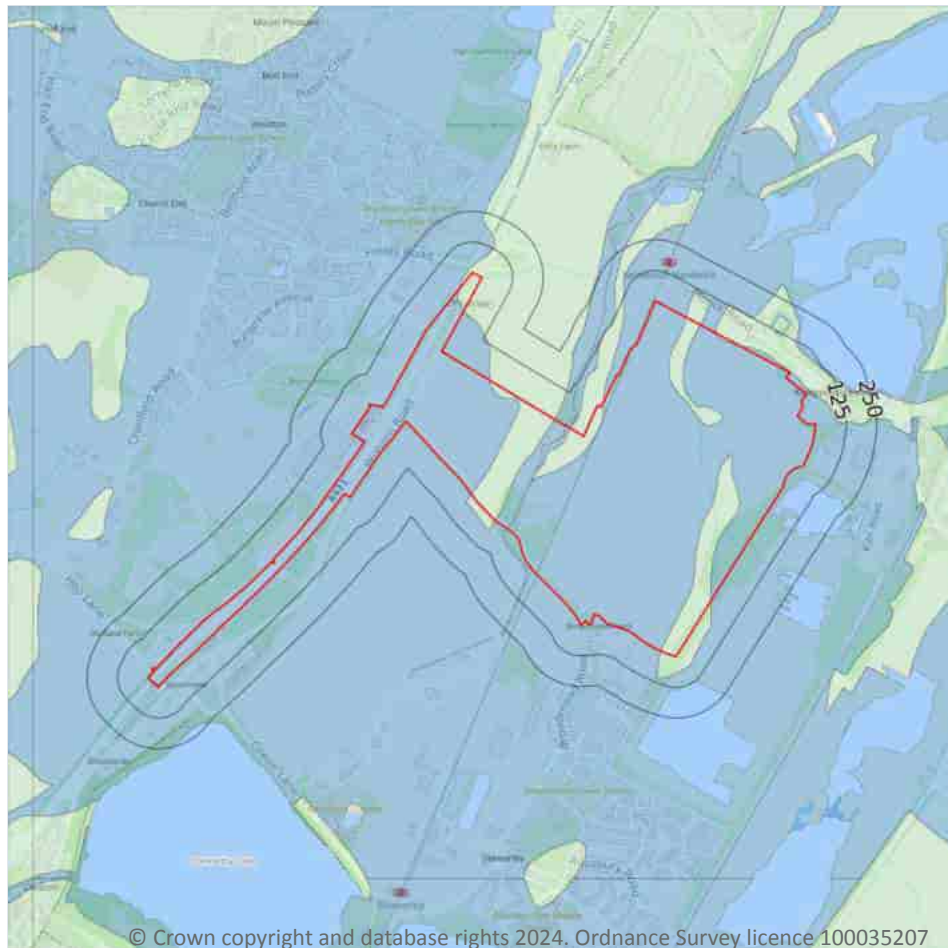
Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

*This data is sourced from Ambiantal Risk Analytics.*





## 9 Groundwater flooding



### 9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

Low

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 98](#) >

*This data is sourced from Ambiantal Risk Analytics.*





## 10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- Sites of Special Scientific Interest (SSSI)
- + Local Nature Reserves (LNR)
- / Designated Ancient Woodland

### 10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*



## 10.2 Conserved wetland sites (Ramsar sites)

**Records within 2000m****0**

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.3 Special Areas of Conservation (SAC)

**Records within 2000m****0**

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.4 Special Protection Areas (SPA)

**Records within 2000m****0**

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.5 National Nature Reserves (NNR)

**Records within 2000m****0**

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*



## 10.6 Local Nature Reserves (LNR)

**Records within 2000m****0**

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.7 Designated Ancient Woodland

**Records within 2000m****2**

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on [page 99 >](#)

ID	Location	Name	Woodland Type
1	1447m W	Wootton Wood	Ancient & Semi-Natural Woodland
2	1821m W	Wootton Wood	Ancient Replanted Woodland

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.8 Biosphere Reserves

**Records within 2000m****0**

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.9 Forest Parks

**Records within 2000m****0**

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

*This data is sourced from the Forestry Commission.*



## 10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.11 Green Belt

Records within 2000m

0

Areas designated to prevent urban sprawl by keeping land permanently open.

*This data is sourced from the Ministry of Housing, Communities and Local Government.*

## 10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

*This data is sourced from Natural England and Natural Resources Wales.*

## 10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*



## 10.15 Nitrate Sensitive Areas

### Records within 2000m

**0**

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

*This data is sourced from Natural England.*

## 10.16 Nitrate Vulnerable Zones

### Records within 2000m

**13**

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	Great Ouse NVZ	Surface Water	391	Existing
On site	Huntingdon River Gravels	Groundwater	144	Existing
On site	Stewartby Lake Eutrophic lake NVZ	Eutrophic Water	111	Existing
899m E	Great Ouse NVZ	Surface Water	391	Existing
899m E	Huntingdon River Gravels	Groundwater	144	Existing
1209m N	Great Ouse NVZ	Surface Water	391	Existing
1209m N	Huntingdon River Gravels	Groundwater	144	Existing
1328m NW	Bedford Great Oolite	Groundwater	74	Existing
1350m NW	Bedford Great Oolite	Groundwater	74	Existing
1524m SW	Stewartby Lake Eutrophic lake NVZ	Eutrophic Water	111	Existing
1903m NE	Great Ouse NVZ	Surface Water	391	Existing
1903m NE	Huntingdon River Gravels	Groundwater	144	Existing
1938m W	Bedford Great Oolite	Groundwater	74	Existing

*This data is sourced from Natural England and Natural Resources Wales.*





## SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

### 10.17 SSSI Impact Risk Zones

#### Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on [page 104](#) >

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Livestock & poultry units with floorspace > 500m <sup>2</sup> , slurry lagoons & digestate stores > 750m <sup>2</sup> , manure stores > 3500t.

*This data is sourced from Natural England.*





## 10.18 SSSI Units

Records within 2000m

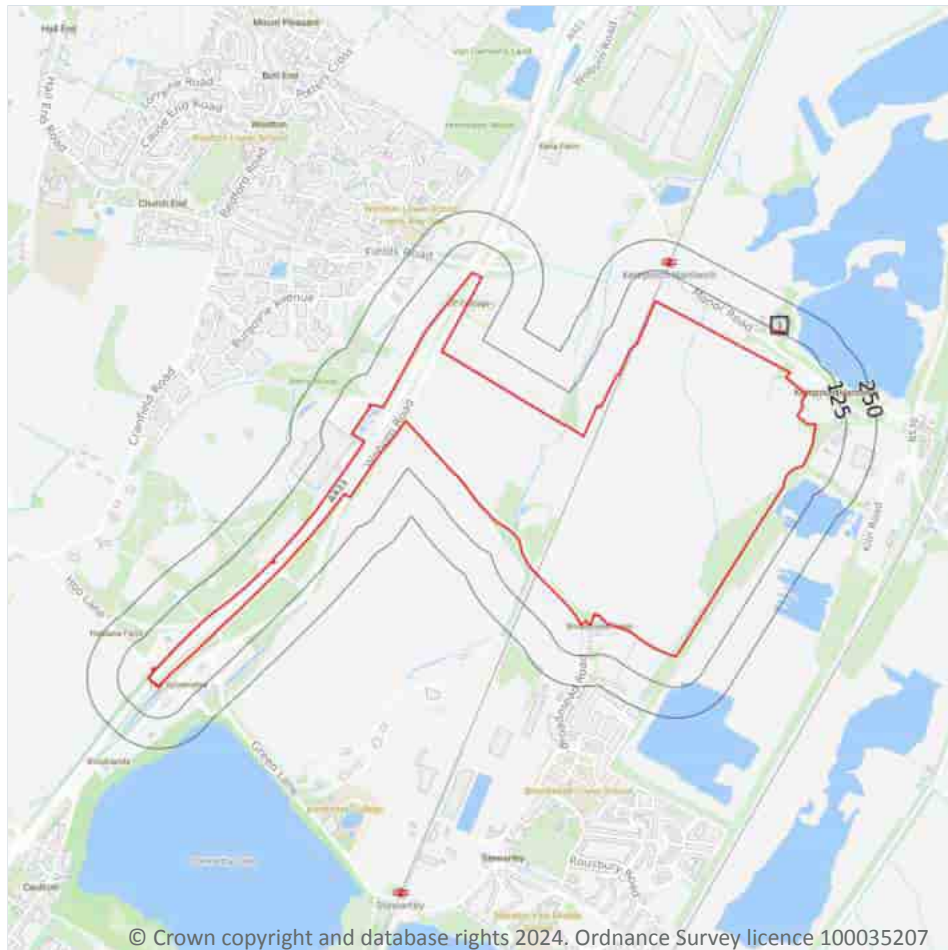
0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

*This data is sourced from Natural England and Natural Resources Wales.*



## 11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

### 11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.2 Area of Outstanding Natural Beauty

**Records within 250m****0**

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 11.3 National Parks

**Records within 250m****0**

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

*This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.*

## 11.4 Listed Buildings

**Records within 250m****0**

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.5 Conservation Areas

**Records within 250m****0**

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.



*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.6 Scheduled Ancient Monuments

Records within 250m

1

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

Features are displayed on the Visual and cultural designations map on [page 106 >](#)

ID	Location	Ancient monument name	Reference number
1	109m NE	Kempston Hardwick moated site	1012312

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.7 Registered Parks and Gardens

Records within 250m

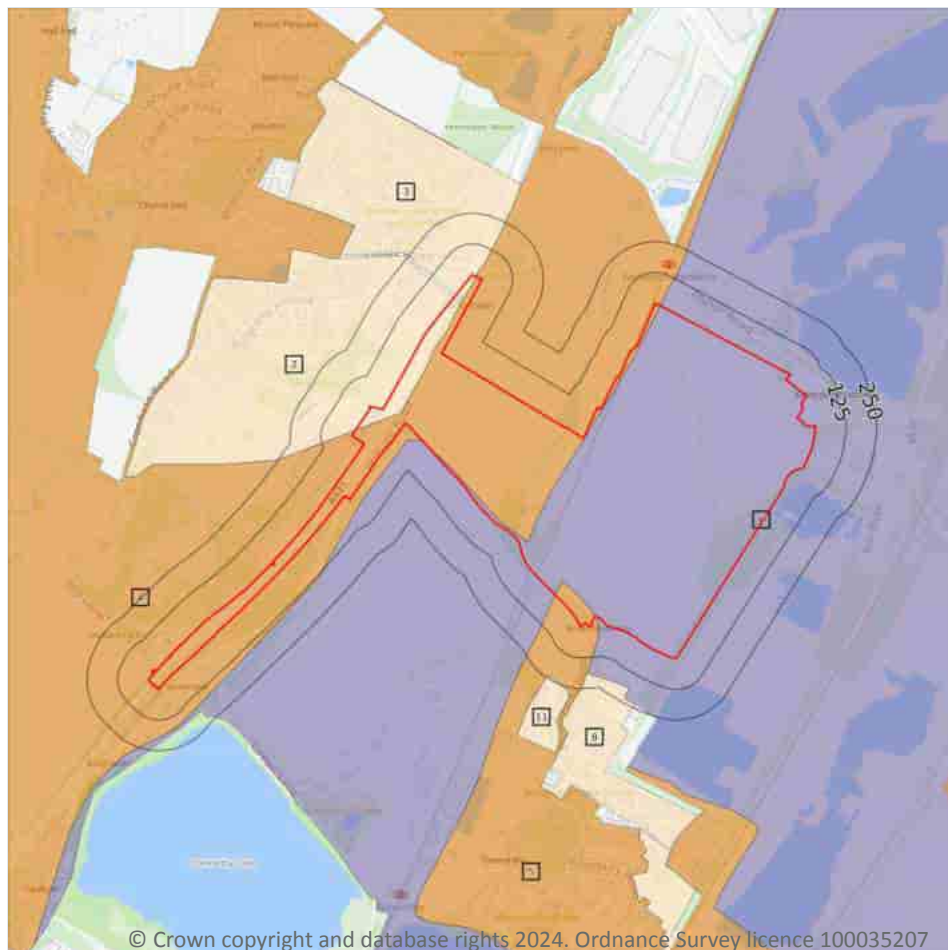
0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*



## 12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

### 12.1 Agricultural Land Classification

Records within 250m

7

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on [page 109](#) >

ID	Location	Classification	Description
2	On site	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

ID	Location	Classification	Description
3	On site	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
4	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
5	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
6	On site	Non Agricultural	-
8	188m S	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
11	239m S	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

*This data is sourced from Natural England.*

## 12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

*This data is sourced from Natural England and Natural Resources Wales.*

## 12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

*This data is sourced from the Forestry Commission.*





## 12.4 Environmental Stewardship Schemes

**Records within 250m****1**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

Location	Reference	Scheme	Start Date	End date
160m SW	AG00352492	Entry Level plus Higher Level Stewardship	01/05/2011	30/04/2023

*This data is sourced from Natural England.*

## 12.5 Countryside Stewardship Schemes

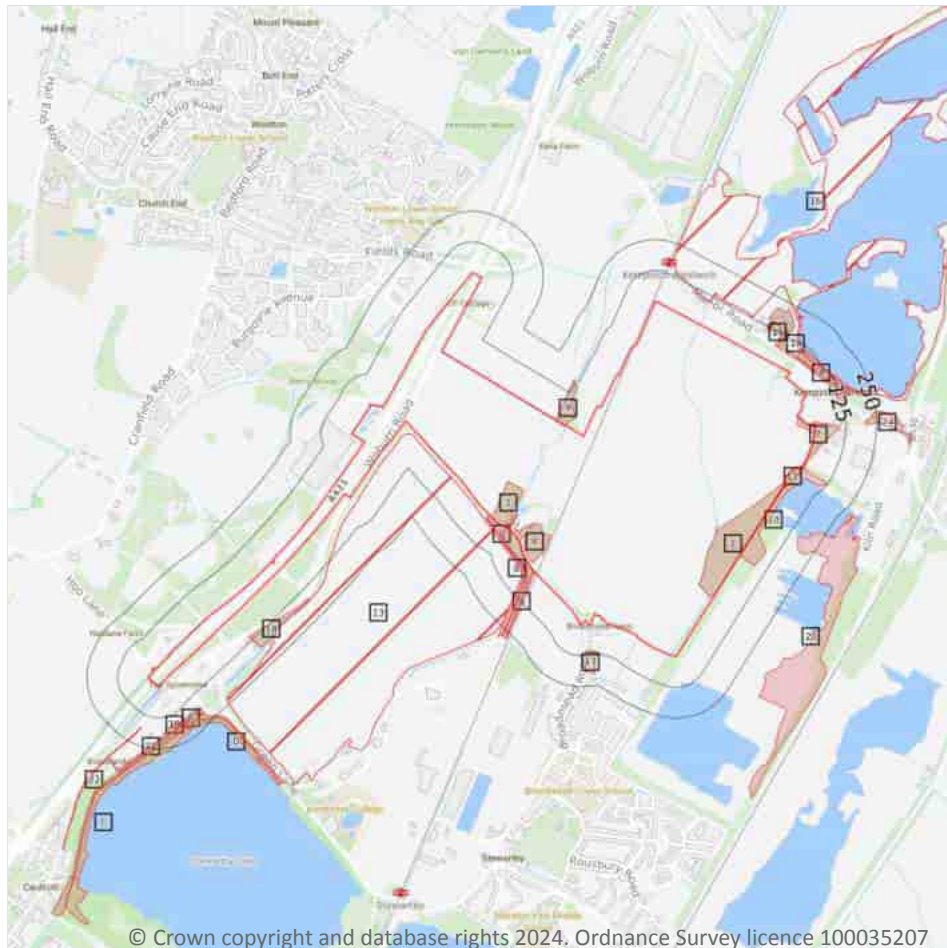
**Records within 250m****0**

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

*This data is sourced from Natural England.*



## 13 Habitat designations



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- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

### 13.1 Priority Habitat Inventory

Records within 250m

30

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on [page 112](#) >

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	2m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	3m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	10m W	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
14	59m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
15	68m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	69m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	95m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
17	104m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
18	106m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
19	159m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
20	161m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
B	162m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); GQSIG (INV > 50%); Additional: RBEDS (FEP 50%); LCGRA (FEP 50%)
21	167m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); GQSIG (INV > 50%); Additional: RBEDS (FEP 50%); LCGRA (FEP 50%)
B	177m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); GQSIG (INV > 50%); Additional: RBEDS (FEP 50%); LCGRA (FEP 50%)
22	178m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
C	180m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); GQSIG (INV > 50%); Additional: RBEDS (FEP 50%); LCGRA (FEP 50%)
23	184m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); GQSIG (INV > 50%); Additional: RBEDS (FEP 50%); LCGRA (FEP 50%)
C	201m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); GQSIG (INV > 50%); Additional: RBEDS (FEP 50%); LCGRA (FEP 50%)
24	203m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
D	204m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); GQSIG (INV > 50%); Additional: RBEDS (FEP 50%); LCGRA (FEP 50%)
D	204m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%); GQSIG (INV > 50%); Additional: RBEDS (FEP 50%); LCGRA (FEP 50%)

*This data is sourced from Natural England.*

## 13.2 Habitat Networks

**Records within 250m**

**0**

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

*This data is sourced from Natural England.*

## 13.3 Open Mosaic Habitat

**Records within 250m**

**2**

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

Features are displayed on the Habitat designations map on [page 112 >](#)



ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
13	18m W	HLD_refs: EAHLD0097 5; EAHLD0097 6; EAHLD0099 0	Low	Environment Agency Historic Landfill Sites	British Geological Survey BRITPITS database	UK Perspectives Aerial Photography
16	95m NE	BRITPITS ref: 35270	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography

*This data is sourced from Natural England.*

## 13.4 Limestone Pavement Orders

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

*This data is sourced from Natural England.*



## 14 Geology 1:10,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

### 14.1 10k Availability

#### Records within 500m

3

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:10,000 scale - Availability map on [page 116](#) >

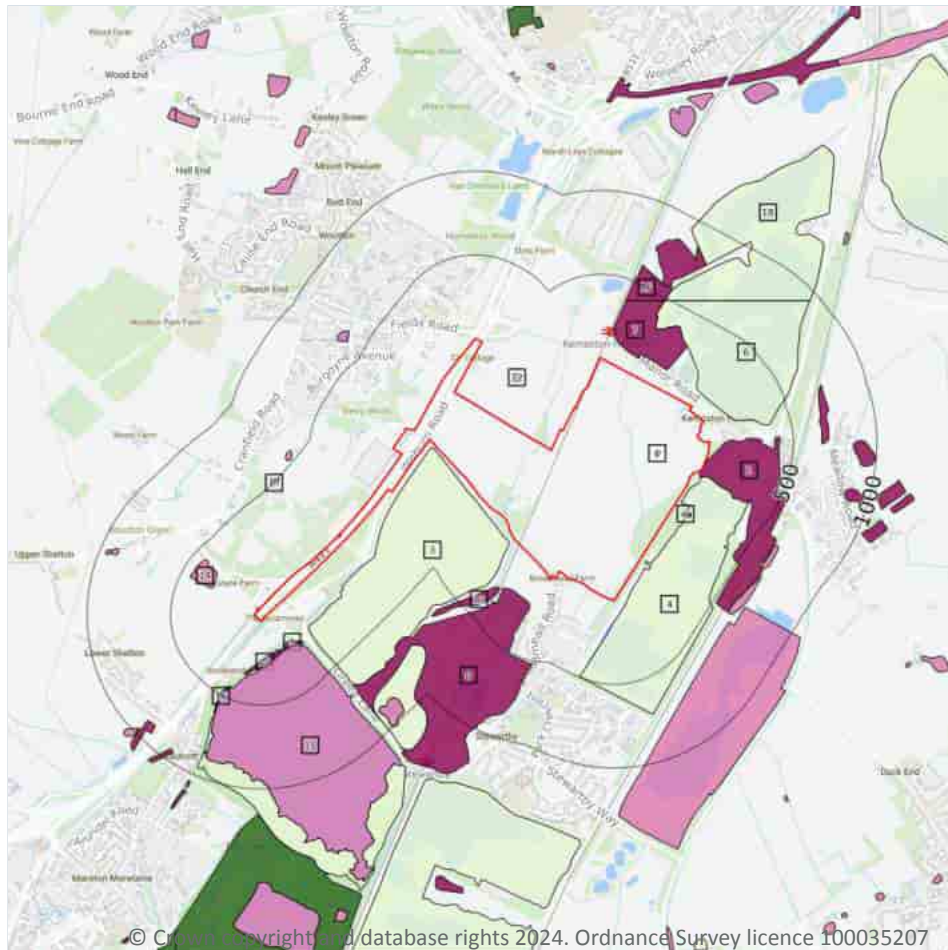
ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	TL04SW
2	227m NW	Full	Full	Full	No coverage	TL04NW
3	471m W	Full	Full	Full	Full	SP94SE

*This data is sourced from the British Geological Survey.*





## Geology 1:10,000 scale - Artificial and made ground



— Site Outline  
Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

### 14.2 Artificial and made ground (10k)

Records within 500m

18

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 117 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	WGR-VOID	Worked Ground (Undivided)	Void
2	1m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	18m W	WMGR-ARTDP	Infilled Ground	Artificial Deposit
4	24m E	WMGR-ARTDP	Infilled Ground	Artificial Deposit

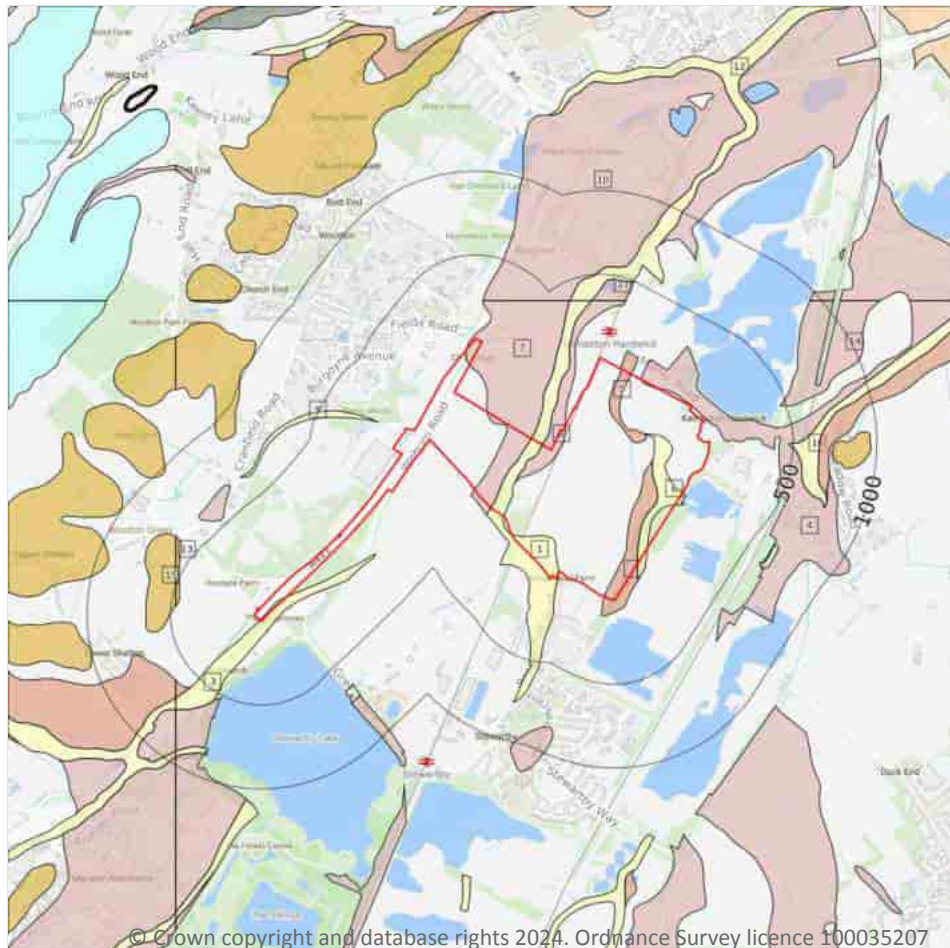


ID	Location	LEX Code	Description	Rock description
5	67m E	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	95m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
7	104m NE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
8	187m S	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	195m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
10	195m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
11	209m SW	WGR-VOID	Worked Ground (Undivided)	Void
12	240m NW	WGR-VOID	Worked Ground (Undivided)	Void
13	269m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
14	293m W	WGR-VOID	Worked Ground (Undivided)	Void
15	375m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
16	428m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
17	478m W	WGR-VOID	Worked Ground (Undivided)	Void
18	484m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (10k)
- Superficial geology (10k)  
Please see table for more details.

### 14.3 Superficial geology (10k)

#### Records within 500m

16

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 119](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
2	On site	HEAD1-XCZSV	Head, 1 - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
3	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt



ID	Location	LEX Code	Description	Rock description
4	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
5	On site	HEAD1-XCZSV	Head, 1 - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
6	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
7	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
9	167m W	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
10	232m NW	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
11	343m N	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
12	347m N	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
13	457m W	HEAD2-XVSZC	Head, 2 - Gravel, Sand, Silt And Clay	Gravel, Sand, Silt And Clay
14	467m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
15	473m W	HEAD2-XVSZC	Head, 2 - Gravel, Sand, Silt And Clay	Gravel, Sand, Silt And Clay
16	476m E	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt

*This data is sourced from the British Geological Survey.*

## 14.4 Landslip (10k)

**Records within 500m**

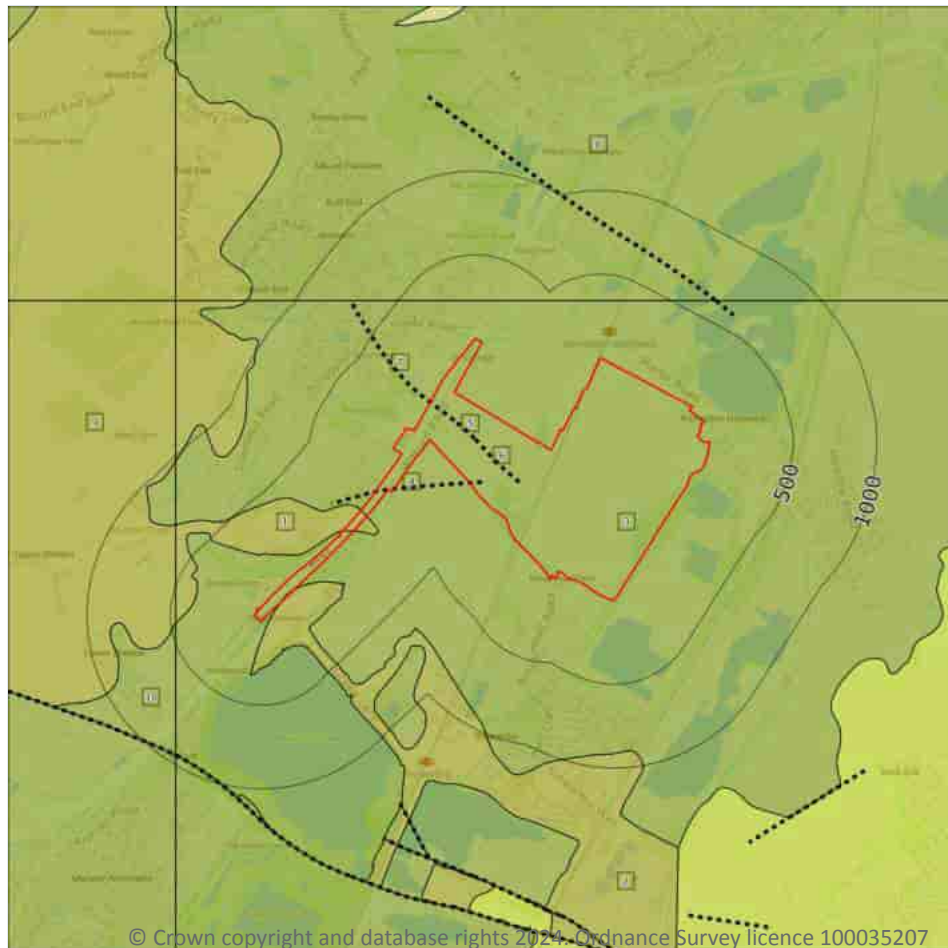
**0**

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Bedrock



**— Site Outline**

Search buffers in metres (m)

**.... Bedrock faults and other linear features (10k)**

**Bedrock geology (10k)**  
Please see table for more details.

### 14.5 Bedrock geology (10k)

Records within 500m

6

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 121](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	SBY-MDST	Stewartby Member - Mudstone	Callovian Age
2	On site	SBY-MDST	Stewartby Member - Mudstone	Callovian Age
3	On site	PET-MDST	Peterborough Member - Mudstone	Callovian Age
8	227m NW	PET-MDST	Peterborough Member - Mudstone	Callovian Age



ID	Location	LEX Code	Description	Rock age
9	471m W	SBY-MDST	Stewartby Member - Mudstone	Callovian Age
10	473m W	PET-MDST	Peterborough Member - Mudstone	Callovian Age

*This data is sourced from the British Geological Survey.*

## 14.6 Bedrock faults and other linear features (10k)

### Records within 500m

**4**

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 121](#) >

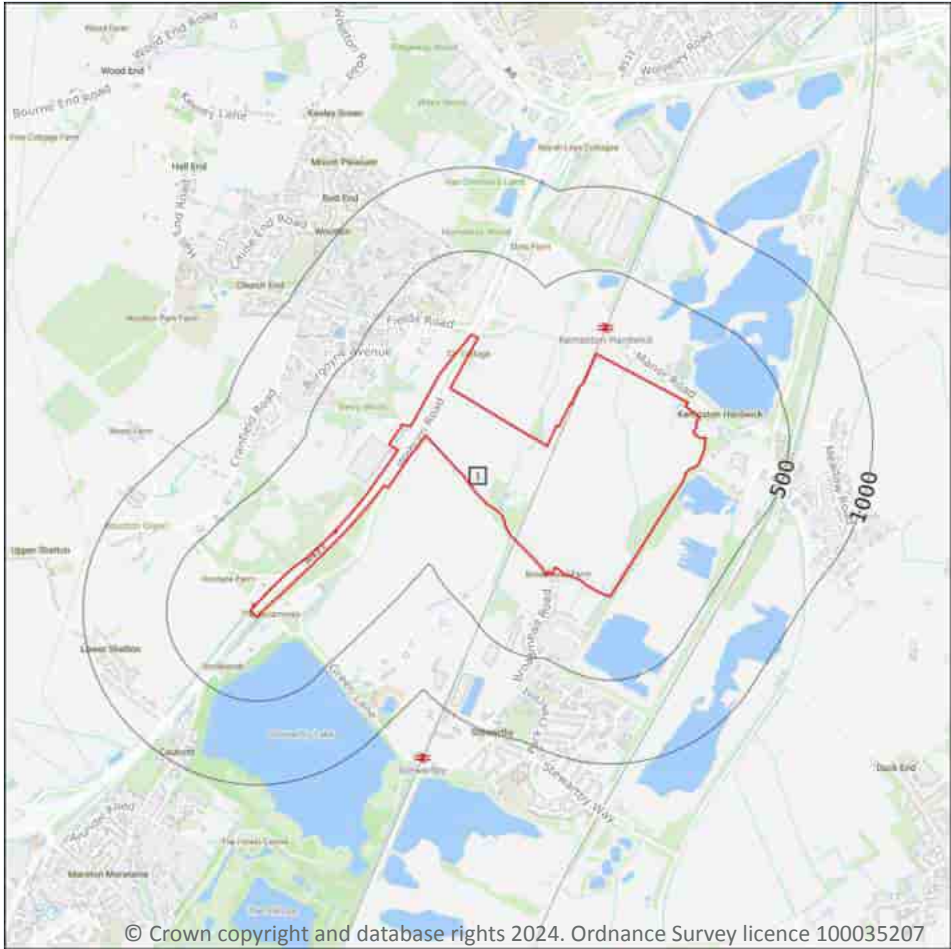
ID	Location	Category	Description
4	On site	FAULT	Normal fault, observed; crossmark on downthrow side
5	On site	FAULT	Normal fault, observed; crossmark on downthrow side
6	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side
7	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side

*This data is sourced from the British Geological Survey.*





15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

☐

 Geological map tile

15.1 50k Availability

Records within 500m	1
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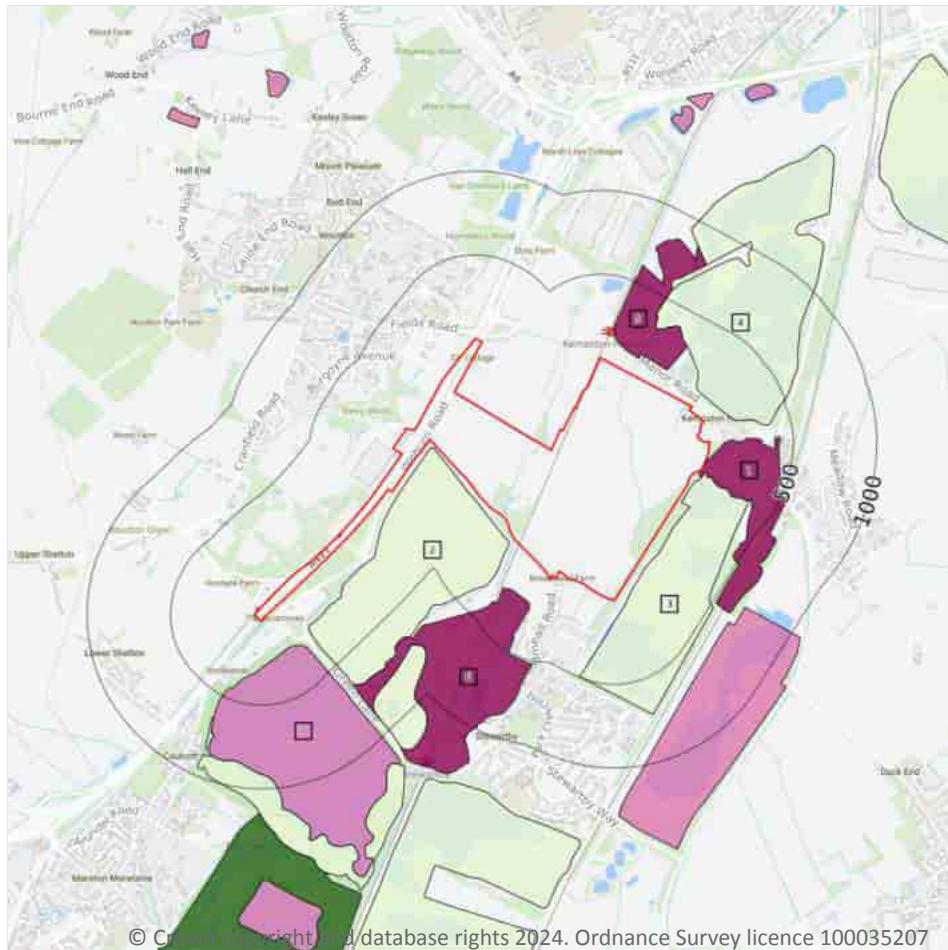
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on [page 123](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW203_bedford_v4

This data is sourced from the British Geological Survey.

## Geology 1:50,000 scale - Artificial and made ground



- Site Outline**
- Search buffers in metres (m)**
- Made ground
  - Worked ground
  - Infilled ground
  - Disturbed ground
  - Landscaped ground

### 15.2 Artificial and made ground (50k)

#### Records within 500m

7

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 124](#) >

ID	Location	LEX Code	Description	Rock description
1	1m E	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	18m W	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
3	23m E	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
4	95m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT



ID	Location	LEX Code	Description	Rock description
5	105m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
6	187m S	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
7	225m SW	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID

*This data is sourced from the British Geological Survey.*

## 15.3 Artificial ground permeability (50k)

### Records within 50m

**3**

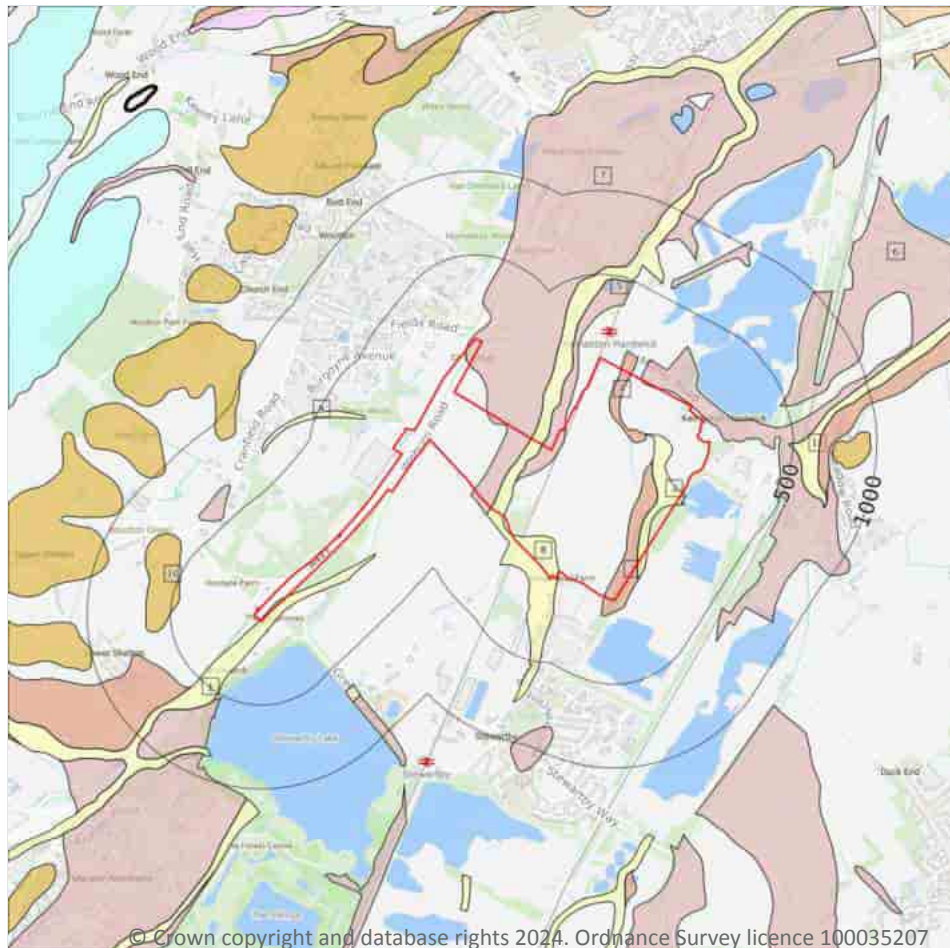
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
1m E	Mixed	Very High	Low
18m W	Mixed	Very High	Low
23m E	Mixed	Very High	Low

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Superficial



— Site Outline

Search buffers in metres (m)

▨ Landslip (50k)

Superficial geology (50k)  
Please see table for more details.

### 15.4 Superficial geology (50k)

#### Records within 500m

11

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 126](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT
2	On site	HEAD1-XCZSV	HEAD, 1	CLAY, SILT, SAND AND GRAVEL
3	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT



ID	Location	LEX Code	Description	Rock description
4	On site	HEAD1-XCZSV	HEAD, 1	CLAY, SILT, SAND AND GRAVEL
5	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
6	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
7	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
8	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT
9	238m W	ALV-XCZ	ALLUVIUM	CLAY AND SILT
10	458m W	HEAD2-XVSZC	HEAD, 2	GRAVEL, SAND, SILT AND CLAY
11	476m E	ALV-XCZ	ALLUVIUM	CLAY AND SILT

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

<b>Records within 50m</b>	<b>8</b>
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A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low
On site	Intergranular	Low	Very Low
On site	Intergranular	Low	Very Low
On site	Intergranular	Low	Very Low
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low

*This data is sourced from the British Geological Survey.*



## 15.6 Landslip (50k)

Records within 500m

0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*

## 15.7 Landslip permeability (50k)

Records within 50m

0

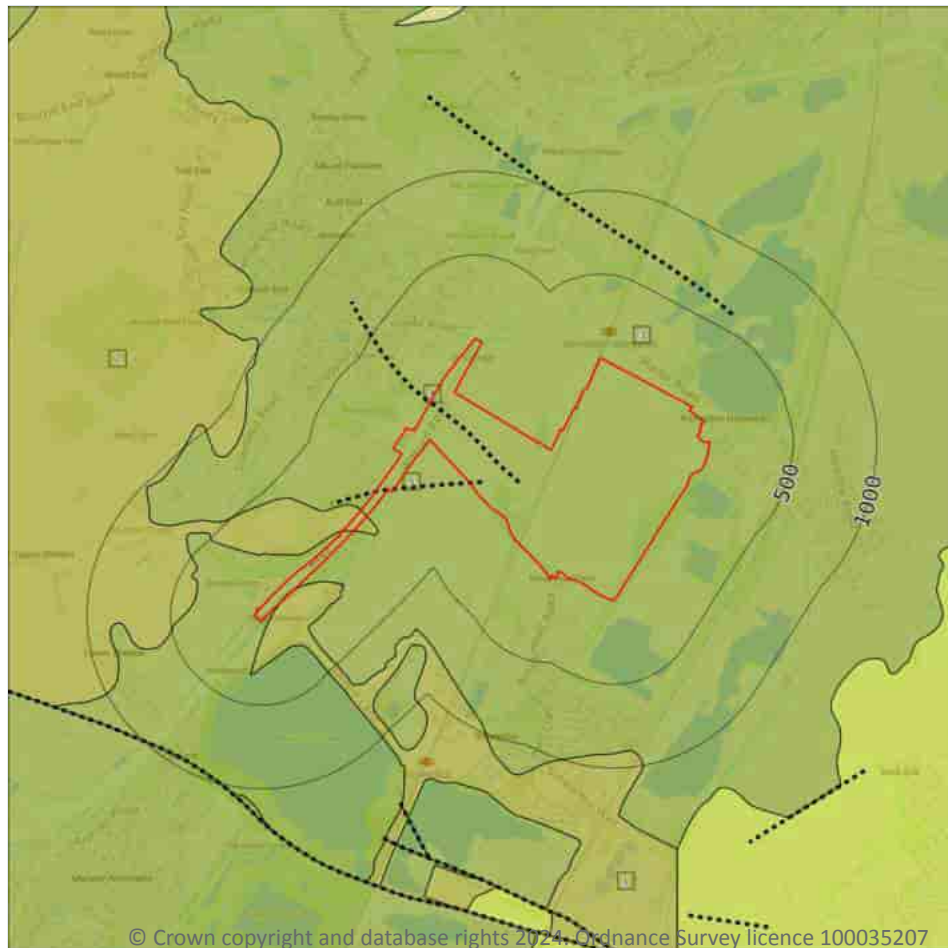
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*





## Geology 1:50,000 scale - Bedrock



**— Site Outline**

Search buffers in metres (m)

**.... Bedrock faults and other linear features (50k)**

Bedrock geology (50k)  
Please see table for more details.

### 15.8 Bedrock geology (50k)

#### Records within 500m

3

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 129](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	SBY-MDST	STEWARTBY MEMBER - MUDSTONE	CALLOVIAN
2	On site	SBY-MDST	STEWARTBY MEMBER - MUDSTONE	CALLOVIAN
3	On site	PET-MDST	PETERBOROUGH MEMBER - MUDSTONE	CALLOVIAN

*This data is sourced from the British Geological Survey.*



## 15.9 Bedrock permeability (50k)

### Records within 50m

3

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Very Low
On site	Fracture	Low	Very Low
On site	Fracture	Low	Very Low

*This data is sourced from the British Geological Survey.*

## 15.10 Bedrock faults and other linear features (50k)

### Records within 500m

2

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

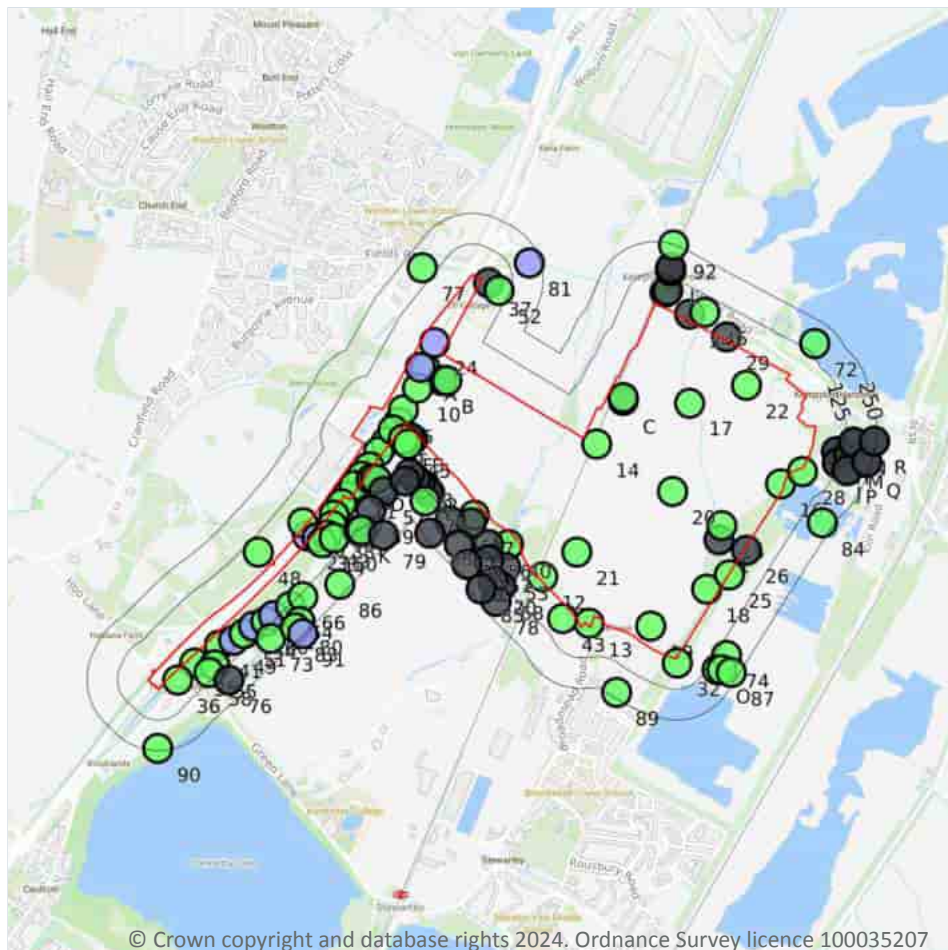
Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 129](#) >

ID	Location	Category	Description
4	On site	FAULT	Fault, inferred
5	On site	FAULT	Fault, inferred

*This data is sourced from the British Geological Survey.*



## 16 Boreholes



— Site Outline  
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

### 16.1 BGS Boreholes

Records within 250m

131

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on [page 131](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	502800 243690	CORONATION PIT AREA 27	-	Y	N/A
2	On site	501490 244170	BERRY FARM WOOTTON 6	12.2	N	<a href="#">524879</a> ↗
3	On site	501440 244090	BERRY FARM WOOTTON 8	12.5	N	<a href="#">524881</a> ↗



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	On site	501410 244050	BERRY FARM WOOTTON 9	12.5	N	<a href="#">524882 ↗</a>
5	On site	501510 244220	BERRY FARM WOOTTON 5	12.5	N	<a href="#">524878 ↗</a>
6	On site	501470 244140	BERRY FARM WOOTTON 7	12.5	N	<a href="#">524880 ↗</a>
7	On site	501370 243990	BERRY FARM WOOTTON 10	14.0	N	<a href="#">524883 ↗</a>
8	On site	501340 243950	BERRY FARM WOOTTON 11	14.5	N	<a href="#">524884 ↗</a>
9	On site	501280 243870	BERRY FARM WOOTTON 13	21.0	N	<a href="#">524886 ↗</a>
10	On site	501570 244310	BERRY FARM WOOTTON 3	10.2	N	<a href="#">524877 ↗</a>
11	On site	501310 243910	BERRY FARM WOOTTON 12	16.0	N	<a href="#">524885 ↗</a>
12	On site	502080 243540	ELSTOW 17	26.9	N	<a href="#">524619 ↗</a>
13	On site	502270 243350	ELSTOW 15	27.4	N	<a href="#">524617 ↗</a>
14	On site	502300 244080	ELSTOW 16	25.3	N	<a href="#">524618 ↗</a>
15	On site	502810 243750	CORONATION PIT AREA 4	12.0	N	<a href="#">524761 ↗</a>
16	On site	503050 243920	CORONATION PIT AREA 2	13.0	N	<a href="#">524759 ↗</a>
17	On site	502680 244250	ELSTOW 13	26.0	N	<a href="#">524615 ↗</a>
18	On site	502750 243490	CORONATION PIT AREA 9/38	12.0	N	<a href="#">524763 ↗</a>
19	On site	502520 243340	CORONATION PIT AREA 10/38	16.0	N	<a href="#">524764 ↗</a>
20	On site	502610 243890	ELSTOW 14	27.1	N	<a href="#">524616 ↗</a>
21	On site	502220 243640	LBC VICARAGE FARM & L FIELD 22	16.76	N	<a href="#">524382 ↗</a>
22	On site	502910 244320	CORONATION PIT AREA 3	18.0	N	<a href="#">524760 ↗</a>
23	On site	501119 243705	A421 IMPROVEMENTS - 2ND PHASE TP55	2.5	N	<a href="#">18925609 ↗</a>
24	On site	501640 244497	A421 IMPROVEMENTS - 2ND PHASE TP59	2.5	N	<a href="#">18925611 ↗</a>
A	On site	501600 244390	BERRY FARM WOOTTON 1	17.1	N	<a href="#">524876 ↗</a>
A	On site	501582 244394	A421 IMPROVEMENTS - 2ND PHASE TP58	2.5	N	<a href="#">18925610 ↗</a>
B	On site	501670 244340	CORONATION PIT AREA 15	-	Y	N/A
B	On site	501690 244340	LBC STAVARTBY AND CORONATION 15	13.41	N	<a href="#">524405 ↗</a>
C	On site	502410 244260	CORONATION PIT AREA 23	-	Y	N/A
C	On site	502410 244270	LBC STAVARTBY AND CORONATION 23	14.42	N	<a href="#">524407 ↗</a>



ID	Location	Grid reference	Name	Length	Confidential	Web link
25	1m SE	502840 243550	ELSTOW 5	27.3	N	<a href="#">524607 ↗</a>
26	7m SE	502910 243650	CORONATION PIT AREA X	-	Y	N/A
27	10m W	501260 243840	BERRY FARM WOOTTON 14	21.5	N	<a href="#">524887 ↗</a>
28	12m E	503140 243970	ELSTOW 4	27.6	N	<a href="#">524606 ↗</a>
29	15m NE	502830 244520	CORONATION PIT AREA 26	-	Y	N/A
30	16m W	501100 243760	BERRY FARM WOOTTON 20	10.5	N	<a href="#">524893 ↗</a>
31	17m W	501230 243790	BERRY FARM WOOTTON 15	21.2	N	<a href="#">524888 ↗</a>
32	17m SE	502630 243190	ELSTOW 6	27.4	N	<a href="#">524608 ↗</a>
33	20m W	501160 243700	BERRY FARM WOOTTON 19	10.0	N	<a href="#">524892 ↗</a>
D	24m W	501380 243940	CORONATION PIT AREA 14	-	Y	N/A
34	24m NE	502680 244610	CORONATION PIT AREA 25	-	Y	N/A
35	26m SW	500660 243190	BERRY FARM WOOTTON 33	10.5	N	<a href="#">524903 ↗</a>
E	26m W	501550 244100	STEWARTBY L FIELD 2/82	-	Y	N/A
E	26m W	501540 244110	L FIELD NW	-	Y	N/A
36	31m SW	500590 243120	BERRY FARM WOOTTON 35	10.5	N	<a href="#">524904 ↗</a>
37	31m NW	501860 244740	CORONATION PIT AREA 16	-	Y	N/A
F	32m W	501510 244100	LBC STEWARTBY L FIELD 1/73	28.96	N	<a href="#">524409 ↗</a>
F	32m W	501510 244100	LBC STEWARTBY L FIELD 2/73	18.59	N	<a href="#">524410 ↗</a>
38	34m W	501220 243750	BERRY FARM WOOTTON 16	19.0	N	<a href="#">524889 ↗</a>
D	40m W	501400 243940	LBC STAVARTBY AND CORONATION 14	17.37	N	<a href="#">524404 ↗</a>
39	42m W	501800 243790	GT.OUSE R A CEGB SITE INVESTIGATION 1	19.51	N	<a href="#">524592 ↗</a>
40	42m SW	501940 243670	LBC VICARAGE FARM & L FIELD 2/52	15.49	N	<a href="#">524367 ↗</a>
41	43m SW	500760 243260	BERRY FARM WOOTTON 31	26.0	N	<a href="#">524902 ↗</a>
42	44m W	501200 243710	BERRY FARM WOOTTON 17	16.2	N	<a href="#">524890 ↗</a>
43	45m S	502160 243370	LBC VICARAGE FARM & L FIELD 21	17.3	N	<a href="#">524381 ↗</a>
44	48m W	501180 243680	BERRY FARM WOOTTON 18	22.0	N	<a href="#">524891 ↗</a>
45	54m W	501530 244080	LBC VICARAGE FARM & L FIELD 3/52	13.89	N	<a href="#">524368 ↗</a>
G	57m N	502580 244700	LBC STAVARTBY AND CORONATION 24	14.47	N	<a href="#">524408 ↗</a>



ID	Location	Grid reference	Name	Length	Confidential	Web link
46	61m NE	502740 244620	ELSTOW 12	23.5	N	<a href="#">524614</a> ↗
47	70m W	501790 243760	'L' FIELD LANDFILL O 1635	-	Y	N/A
48	70m W	500920 243640	BERRY FARM WOOTTON 21	10.5	N	<a href="#">524894</a> ↗
G	70m N	502590 244710	CORONATION PIT AREA 24	-	Y	N/A
49	71m SW	500820 243280	BERRY FARM WOOTTON 29	10.0	N	<a href="#">524901</a> ↗
50	74m W	501230 243700	LBC VICARAGE FARM & L FIELD 4/52	22.91	N	<a href="#">524369</a> ↗
51	76m SW	500860 243310	BERRY FARM WOOTTON 28	20.0	N	<a href="#">524900</a> ↗
52	81m NW	501900 244710	LBC STAVARTBY AND CORONATION 16	12.26	N	<a href="#">524406</a> ↗
53	81m SW	501930 243580	'L' FIELD LANDFILL O 1622	-	Y	N/A
54	82m SW	500900 243340	BERRY FARM WOOTTON 27	10.0	N	<a href="#">524899</a> ↗
55	87m SW	500740 243180	LBC VICARAGE FARM & L FIELD 5/52	28.04	N	<a href="#">524370</a> ↗
56	90m SW	501860 243670	'L' FIELD LANDFILL O 1636	-	Y	N/A
57	93m W	501430 243890	'L' FIELD LANDFILL O 1645	-	Y	N/A
58	96m SW	500720 243150	LBC VICARAGE FARM & L FIELD 15/39	26.9	N	<a href="#">524397</a> ↗
59	97m W	501380 243810	'L' FIELD LANDFILL O 1630	-	Y	N/A
H	100m E	503278 244050	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH9	-	Y	N/A
H	100m E	503278 244050	CORONATION BRICKWORKS KEMPTON HARDWICK 9	-	Y	N/A
60	102m SW	500950 243360	BERRY FARM WOOTTON 26	20.0	N	<a href="#">524898</a> ↗
61	109m SW	500980 243380	BERRY FARM WOOTTON 25	10.0	N	<a href="#">524897</a> ↗
I	117m W	501600 243910	'L' FIELD LANDFILL O 1640	-	Y	N/A
J	118m E	503281 244005	CORONATION BRICKWORKS KEMPTON HARDWICK 10	-	Y	N/A
J	118m E	503281 244005	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH10	-	Y	N/A
I	123m W	501620 243880	'L' FIELD LANDFILL O 1638	-	Y	N/A
I	123m W	501610 243890	'L' FIELD LANDFILL O 1639	-	Y	N/A
I	125m W	501580 243920	'L' FIELD LANDFILL O 1641	-	Y	N/A
62	126m W	501560 243940	'L' FIELD LANDFILL O 1642	-	Y	N/A





ID	Location	Grid reference	Name	Length	Confidential	Web link
63	128m W	501540 243960	'L' FIELD LANDFILL O 1643	-	Y	N/A
64	130m SW	501050 243420	BERRY FARM WOOTTON 24	19.0	N	<a href="#">524896 ↗</a>
65	131m W	501700 243770	'L' FIELD LANDFILL O 1634	-	Y	N/A
K	131m W	501330 243730	'L' FIELD LANDFILL O 1629	-	Y	N/A
K	134m W	501340 243730	LBC VICARAGE FARM & L FIELD 12/39	20.73	N	<a href="#">524394 ↗</a>
66	137m W	501100 243460	BERRY FARM WOOTTON 23	13.5	N	<a href="#">524895 ↗</a>
67	137m SW	501860 243610	'L' FIELD LANDFILL O 1621	-	Y	N/A
68	139m SW	501910 243500	'L' FIELD LANDFILL O 1623	-	Y	N/A
69	145m W	501520 243930	'L' FIELD LANDFILL O 1644	-	Y	N/A
L	146m N	502600 244790	KEMPSTON HARDWICK 1/83	-	Y	N/A
L	146m N	502600 244790	KEMPSTON HARDWICK 3A	-	Y	N/A
M	152m E	503327 244034	CORONATION BRICKWORKS KEMPTON HARDWICK 7	-	Y	N/A
M	152m E	503327 244034	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH7	-	Y	N/A
70	153m SW	501880 243520	'L' FIELD LANDFILL O 1624	-	Y	N/A
L	155m N	502600 244800	KEMPSTON HARDWICK 2/83	-	Y	N/A
71	158m W	501600 243850	LBC VICARAGE FARM & L FIELD 6/52	21.11	N	<a href="#">524371 ↗</a>
72	161m NE	503190 244490	CORONATION PIT AREA 5	15.0	N	<a href="#">524762 ↗</a>
N	162m E	503348 244090	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH8	-	Y	N/A
N	162m E	503348 244090	CORONATION BRICKWORKS KEMPTON HARDWICK 8	-	Y	N/A
O	165m SE	502790 243160	CORONATION PIT AREA 7/55	14.0	N	<a href="#">524776 ↗</a>
P	166m E	503319 243972	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH6	-	Y	N/A
P	166m E	503319 243972	CORONATION BRICKWORKS KEMPTON HARDWICK 6	-	Y	N/A
73	166m SW	500970 243290	GT.OUSE R A CEGB SITE INVESTIGATION 4	28.96	N	<a href="#">524595 ↗</a>
74	167m SE	502830 243220	CORONATION PIT AREA 5/55	14.0	N	<a href="#">524774 ↗</a>
75	169m SW	501740 243670	'L' FIELD LANDFILL O 1637	-	Y	N/A

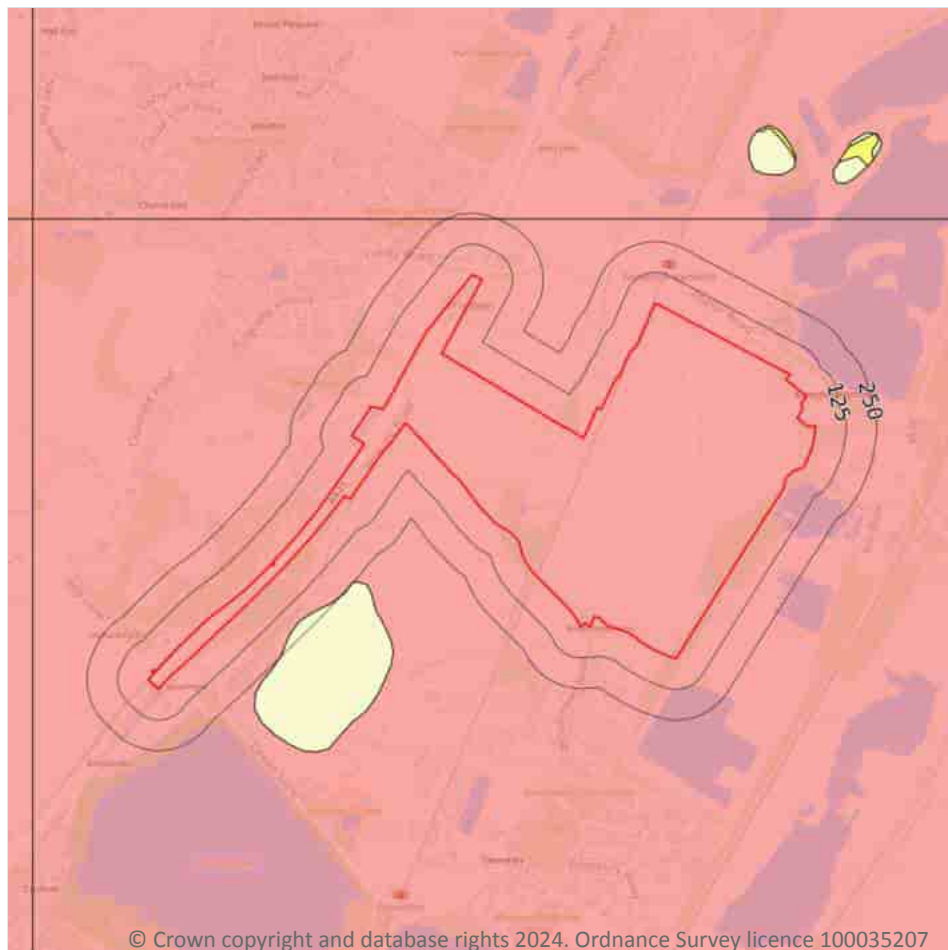


ID	Location	Grid reference	Name	Length	Confidential	Web link
76	172m SW	500800 243120	L FIELD SW	-	Y	N/A
77	175m NW	501590 244800	KEMPSTON K/I	16.76	N	<a href="#">524355 ↗</a>
O	182m SE	502810 243160	CORONATION PIT AREA 11/38	14.0	N	<a href="#">524765 ↗</a>
78	191m SW	501890 243440	'L' FIELD LANDFILL O 1606	-	Y	N/A
79	200m W	501430 243710	'L' FIELD LANDFILL O 1631	-	Y	N/A
80	201m SW	501090 243360	LBC VICARAGE FARM & L FIELD 12	12.8	N	<a href="#">524379 ↗</a>
81	204m N	502024 244822	A421 IMPROVEMENTS - 2ND PHASE TP60	2.5	N	<a href="#">18925612 ↗</a>
82	206m SW	501770 243590	'L' FIELD LANDFILL O 1620	-	Y	N/A
83	208m SW	501070 243330	LBC VICARAGE FARM & L FIELD 13/39	24.16	N	<a href="#">524395 ↗</a>
84	208m E	503220 243760	CORONATION PIT AREA 1	18.0	N	<a href="#">524758 ↗</a>
85	212m SW	501830 243490	'L' FIELD LANDFILL O 1607	-	Y	N/A
86	213m SW	501250 243510	LBC VICARAGE FARM & L FIELD 1/39	24.23	N	<a href="#">524391 ↗</a>
87	222m SE	502850 243150	CORONATION PIT AREA 8/55	15.0	N	<a href="#">524777 ↗</a>
88	225m W	501620 243720	'L' FIELD LANDFILL O 1633	-	Y	N/A
89	227m S	502380 243070	CORONATION PIT AREA 13/38	17.0	N	<a href="#">524767 ↗</a>
Q	232m E	503403 244009	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH2	-	Y	N/A
Q	232m E	503403 244009	CORONATION BRICKWORKS KEMPTON HARDWICK 2	-	Y	N/A
90	241m SW	500510 242840	LBC VICARAGE FARM & L FIELD 39	22.76	N	<a href="#">524384 ↗</a>
91	243m SW	501100 243310	GT.OUSE R A CEGB SITE INVESTIGATION 3	9.75	N	<a href="#">524594 ↗</a>
92	247m N	502615 244892	East West Rail Phase 2 CP2DKHOB_2D	19.86	N	<a href="#">20864544 ↗</a>
R	248m E	503435 244093	CORONATION BRICKWORKS KEMPTON HARDWICK 3	-	Y	N/A
R	248m E	503435 244093	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH3	-	Y	N/A

*This data is sourced from the British Geological Survey.*



## 17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.1 Shrink swell clays

#### Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

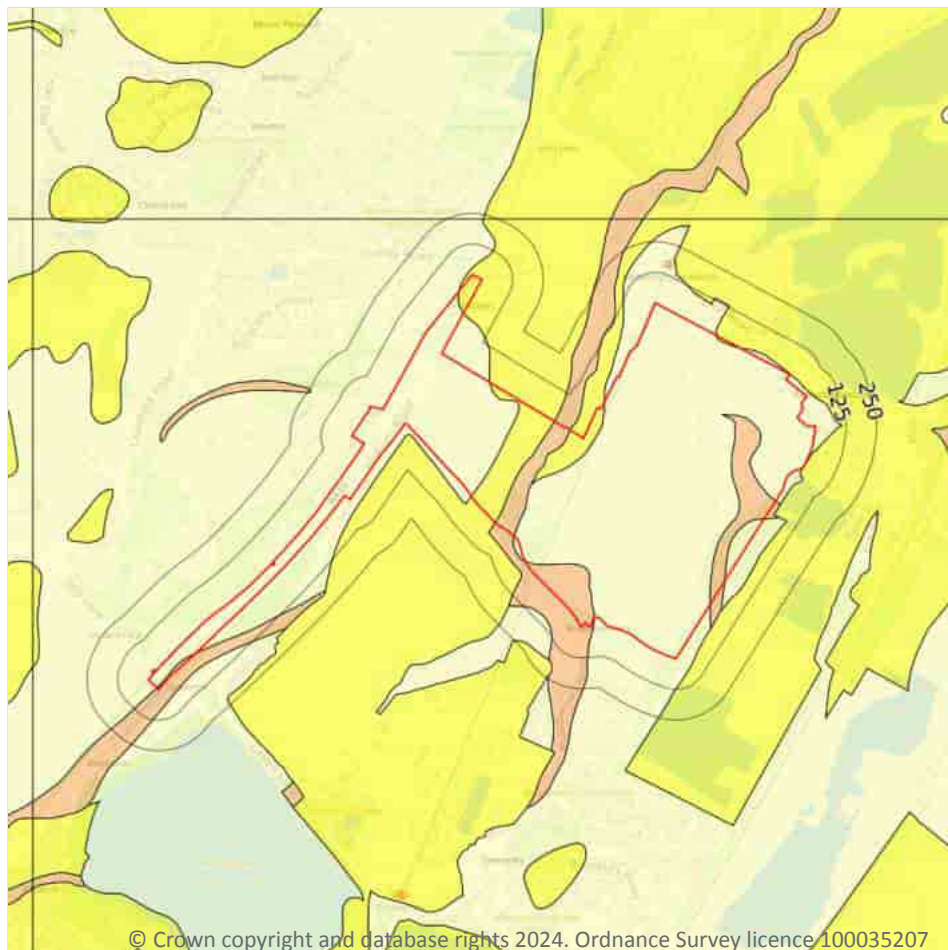
Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 137 >](#)

Location	Hazard rating	Details
On site	Moderate	Ground conditions predominantly high plasticity.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.2 Running sands

#### Records within 50m

3

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on [page 138](#) >

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

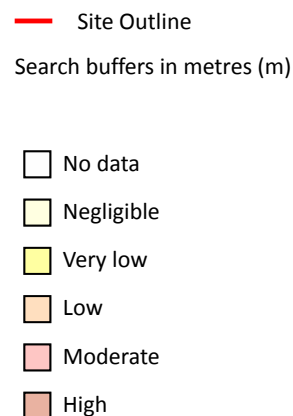
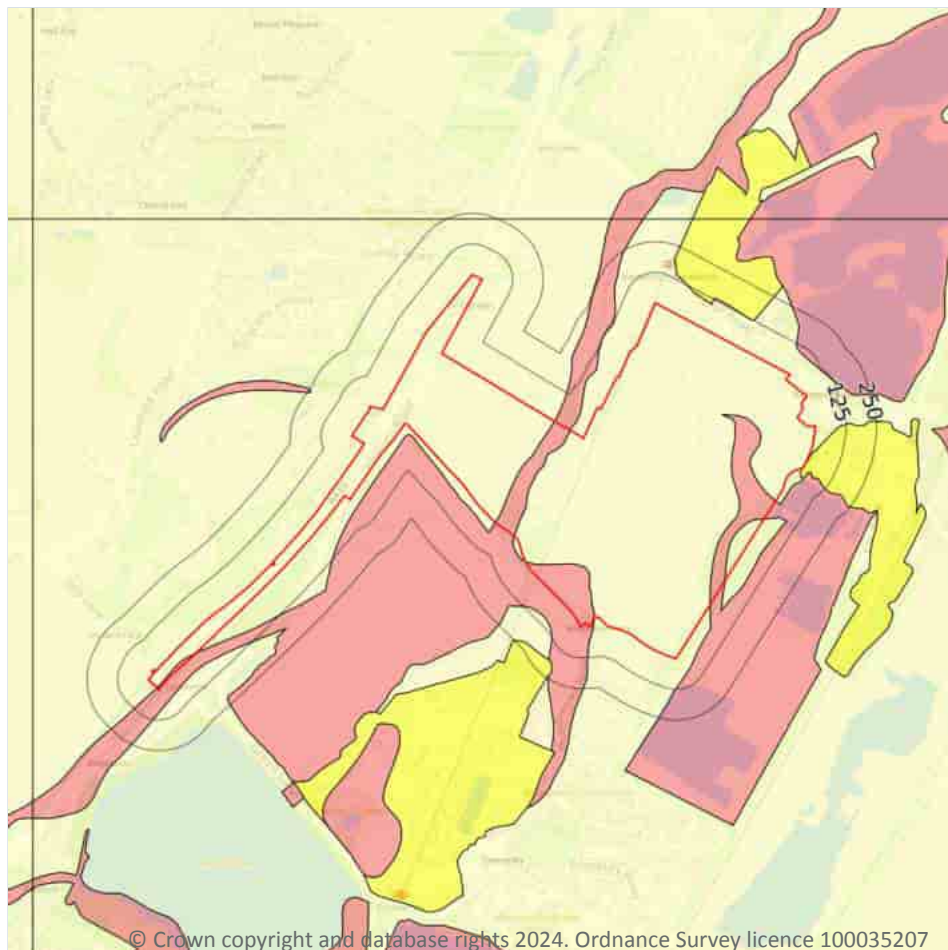


Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Compressible deposits



### 17.3 Compressible deposits

#### Records within 50m

3

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 140](#) >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.



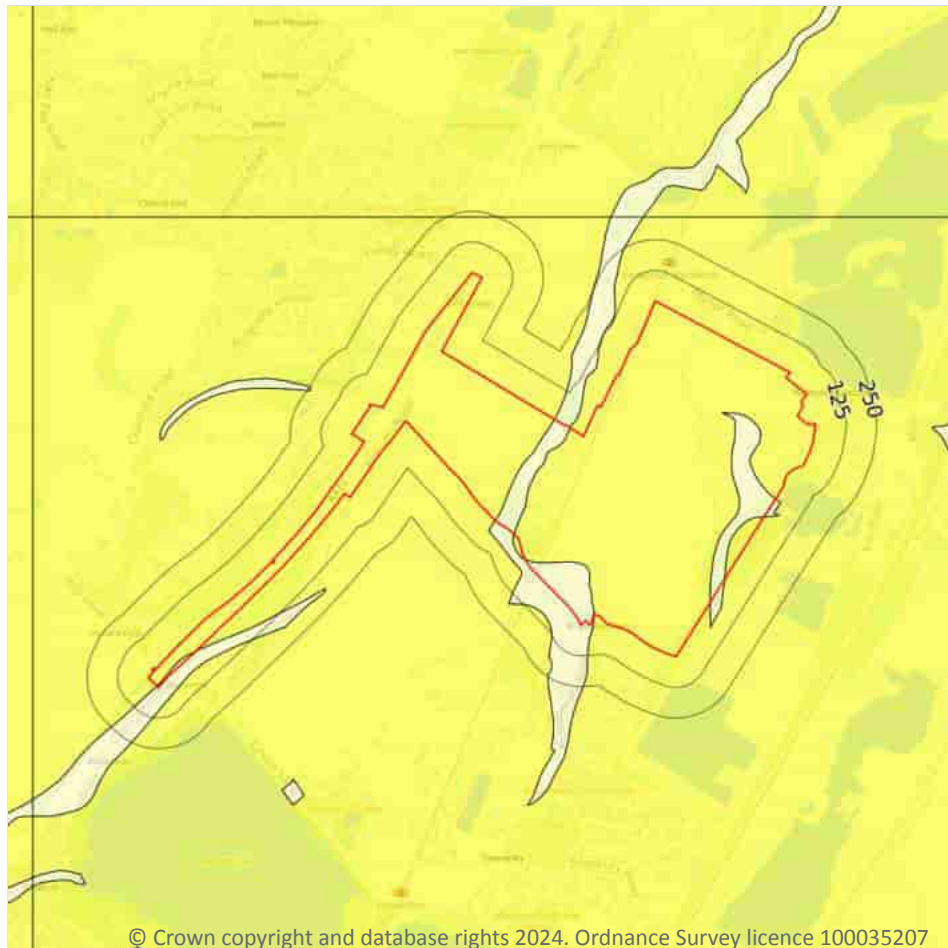


Location	Hazard rating	Details
1m E	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.4 Collapsible deposits

#### Records within 50m

2

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

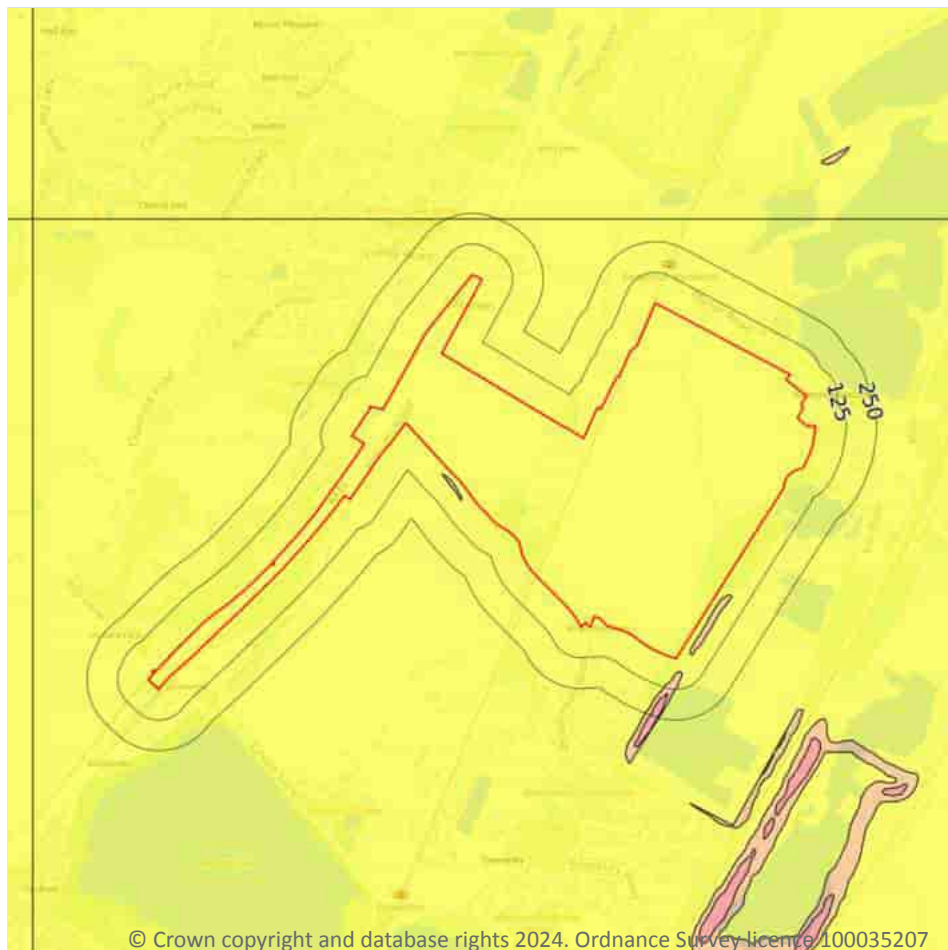
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 142 >](#)

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.5 Landslides

#### Records within 50m

3

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on [page 143 >](#)

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.

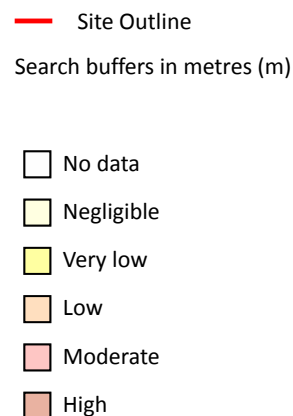
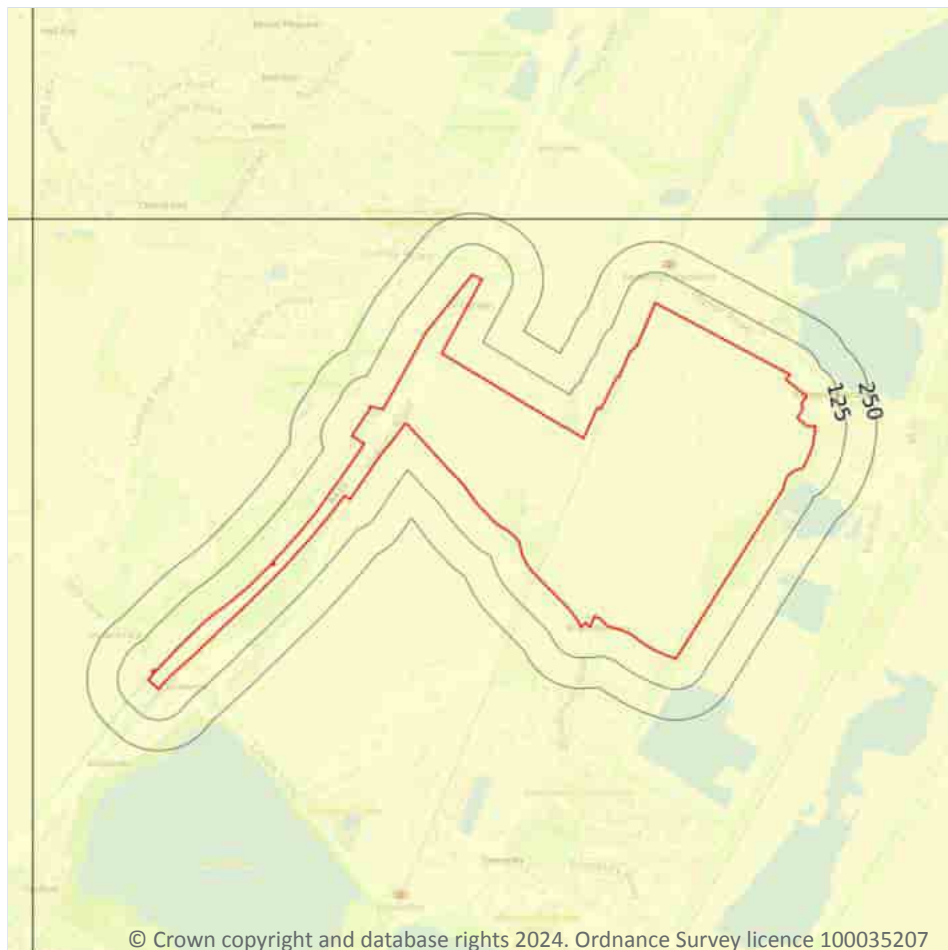


Location	Hazard rating	Details
24m W	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.
26m SE	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Ground dissolution of soluble rocks



### 17.6 Ground dissolution of soluble rocks

#### Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 145 >](#)

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

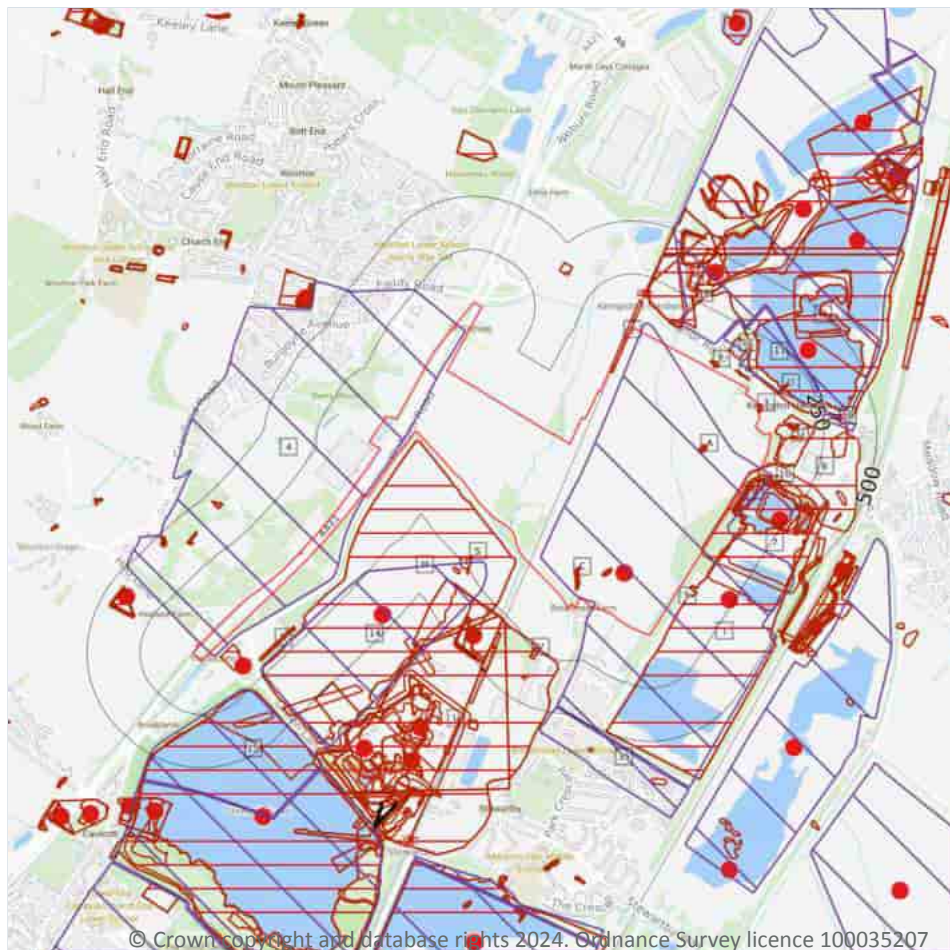


*This data is sourced from the British Geological Survey.*





## 18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

### 18.1 BritPits

Records within 500m

9

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on [page 147](#) >



ID	Location	Details	Description
1	On site	<b>Name:</b> Coronation Quarry <b>Address:</b> Stewartby, BEDFORD, Bedfordshire <b>Commodity:</b> Clay & Shale <b>Status:</b> Ceased	<b>Type:</b> A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site <b>Status description:</b> Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
13	152m SW	Name: Lower Shelton Brick Field Address: Stewartby, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
J	226m E	Name: Coronation Brick Works Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
17	229m SE	Name: Broadmead Address: Stewartby, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
P	336m NE	Name: Hardwick Hill Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
AC	403m W	Name: Wootton Green Brick Field Address: Wootton, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
29	411m NE	Name: Kempston Hardwick (North) Address: Kempston Hardwick, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
Y	426m SW	Name: Stewartby Brick Field Address: Stewartby, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
33	439m SW	Name: Stewartby Brick Works Address: Stewartby, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

*This data is sourced from the British Geological Survey.*

## 18.2 Surface ground workings

<b>Records within 250m</b>	<b>77</b>
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Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on [page 147](#) >

ID	Location	Land Use	Year of mapping	Mapping scale
2	On site	Cuttings	1882	1:10560
3	On site	Pond	1938	1:10560
A	On site	Pond	1900	1:10560
A	On site	Pond	1882	1:10560
A	On site	Pond	1938	1:10560
A	On site	Pond	1989	1:10000
A	On site	Pond	1959	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Pond	1980	1:10000
A	On site	Pond	1948	1:10560
A	On site	Pond	1924	1:10560
B	On site	Pond	1900	1:10560
B	On site	Pond	1882	1:10560
B	On site	Pond	1938	1:10560
B	On site	Pond	1959	1:10560
B	On site	Pond	1948	1:10560
B	On site	Pond	1924	1:10560
C	On site	Pond	1938	1:10560
C	On site	Pond	1989	1:10000
C	On site	Pond	1959	1:10560
C	On site	Pond	1980	1:10000
C	On site	Pond	1948	1:10560
D	On site	Brick Works	1948	1:10560
6	2m E	Brick Works	1980	1:10000
D	13m E	Unspecified Pit	1948	1:10560
E	13m E	Pond	1948	1:10560
7	15m E	Clay Pit	1959	1:10560
E	15m E	Ponds	1959	1:10560
F	18m NE	Pond	1989	1:10000
F	18m NE	Pond	1959	1:10560
F	18m NE	Pond	1980	1:10000
F	19m NE	Pond	1900	1:10560
F	19m NE	Pond	1948	1:10560
F	20m NE	Pond	1924	1:10560
F	21m NE	Pond	1938	1:10560
G	22m E	Bricks Works	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
G	22m E	Bricks Works	1938	1:10560
H	22m W	Unspecified Disused Pit	1989	1:10000
H	22m W	Unspecified Disused Pit	1980	1:10000
I	23m E	Unspecified Disused Pit	1989	1:10000
I	23m E	Unspecified Disused Pit	1980	1:10000
J	33m E	Ponds	1989	1:10000
J	33m E	Ponds	1980	1:10000
8	39m NE	Ponds	1882	1:10560
9	46m SW	Brick Field	1882	1:10560
10	55m E	Unspecified Heap	1948	1:10560
K	70m NE	Unspecified Disused Pit	1989	1:10000
K	70m NE	Unspecified Disused Pit	1980	1:10000
L	87m E	Pond	1959	1:10560
L	89m E	Pond	1900	1:10560
L	89m E	Pond	1882	1:10560
L	89m E	Pond	1948	1:10560
L	92m E	Pond	1938	1:10560
L	92m E	Pond	1924	1:10560
J	97m E	Pond	1948	1:10560
M	100m NE	Bricks Works	1938	1:10560
M	100m NE	Bricks Works	1938	1:10560
N	101m NE	Brick Works	1989	1:10000
N	101m NE	Brick Works	1980	1:10000
O	103m E	Pond	1882	1:10560
N	104m NE	Brick Works	1948	1:10560
12	104m NE	Pond	1959	1:10560
O	105m NE	Pond	1959	1:10560
O	107m NE	Pond	1948	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
P	107m NE	Water Body	1989	1:10000
P	107m NE	Water Body	1980	1:10000
J	116m E	Pond	1959	1:10560
R	178m SW	Pond	1989	1:10000
R	178m SW	Pond	1980	1:10000
S	206m SW	Unspecified Ground Workings	1920	1:10560
T	219m SW	Lake	1989	1:10000
T	219m SW	Lake	1980	1:10000
16	220m NE	Unspecified Heap	1948	1:10560
S	229m SW	Old Gravel Pit	1920	1:10560
U	229m S	Brick Works	1989	1:10000
U	229m S	Brick Works	1980	1:10000
V	237m S	Sewage Works	1989	1:10000
V	237m S	Sewage Works	1980	1:10000

*This is data is sourced from Ordnance Survey/Groundsure.*

### 18.3 Underground workings

**Records within 1000m**

**0**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

*This is data is sourced from Ordnance Survey/Groundsure.*

### 18.4 Underground mining extents

**Records within 500m**

**0**

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

*This data is sourced from Groundsure.*





## 18.5 Historical Mineral Planning Areas

**Records within 500m**
**8**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

Features are displayed on the Mining and ground workings map on [page 147 >](#)

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
4	On site	Stewartby	Clay	Surface mineral working	Refused	1957
5	On site	Coronation	Clay	Surface mineral working	Valid	17/7/52
11	73m NE	Hardwick Hill	Clay	Surface mineral working	Valid	10/09/53
Q	111m NE	Hardwick Hill	Clay	Surface mineral working	Valid	31/07/52
14	174m SW	Stewartby	Clay	Surface mineral working	Valid	17/7/52
15	213m SW	Stewartby	Clay	Surface mineral working	Valid	17/7/52
18	258m E	Hardwick Hill	Clay	Surface mineral working	Refused	Not available
35	472m S	Coronation	Clay	Surface mineral working	Valid	27/12/62

*This data is sourced from the British Geological Survey.*

## 18.6 Non-coal mining

**Records within 1000m**
**0**

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

*This data is sourced from the British Geological Survey.*

## 18.7 JPB mining areas

**Records on site**
**0**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

*This data is sourced from Johnson Poole and Bloomer.*



## 18.8 The Coal Authority non-coal mining

### Records within 500m

0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

*This data is sourced from The Coal Authority.*

## 18.9 Researched mining

### Records within 500m

4

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
18m W	Stone
24m E	Stone
95m NE	Stone
225m SW	Stone

*This data is sourced from Groundsure.*

## 18.10 Mining record office plans

### Records within 500m

0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*



### 18.11 BGS mine plans

**Records within 500m****0**

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

### 18.12 Coal mining

**Records on site****0**

Areas which could be affected by past, current or future coal mining.

*This data is sourced from the Coal Authority.*

### 18.13 Brine areas

**Records on site****0**

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

*This data is sourced from the Cheshire Brine Subsidence Compensation Board.*

### 18.14 Gypsum areas

**Records on site****0**

Generalised areas that may be affected by gypsum extraction.

*This data is sourced from British Gypsum.*

### 18.15 Tin mining

**Records on site****0**

Generalised areas that may be affected by historical tin mining.

*This data is sourced from Groundsure.*



## 18.16 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

*This data is sourced from the Kaolin and Ball Clay Association (UK).*



## 19 Ground cavities and sinkholes

### 19.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

*This data is sourced from Stantec UK Ltd.*

### 19.2 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

*This data is sourced from Stantec UK Ltd.*

### 19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

*This data is sourced from Groundsure.*

### 19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



*This data is sourced from Groundsure.*

## 19.5 National karst database

Records within 500m

0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

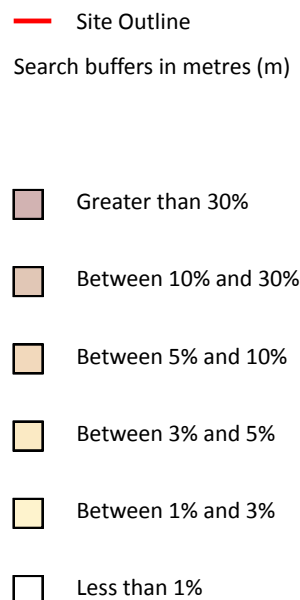
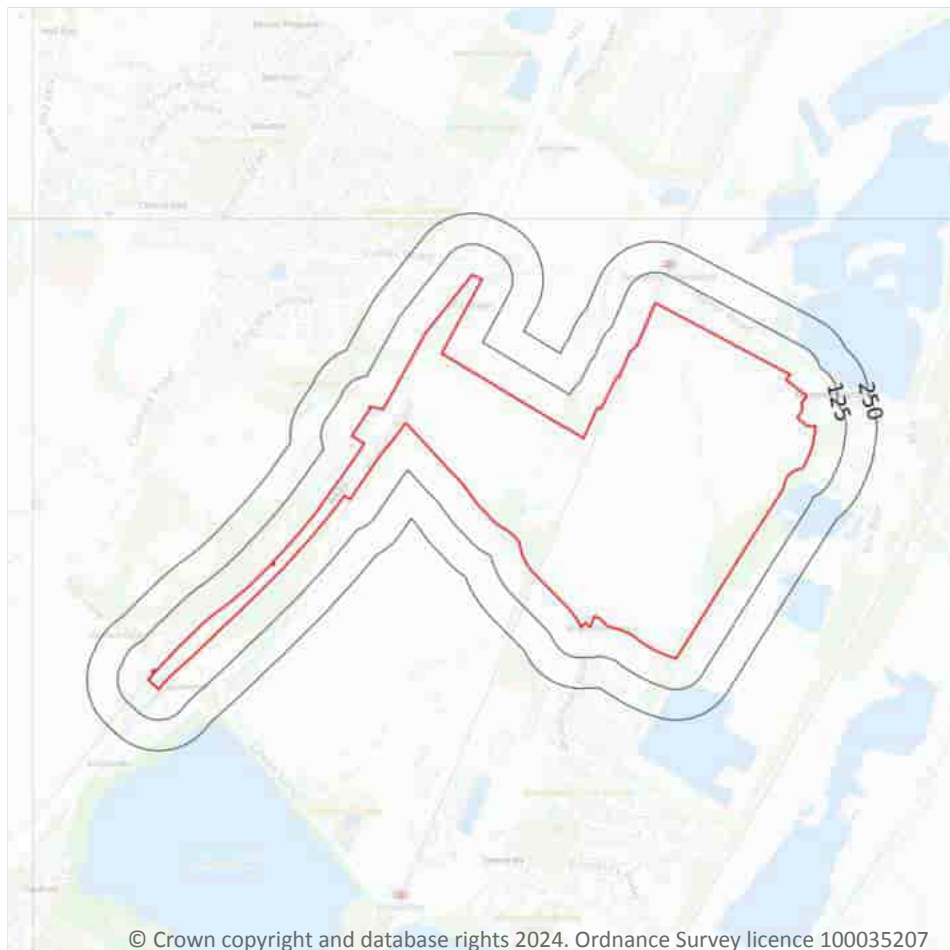
The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

*This data is sourced from the British Geological Survey.*





## 20 Radon



### 20.1 Radon

#### Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 159](#) >

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None



*This data is sourced from the British Geological Survey and UK Health Security Agency.*



## 21 Soil chemistry

### 21.1 BGS Estimated Background Soil Chemistry

Records within 50m

74

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km<sup>2</sup>. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km<sup>2</sup>; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 - 2.2 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 - 2.2 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	3.0 - 6.0 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 - 2.2 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg





Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
1m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
1m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
1m NE	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	3.0 - 6.0 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
6m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
8m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
38m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
38m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg

*This data is sourced from the British Geological Survey.*

## 21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0
--------------------	---

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km<sup>2</sup>).

*This data is sourced from the British Geological Survey.*

## 21.3 BGS Measured Urban Soil Chemistry

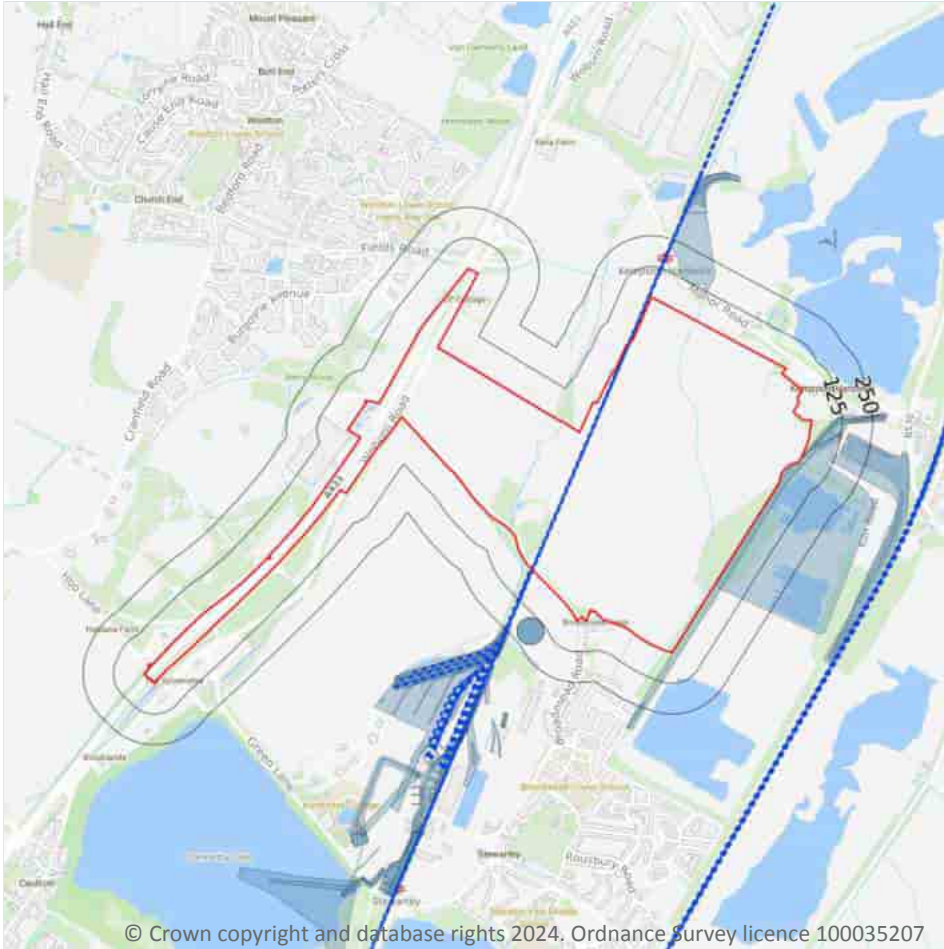
Records within 50m	0
--------------------	---

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km<sup>2</sup>.

*This data is sourced from the British Geological Survey.*



## 22 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

### 22.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

*This data is sourced from publicly available information by Groundsure.*

### 22.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



*This data is sourced from publicly available information by Groundsure.*

## 22.3 Railway tunnels

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Railway tunnels taken from contemporary Ordnance Survey mapping.

*This data is sourced from the Ordnance Survey.*

## 22.4 Historical railway and tunnel features

<b>Records within 250m</b>	<b>19</b>
----------------------------	-----------

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on [page 166 >](#)

Location	Land Use	Year of mapping	Mapping scale
<b>On site</b>	<b>Railway Sidings</b>	<b>1993</b>	<b>2500</b>
<b>On site</b>	<b>Railway Sidings</b>	<b>1974</b>	<b>2500</b>
<b>On site</b>	<b>Tramway Sidings</b>	<b>1959</b>	<b>10560</b>
<b>On site</b>	<b>Railway Sidings</b>	<b>1980</b>	<b>10000</b>
1m E	Railway Sidings	1979	2500
4m E	Railway Sidings	1968	2500
112m NE	Railway Sidings	1959	10560
117m E	Railway Sidings	1959	10560
127m S	Railway Sidings	1948	10560
127m S	Railway Sidings	1900	10560
127m S	Railway Sidings	1882	10560
137m E	Railway Sidings	1948	10560
155m E	Railway Sidings	1979	2500
159m E	Railway Sidings	1989	10000
222m SW	Railway Sidings	1989	10000
222m SW	Railway Sidings	1980	10000
229m E	Railway Sidings	1968	2500



Location	Land Use	Year of mapping	Mapping scale
230m S	Railway Sidings	1974	2500
248m SW	Railway Sidings	1974	2500

*This data is sourced from Ordnance Survey/Groundsure.*

## 22.5 Royal Mail tunnels

**Records within 250m**

**0**

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

*This data is sourced from Groundsure/the Postal Museum.*

## 22.6 Historical railways

**Records within 250m**

**0**

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

*This data is sourced from OpenStreetMap.*

## 22.7 Railways

**Records within 250m**

**14**

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. Features are displayed on the Railway infrastructure and projects map on [page 166 >](#)

Location	Name	Type
On site		rail
On site	Marston Vale Line	rail
On site	Marston Vale Line	rail
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track
On site	Not given	Multi Track



Location	Name	Type
<b>On site</b>	<b>Not given</b>	<b>Multi Track</b>
15m SW	Forder's Sidings	rail
70m SW	Forder's Sidings	rail
98m N	Not given	Multi Track
111m N	Not given	Multi Track
203m N	Not given	Multi Track
209m SW	Not given	Multi Track

*This data is sourced from Ordnance Survey and OpenStreetMap.*

## 22.8 Crossrail 1

**Records within 500m** **0**

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

*This data is sourced from publicly available information by Groundsure.*

## 22.9 Crossrail 2

**Records within 500m** **0**

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

*This data is sourced from publicly available information by Groundsure.*

## 22.10 HS2

**Records within 500m** **0**

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

*This data is sourced from HS2 Ltd.*



## Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

## Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: [www.groundsure.com/terms-and-conditions-april-2023/](https://www.groundsure.com/terms-and-conditions-april-2023/) ↗.





70116516 Rev B

## Order Details

**Date:** 28/03/2024  
**Your ref:** 70116516 Rev B  
**Our Ref:** GSIP-2024-14754-18113\_B

## Site Details

**Location:** 503806 246160  
**Area:** 68.46 ha  
**Authority:** [Bedford Council \(Unitary\)](#) ↗



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**Summary of findings**

[p. 2 >](#)

**Aerial image**

[p. 9 >](#)

**OS MasterMap site plan**

N/A: >10ha

[groundsure.com/insightuserguide](https://groundsure.com/insightuserguide) ↗

Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com) ↗

01273 257 755

## Summary of findings

Page	Section	<a href="#">Past land use &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">14 &gt;</a>	<a href="#">1.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	9	7	54	58	-
<a href="#">19 &gt;</a>	<a href="#">1.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	0	0	4	26	-
<a href="#">21 &gt;</a>	<a href="#">1.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	0	4	1	19	-
22	1.4	Historical petrol stations	0	0	0	0	-
22	1.5	Historical garages	0	0	0	0	-
22	1.6	Historical military land	0	0	0	0	-
Page	Section	<a href="#">Past land use - un-grouped &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">23 &gt;</a>	<a href="#">2.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	10	8	67	77	-
<a href="#">29 &gt;</a>	<a href="#">2.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	0	0	8	46	-
<a href="#">32 &gt;</a>	<a href="#">2.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	0	7	2	41	-
34	2.4	Historical petrol stations	0	0	0	0	-
34	2.5	Historical garages	0	0	0	0	-
Page	Section	<a href="#">Waste and landfill &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">35 &gt;</a>	<a href="#">3.1 &gt;</a>	<a href="#">Active or recent landfill &gt;</a>	0	0	1	0	-
<a href="#">36 &gt;</a>	<a href="#">3.2 &gt;</a>	<a href="#">Historical landfill (BGS records) &gt;</a>	0	0	0	1	-
<a href="#">36 &gt;</a>	<a href="#">3.3 &gt;</a>	<a href="#">Historical landfill (LA/mapping records) &gt;</a>	0	0	0	1	-
<a href="#">36 &gt;</a>	<a href="#">3.4 &gt;</a>	<a href="#">Historical landfill (EA/NRW records) &gt;</a>	1	0	1	1	-
37	3.5	Historical waste sites	0	0	0	0	-
<a href="#">37 &gt;</a>	<a href="#">3.6 &gt;</a>	<a href="#">Licensed waste sites &gt;</a>	0	0	0	5	-
<a href="#">39 &gt;</a>	<a href="#">3.7 &gt;</a>	<a href="#">Waste exemptions &gt;</a>	0	0	4	10	-
Page	Section	<a href="#">Current industrial land use &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">41 &gt;</a>	<a href="#">4.1 &gt;</a>	<a href="#">Recent industrial land uses &gt;</a>	0	3	30	-	-
<a href="#">43 &gt;</a>	<a href="#">4.2 &gt;</a>	<a href="#">Current or recent petrol stations &gt;</a>	0	0	0	1	-
44	4.3	Electricity cables	0	0	0	0	-
44	4.4	Gas pipelines	0	0	0	0	-
44	4.5	Sites determined as Contaminated Land	0	0	0	0	-



44	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
45	4.7	Regulated explosive sites	0	0	0	0	-
<a href="#">45</a> >	<a href="#">4.8</a> >	<a href="#">Hazardous substance storage/usage</a> >	0	0	1	0	-
45	4.9	Historical licensed industrial activities (IPC)	0	0	0	0	-
45	4.10	Licensed industrial activities (Part A(1))	0	0	0	0	-
<a href="#">46</a> >	<a href="#">4.11</a> >	<a href="#">Licensed pollutant release (Part A(2)/B)</a> >	0	1	2	4	-
47	4.12	Radioactive Substance Authorisations	0	0	0	0	-
<a href="#">47</a> >	<a href="#">4.13</a> >	<a href="#">Licensed Discharges to controlled waters</a> >	0	0	5	1	-
48	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
<a href="#">48</a> >	<a href="#">4.15</a> >	<a href="#">Pollutant release to public sewer</a> >	0	0	0	1	-
48	4.16	List 1 Dangerous Substances	0	0	0	0	-
<a href="#">49</a> >	<a href="#">4.17</a> >	<a href="#">List 2 Dangerous Substances</a> >	0	0	1	3	-
<a href="#">49</a> >	<a href="#">4.18</a> >	<a href="#">Pollution Incidents (EA/NRW)</a> >	1	0	1	0	-
50	4.19	Pollution inventory substances	0	0	0	0	-
50	4.20	Pollution inventory waste transfers	0	0	0	0	-
50	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<a href="#">Hydrogeology</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">51</a> >	<a href="#">5.1</a> >	<a href="#">Superficial aquifer</a> >	Identified (within 500m)				
<a href="#">53</a> >	<a href="#">5.2</a> >	<a href="#">Bedrock aquifer</a> >	Identified (within 500m)				
<a href="#">54</a> >	<a href="#">5.3</a> >	<a href="#">Groundwater vulnerability</a> >	Identified (within 50m)				
57	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
58	5.5	Groundwater vulnerability- local information	None (within 0m)				
<a href="#">59</a> >	<a href="#">5.6</a> >	<a href="#">Groundwater abstractions</a> >	1	0	1	0	0
<a href="#">60</a> >	<a href="#">5.7</a> >	<a href="#">Surface water abstractions</a> >	0	0	1	1	8
62	5.8	Potable abstractions	0	0	0	0	0
63	5.9	Source Protection Zones	0	0	0	0	-
63	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<a href="#">Hydrology</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">64</a> >	<a href="#">6.1</a> >	<a href="#">Water Network (OS MasterMap)</a> >	12	6	30	-	-



<a href="#">68</a> >	<a href="#">6.2</a> >	<a href="#">Surface water features</a> >	1	8	18	-	-
<a href="#">69</a> >	<a href="#">6.3</a> >	<a href="#">WFD Surface water body catchments</a> >	1	-	-	-	-
<a href="#">69</a> >	<a href="#">6.4</a> >	<a href="#">WFD Surface water bodies</a> >	1	0	0	-	-
69	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	<a href="#">River and coastal flooding</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">70</a> >	<a href="#">7.1</a> >	<a href="#">Risk of flooding from rivers and the sea</a> >	High (within 50m)				
71	7.2	Historical Flood Events	0	0	0	-	-
71	7.3	Flood Defences	0	0	0	-	-
71	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
71	7.5	Flood Storage Areas	0	0	0	-	-
<a href="#">72</a> >	<a href="#">7.6</a> >	<a href="#">Flood Zone 2</a> >	Identified (within 50m)				
<a href="#">73</a> >	<a href="#">7.7</a> >	<a href="#">Flood Zone 3</a> >	Identified (within 50m)				
Page	Section	<a href="#">Surface water flooding</a> >					
<a href="#">74</a> >	<a href="#">8.1</a> >	<a href="#">Surface water flooding</a> >	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	<a href="#">Groundwater flooding</a> >					
<a href="#">76</a> >	<a href="#">9.1</a> >	<a href="#">Groundwater flooding</a> >	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
77	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
77	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
77	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
77	10.4	Special Protection Areas (SPA)	0	0	0	0	0
78	10.5	National Nature Reserves (NNR)	0	0	0	0	0
78	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
78	10.7	Designated Ancient Woodland	0	0	0	0	0
78	10.8	Biosphere Reserves	0	0	0	0	0
79	10.9	Forest Parks	0	0	0	0	0
79	10.10	Marine Conservation Zones	0	0	0	0	0
79	10.11	Green Belt	0	0	0	0	0
79	10.12	Proposed Ramsar sites	0	0	0	0	0



79	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
80	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
80	10.15	Nitrate Sensitive Areas	0	0	0	0	0
<a href="#">80</a> >	<a href="#">10.16</a> >	<a href="#">Nitrate Vulnerable Zones</a> >	6	0	2	0	3
<a href="#">82</a> >	<a href="#">10.17</a> >	<a href="#">SSSI Impact Risk Zones</a> >	2	-	-	-	-
83	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
84	11.1	World Heritage Sites	0	0	0	-	-
84	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
84	11.3	National Parks	0	0	0	-	-
84	11.4	Listed Buildings	0	0	0	-	-
85	11.5	Conservation Areas	0	0	0	-	-
85	11.6	Scheduled Ancient Monuments	0	0	0	-	-
85	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	<a href="#">Agricultural designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">86</a> >	<a href="#">12.1</a> >	<a href="#">Agricultural Land Classification</a> >	Grade 2 (within 250m)				
87	12.2	Open Access Land	0	0	0	-	-
<a href="#">87</a> >	<a href="#">12.3</a> >	<a href="#">Tree Felling Licences</a> >	1	3	5	-	-
88	12.4	Environmental Stewardship Schemes	0	0	0	-	-
<a href="#">88</a> >	<a href="#">12.5</a> >	<a href="#">Countryside Stewardship Schemes</a> >	2	1	0	-	-
Page	Section	<a href="#">Habitat designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">89</a> >	<a href="#">13.1</a> >	<a href="#">Priority Habitat Inventory</a> >	3	4	9	-	-
90	13.2	Habitat Networks	0	0	0	-	-
<a href="#">90</a> >	<a href="#">13.3</a> >	<a href="#">Open Mosaic Habitat</a> >	1	0	2	-	-
91	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	<a href="#">Geology 1:10,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">92</a> >	<a href="#">14.1</a> >	<a href="#">10k Availability</a> >	Identified (within 500m)				
<a href="#">93</a> >	<a href="#">14.2</a> >	<a href="#">Artificial and made ground (10k)</a> >	3	4	4	3	-
<a href="#">95</a> >	<a href="#">14.3</a> >	<a href="#">Superficial geology (10k)</a> >	3	0	5	6	-



96	14.4	Landslip (10k)	0	0	0	0	-
<a href="#">97 &gt;</a>	<a href="#">14.5 &gt;</a>	<a href="#">Bedrock geology (10k) &gt;</a>	1	0	1	0	-
<a href="#">98 &gt;</a>	<a href="#">14.6 &gt;</a>	<a href="#">Bedrock faults and other linear features (10k) &gt;</a>	0	0	1	1	-
Page	Section	<a href="#">Geology 1:50,000 scale &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">99 &gt;</a>	<a href="#">15.1 &gt;</a>	<a href="#">50k Availability &gt;</a>	Identified (within 500m)				
<a href="#">100 &gt;</a>	<a href="#">15.2 &gt;</a>	<a href="#">Artificial and made ground (50k) &gt;</a>	1	2	3	0	-
<a href="#">101 &gt;</a>	<a href="#">15.3 &gt;</a>	<a href="#">Artificial ground permeability (50k) &gt;</a>	1	0	-	-	-
<a href="#">102 &gt;</a>	<a href="#">15.4 &gt;</a>	<a href="#">Superficial geology (50k) &gt;</a>	4	0	4	3	-
<a href="#">103 &gt;</a>	<a href="#">15.5 &gt;</a>	<a href="#">Superficial permeability (50k) &gt;</a>	Identified (within 50m)				
104	15.6	Landslip (50k)	0	0	0	0	-
104	15.7	Landslip permeability (50k)	None (within 50m)				
<a href="#">105 &gt;</a>	<a href="#">15.8 &gt;</a>	<a href="#">Bedrock geology (50k) &gt;</a>	1	0	0	0	-
<a href="#">106 &gt;</a>	<a href="#">15.9 &gt;</a>	<a href="#">Bedrock permeability (50k) &gt;</a>	Identified (within 50m)				
<a href="#">106 &gt;</a>	<a href="#">15.10 &gt;</a>	<a href="#">Bedrock faults and other linear features (50k) &gt;</a>	0	0	1	0	-
Page	Section	<a href="#">Boreholes &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">107 &gt;</a>	<a href="#">16.1 &gt;</a>	<a href="#">BGS Boreholes &gt;</a>	25	18	73	-	-
Page	Section	<a href="#">Natural ground subsidence &gt;</a>					
<a href="#">113 &gt;</a>	<a href="#">17.1 &gt;</a>	<a href="#">Shrink swell clays &gt;</a>	Moderate (within 50m)				
<a href="#">115 &gt;</a>	<a href="#">17.2 &gt;</a>	<a href="#">Running sands &gt;</a>	Low (within 50m)				
<a href="#">117 &gt;</a>	<a href="#">17.3 &gt;</a>	<a href="#">Compressible deposits &gt;</a>	Moderate (within 50m)				
<a href="#">119 &gt;</a>	<a href="#">17.4 &gt;</a>	<a href="#">Collapsible deposits &gt;</a>	Very low (within 50m)				
<a href="#">120 &gt;</a>	<a href="#">17.5 &gt;</a>	<a href="#">Landslides &gt;</a>	Low (within 50m)				
<a href="#">122 &gt;</a>	<a href="#">17.6 &gt;</a>	<a href="#">Ground dissolution of soluble rocks &gt;</a>	Negligible (within 50m)				
Page	Section	<a href="#">Mining and ground workings &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">124 &gt;</a>	<a href="#">18.1 &gt;</a>	<a href="#">BritPits &gt;</a>	1	0	6	2	-
<a href="#">126 &gt;</a>	<a href="#">18.2 &gt;</a>	<a href="#">Surface ground workings &gt;</a>	14	9	66	-	-
130	18.3	Underground workings	0	0	0	0	0
130	18.4	Underground mining extents	0	0	0	0	-
<a href="#">130 &gt;</a>	<a href="#">18.5 &gt;</a>	<a href="#">Historical Mineral Planning Areas &gt;</a>	3	0	2	1	-





131	18.6	Non-coal mining	0	0	0	0	0
131	18.7	JPB mining areas	None (within 0m)				
131	18.8	The Coal Authority non-coal mining	0	0	0	0	-
<a href="#">131</a> >	<a href="#">18.9</a> >	<a href="#">Researched mining</a> >	1	0	1	0	-
132	18.10	Mining record office plans	0	0	0	0	-
132	18.11	BGS mine plans	0	0	0	0	-
132	18.12	Coal mining	None (within 0m)				
132	18.13	Brine areas	None (within 0m)				
132	18.14	Gypsum areas	None (within 0m)				
133	18.15	Tin mining	None (within 0m)				
133	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
134	19.1	Natural cavities	0	0	0	0	-
134	19.2	Mining cavities	0	0	0	0	0
134	19.3	Reported recent incidents	0	0	0	0	-
134	19.4	Historical incidents	0	0	0	0	-
135	19.5	National karst database	0	0	0	0	-
Page	Section	<a href="#">Radon</a> >					
<a href="#">136</a> >	<a href="#">20.1</a> >	<a href="#">Radon</a> >	Less than 1% (within 0m)				
Page	Section	<a href="#">Soil chemistry</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">138</a> >	<a href="#">21.1</a> >	<a href="#">BGS Estimated Background Soil Chemistry</a> >	21	4	-	-	-
139	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
140	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	<a href="#">Railway infrastructure and projects</a> >	On site	0-50m	50-250m	250-500m	500-2000m
141	22.1	Underground railways (London)	0	0	0	-	-
141	22.2	Underground railways (Non-London)	0	0	0	-	-
142	22.3	Railway tunnels	0	0	0	-	-
<a href="#">142</a> >	<a href="#">22.4</a> >	<a href="#">Historical railway and tunnel features</a> >	0	0	19	-	-
143	22.5	Royal Mail tunnels	0	0	0	-	-



143	22.6	Historical railways	0	0	0	-	-
<a href="#">143</a> >	<a href="#">22.7</a> >	<a href="#">Railways</a> >	0	6	53	-	-
146	22.8	Crossrail 1	0	0	0	0	-
146	22.9	Crossrail 2	0	0	0	0	-
146	22.10	HS2	0	0	0	0	-

## Recent aerial photograph



Capture Date: 15/04/2020

Site Area: 68.46ha



Contact us with any questions at:

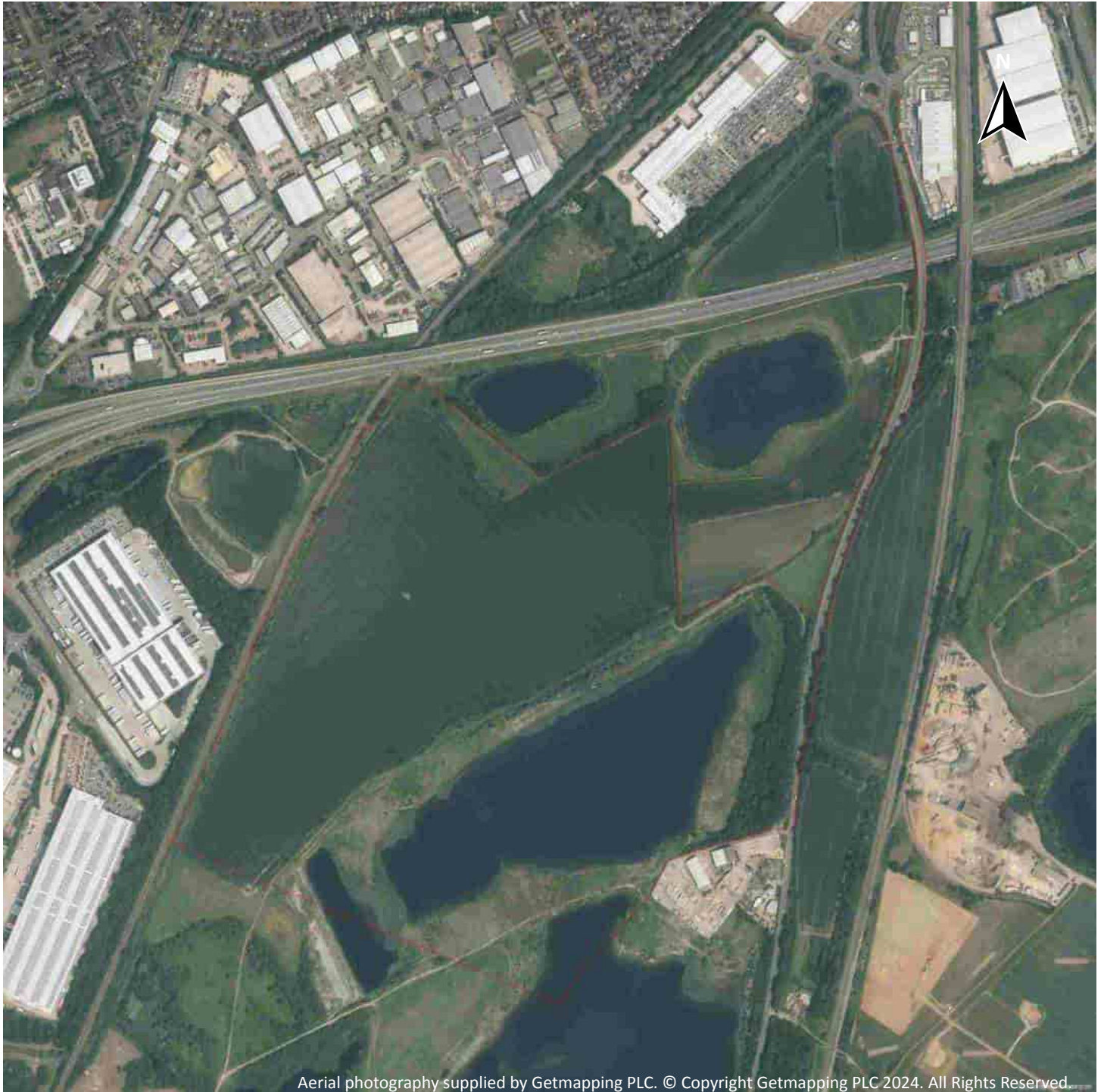
[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024



## Recent site history - 2017 aerial photograph



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Capture Date: 21/06/2017

Site Area: 68.46ha



Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024



## Recent site history - 2006 aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2024. All Rights Reserved.

Capture Date: 01/07/2006

Site Area: 68.46ha



Contact us with any questions at:

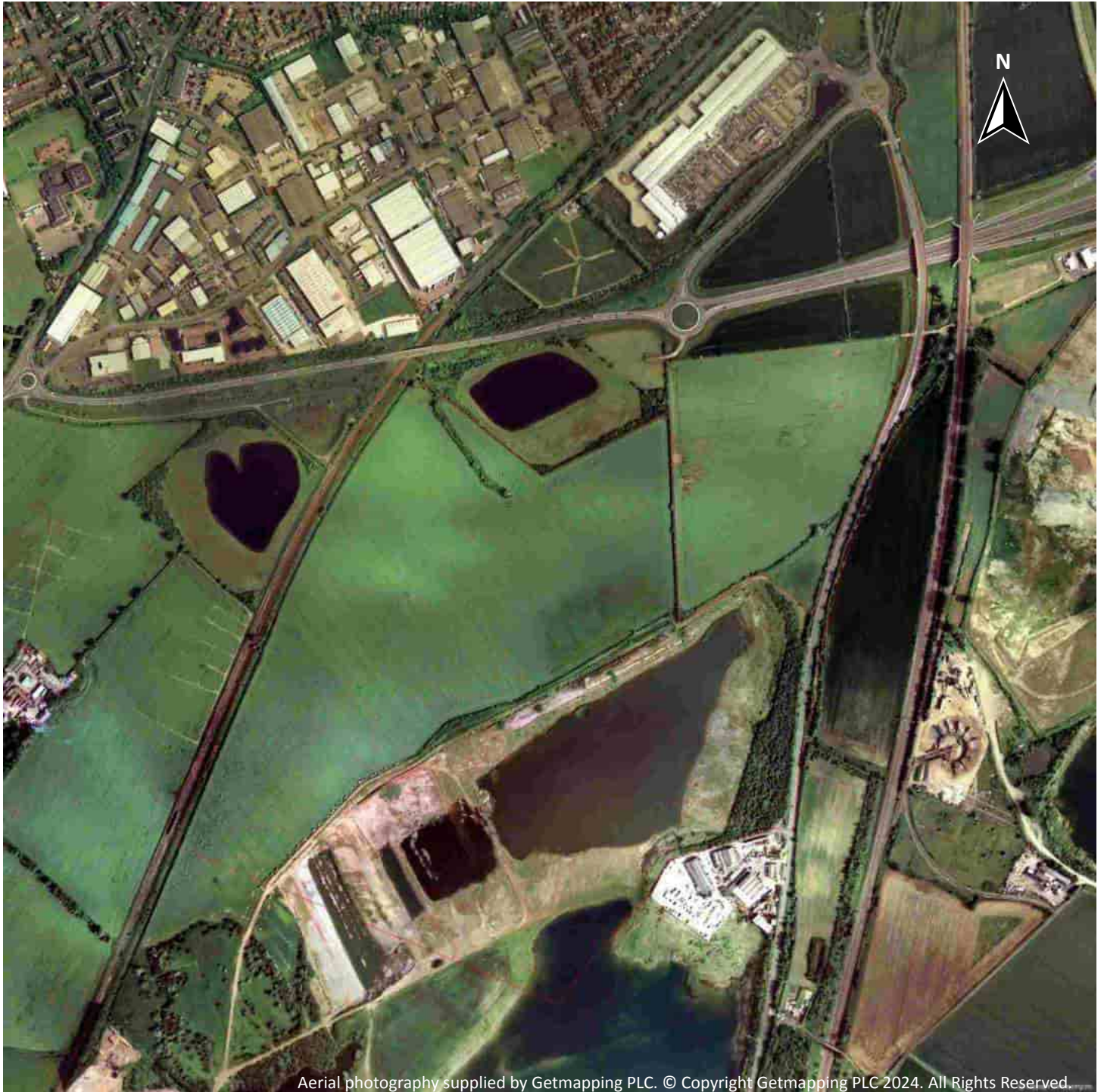
[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024



## Recent site history - 2000 aerial photograph



Capture Date: 10/06/2000

Site Area: 68.46ha



Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024



## Recent site history - 1999 aerial photograph



Capture Date: 25/05/1999

Site Area: 68.46ha



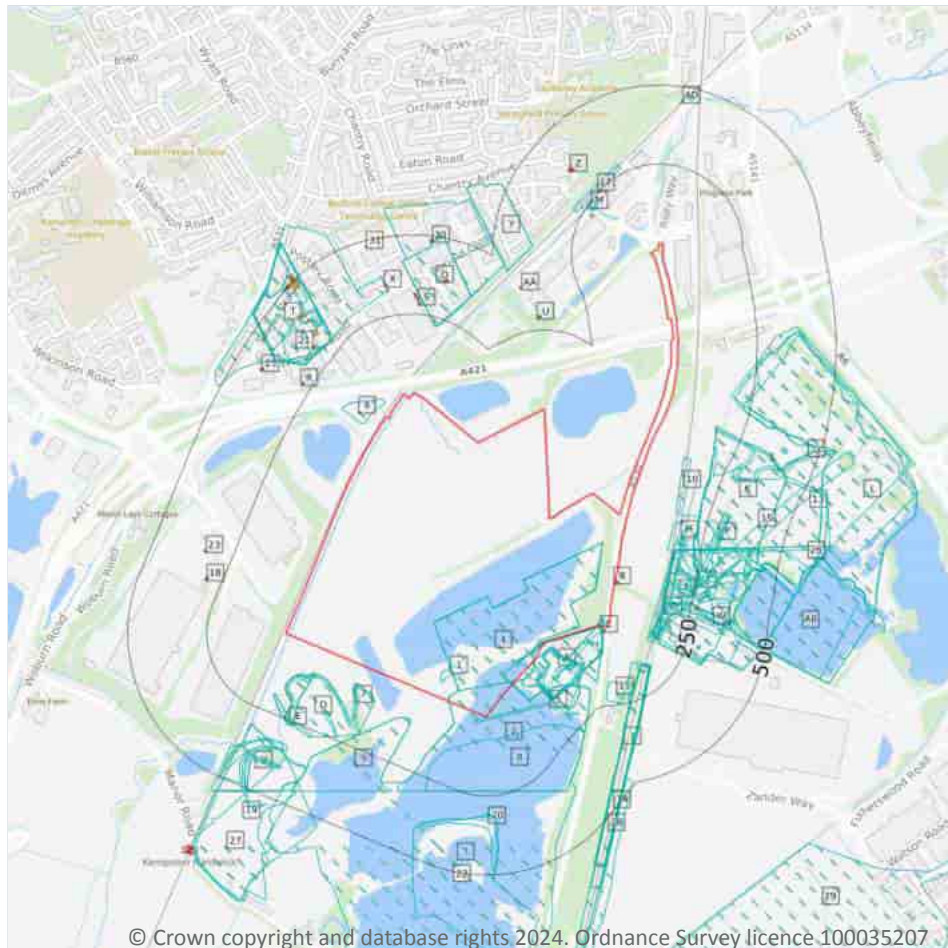
Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024

## 1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

### 1.1 Historical industrial land uses

Records within 500m

128

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
1	On site	Unspecified Heap	1971	2053935



ID	Location	Land use	Dates present	Group ID
2	On site	Clay Pit	1978	2102834
3	On site	Unspecified Disused Pit	1980 - 1989	2114565
4	On site	Clay Pit	1987	2114637
A	On site	Unspecified Works	1971	2068043
A	On site	Brick Works	1924	2072027
A	On site	Brick Works	1948	2080190
A	On site	Bricks Works	1938	2082047
A	On site	Unspecified Works	1959	2103920
5	3m S	Unspecified Ground Workings	1971	2060262
A	17m SE	Unspecified Pit	1938	2077132
A	19m SE	Unspecified Ground Workings	1924	2060263
A	24m SE	Brick Works	1900	2082454
6	32m NW	Unspecified Pit	1987	2041044
A	38m SE	Unspecified Works	1987	2115196
A	38m SE	Unspecified Works	1978	2120101
7	58m SW	Unspecified Ground Workings	1948	2060261
D	61m SW	Unspecified Heap	1959	2121811
8	68m S	Clay Pit	1971	2106481
A	74m SE	Unspecified Heap	1948	2053936
E	81m SW	Unspecified Ground Workings	1948	2060260
E	84m SW	Unspecified Heap	1978	2075768
E	84m SW	Unspecified Heap	1971	2108128
E	84m SW	Unspecified Heap	1987	2109310
A	89m SE	Railway Sidings	1924	2062189
9	99m S	Clay Pit	1978	2048209
10	114m NE	Cuttings	1882	2061441
F	129m SE	Railway Sidings	1959	2080451
G	132m SE	Railway Sidings	1971	2082587





ID	Location	Land use	Dates present	Group ID
11	135m SE	Old Clay Pits	1882	2042509
G	139m E	Railway Sidings	1948	2074335
G	142m E	Railway Sidings	1938	2119917
H	147m E	Railway Sidings	1938	2072099
G	147m SE	Railway Sidings	1900 - 1924	2073062
I	149m E	Brick Works	1900 - 1924	2096976
G	150m E	Unspecified Works	1959	2046268
J	157m SE	Cuttings	1938 - 1948	2074736
J	157m SE	Cuttings	1900	2075652
J	157m SE	Cuttings	1924	2067323
G	159m E	Brick Works	1971	2122200
G	159m SE	Unspecified Disused Works	1978	2053703
12	159m SE	Cuttings	1959 - 1971	2094316
J	159m SE	Cuttings	1978 - 1989	2107952
I	160m E	Brick Works	1948	2067822
K	162m NE	Clay Pit	1924 - 1938	2103361
I	163m E	Bricks Works	1938	2104510
K	165m NE	Clay Pit	1938	2116530
13	168m NE	Unspecified Ground Workings	1948	2084382
14	170m SE	Cuttings	1882	2095329
D	178m SW	Unspecified Ground Workings	1948	2060269
F	178m E	Unspecified Heap	1900	2110403
H	183m E	Railway Sidings	1924	2092438
L	183m NE	Refuse Heap	1987	2098965
15	184m NE	Unspecified Ground Workings	1959	2114018
L	196m NE	Unspecified Pit	1959	2041039
N	220m N	Industrial Estate	1987	2051261
O	220m N	Unspecified Warehouses	1971	2072338



ID	Location	Land use	Dates present	Group ID
O	220m N	Unspecified Warehouses	1978	2123353
M	225m N	Abattoir	1987	2062698
G	226m E	Chimneys	1971	2055369
G	226m E	Chimney	1978	2058681
F	230m E	Unspecified Ground Workings	1938	2101524
M	232m N	Slaughter House	1978	2099564
M	232m N	Slaughter House	1971	2114992
F	232m E	Unspecified Ground Workings	1924	2103858
L	238m NE	Refuse Heap	1978	2085130
16	243m SE	Wind Pump	1924	2059025
I	244m E	Unspecified Pit	1900	2041042
F	246m E	Tramway Sidings	1924	2052184
F	248m E	Unspecified Heaps	1948	2049731
P	254m E	Unspecified Pit	1971	2041041
17	254m N	Cuttings	1882	2061440
F	257m E	Unspecified Ground Workings	1924	2067018
P	269m E	Tramway Sidings	1938 - 1948	2113935
Q	271m E	Unspecified Ground Workings	1971	2067019
P	273m E	Tramway Sidings	1938	2101872
P	281m E	Tramway Sidings	1924	2064424
T	282m NW	Sewage Works	1938 - 1948	2115997
T	282m NW	Unspecified Works	1959	2046255
T	282m NW	Sewage Works	1978	2077974
T	282m NW	Sewage Works	1971	2118893
T	283m NW	Sewage Works	1924	2095398
T	286m NW	Industrial Estate	1987	2099571
G	287m E	Chimney	1959	2123332
F	288m E	Unspecified Heap	1948	2053941



ID	Location	Land use	Dates present	Group ID
G	288m E	Chimneys	1971	2055370
G	288m E	Chimney	1978	2071047
19	307m SW	Brick Works	1978 - 1989	2064290
V	307m SW	Brick Works	1971	2107269
20	309m S	Unspecified Pit	1948	2041043
21	311m NW	Refuse Heap	1971	2063107
22	314m S	Clay Pit	1959	2048205
F	316m E	Unspecified Heap	1971	2053942
V	325m SW	Railway Sidings	1948	2065517
V	325m SW	Railway Sidings	1959	2092166
W	326m E	Chimney	1959	2114823
V	327m SW	Railway Sidings	1971	2086766
W	329m E	Chimney	1978	2116315
T	330m NW	Filter Beds	1978	2050536
T	340m NW	Filter Beds	1978	2050537
T	340m NW	Unspecified Tanks	1959 - 1971	2074529
T	341m NW	Unspecified Tanks	1948	2085539
Y	354m N	Unspecified Works	1978	2111805
Q	355m E	Unspecified Tanks	1924 - 1948	2076739
24	360m SW	Bricks Works	1938	2094376
Q	363m E	Unspecified Tanks	1938 - 1948	2121122
Q	364m E	Unspecified Tanks	1924	2075677
Q	364m E	Unspecified Tanks	1938	2090192
Y	374m N	Engineering Works	1971	2059808
Q	384m E	Shooting Range	1987	2079841
Q	384m E	Shooting Range	1971	2093432
Q	384m E	Shooting Range	1978	2107451
AB	388m E	Clay Pit	1971	2048213





ID	Location	Land use	Dates present	Group ID
AB	391m E	Unspecified Disused Pit	1987	2097301
AB	391m E	Unspecified Disused Pit	1978	2117563
V	393m SW	Unspecified Ground Workings	1948	2076602
V	396m SW	Unspecified Heap	1959	2053934
F	397m E	Unspecified Ground Workings	1948	2079812
AC	404m NW	Industrial Estate	1987	2067243
T	425m NW	Unspecified Tanks	1924	2054907
26	439m E	Unspecified Heap	1948	2053940
AD	446m NE	Railway Building	1938 - 1948	2111991
27	447m SW	Unspecified Works	1959	2046254
28	456m SE	Cuttings	1959	2099204
AD	461m NE	Railway Building	1938 - 1948	2082508
29	467m SE	Railway Sidings	1948	2073425
T	497m NW	Pump House	1938 - 1948	2094874
T	499m NW	Pump House	1924	2066236

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.2 Historical tanks

### Records within 500m

**30**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
A	70m SE	Unspecified Tank	1997	343516
A	100m SE	Unspecified Tank	1926	343513
M	221m N	Unspecified Tank	1982 - 1987	351912



ID	Location	Land use	Dates present	Group ID
M	249m N	Unspecified Tank	1982 - 1987	356017
M	259m N	Unspecified Tank	1982	358611
M	260m N	Unspecified Tank	1986 - 1987	351173
G	266m E	Tanks	1926	348133
S	282m N	Unspecified Tank	1989 - 1994	354497
U	287m N	Unspecified Tank	1997	343512
U	291m N	Unspecified Tank	1996 - 1997	350508
S	294m N	Unspecified Tank	1994	356006
S	295m N	Unspecified Tank	1989 - 1990	351002
18	296m W	Unspecified Tank	1968 - 1993	353940
23	330m W	Tanks	1968 - 1993	352680
T	331m NW	Unspecified Tank	1968	349764
X	343m N	Tanks	1983 - 1990	354114
Q	360m E	Tanks	1926	348132
Q	365m E	Tanks	1926	348131
T	377m NW	Unspecified Tank	1968	343519
T	394m NW	Unspecified Tank	1986 - 1990	352896
T	473m NW	Tanks	1968 - 1990	350226
T	473m NW	Tanks	1966 - 1971	349951
T	492m NW	Tanks	1968	355663
T	492m NW	Tanks	1966 - 1971	349835
Y	492m N	Unspecified Tank	1982	343509
T	493m NW	Tanks	1986 - 1990	353793
T	493m NW	Tanks	1926	356320
T	499m NW	Tanks	1966 - 1971	351809
T	499m NW	Tanks	1926	353683
T	499m NW	Tanks	1986 - 1990	354453

*This data is sourced from Ordnance Survey / Groundsure.*



### 1.3 Historical energy features

#### Records within 500m

24

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
B	2m E	Electricity Substation	1997	225225
B	8m E	Electricity Substation	1991	230609
C	9m SE	Electricity Substation	1968 - 1997	233414
C	9m SE	Electricity Substation	1991	225224
M	218m N	Electricity Substation	1996 - 1997	231179
R	276m NW	Electricity Substation	1990	228752
R	276m NW	Electricity Substation	1993	227886
S	302m N	Electricity Substation	1989 - 1994	235694
T	314m NW	Electricity Substation	1990 - 1993	229696
X	327m N	Electricity Substation	1990 - 1994	231288
Z	354m N	Electricity Substation	1994 - 1997	239657
Z	361m N	Electricity Substation	1982 - 1987	236022
Z	362m N	Electricity Substation	1996	228809
O	364m N	Electricity Substation	1976	236847
O	364m N	Electricity Substation	1983 - 1990	238681
O	365m N	Electricity Substation	1994	225273
AA	387m N	Electricity Substation	1997	228579
AA	390m N	Electricity Substation	1996	228450
25	409m NW	Electricity Substation	1990 - 1993	238099
N	454m N	Electricity Substation	1994	225272
AC	456m NW	Electricity Substation	1986 - 1993	231736



ID	Location	Land use	Dates present	Group ID
T	478m NW	Electricity Substation	1984 - 1991	233924
30	480m N	Electricity Substation	1976 - 1994	232307
31	481m N	Electricity Substation	1994	225274

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.4 Historical petrol stations

<b>Records within 500m</b>	<b>0</b>
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Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.5 Historical garages

<b>Records within 500m</b>	<b>0</b>
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Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

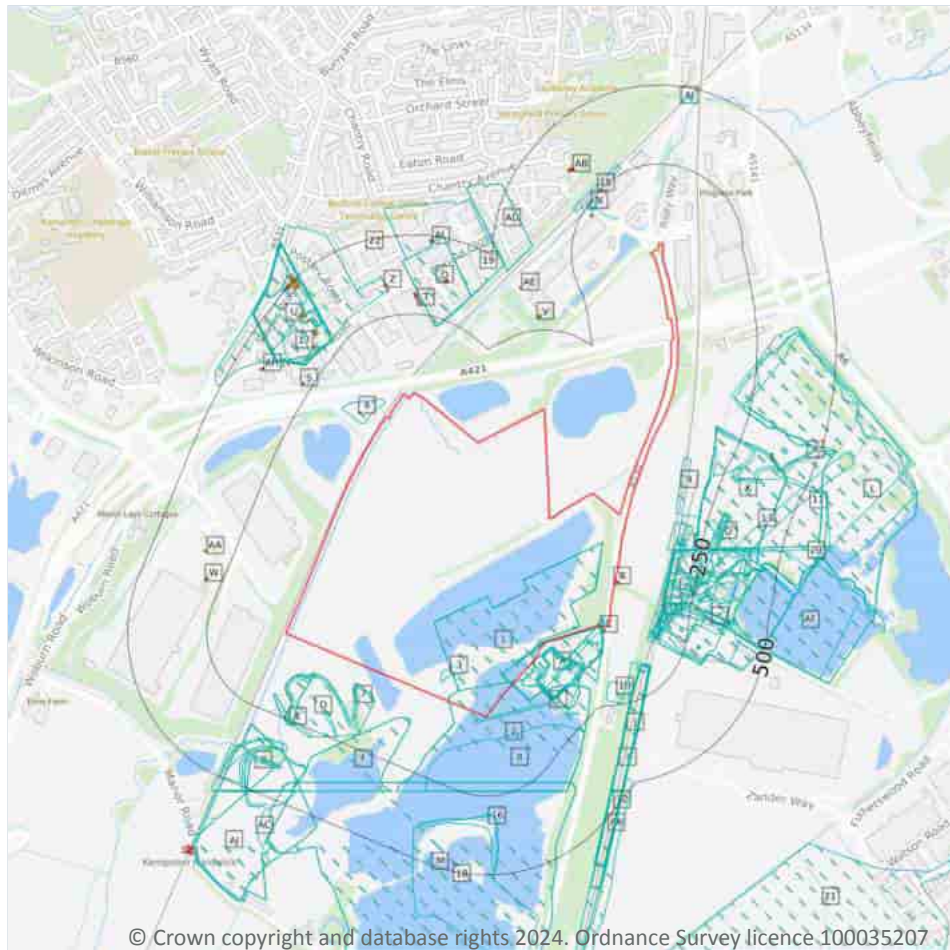
## 1.6 Historical military land

<b>Records within 500m</b>	<b>0</b>
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Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

*This data is sourced from Ordnance Survey / Groundsure / other sources.*

## 2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

### 2.1 Historical industrial land uses

Records within 500m

162

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 23](#) >

ID	Location	Land Use	Date	Group ID
1	On site	Clay Pit	1987	2114637
2	On site	Clay Pit	1978	2102834
3	On site	Unspecified Heap	1971	2053935



ID	Location	Land Use	Date	Group ID
4	On site	Unspecified Disused Pit	1987	2114565
A	On site	Brick Works	1948	2080190
A	On site	Brick Works	1924	2072027
A	On site	Unspecified Works	1971	2068043
A	On site	Unspecified Works	1959	2103920
A	On site	Bricks Works	1938	2082047
A	On site	Bricks Works	1938	2082047
5	3m S	Unspecified Ground Workings	1971	2060262
A	17m SE	Unspecified Pit	1938	2077132
A	17m SE	Unspecified Pit	1938	2077132
A	19m SE	Unspecified Ground Workings	1924	2060263
A	24m SE	Brick Works	1900	2082454
6	32m NW	Unspecified Pit	1987	2041044
A	38m SE	Unspecified Works	1987	2115196
A	38m SE	Unspecified Works	1978	2120101
7	58m SW	Unspecified Ground Workings	1948	2060261
D	61m SW	Unspecified Heap	1959	2121811
8	68m S	Clay Pit	1971	2106481
A	74m SE	Unspecified Heap	1948	2053936
E	81m SW	Unspecified Ground Workings	1948	2060260
E	84m SW	Unspecified Heap	1971	2108128
E	84m SW	Unspecified Heap	1987	2109310
E	84m SW	Unspecified Heap	1978	2075768
A	89m SE	Railway Sidings	1924	2062189
F	99m S	Clay Pit	1978	2048209
F	99m S	Unspecified Disused Pit	1987	2114565
9	114m NE	Cuttings	1882	2061441
G	129m SE	Railway Sidings	1959	2080451





ID	Location	Land Use	Date	Group ID
H	132m SE	Railway Sidings	1971	2082587
10	135m SE	Old Clay Pits	1882	2042509
H	139m E	Railway Sidings	1948	2074335
H	142m E	Railway Sidings	1938	2119917
G	147m E	Railway Sidings	1938	2072099
H	147m SE	Railway Sidings	1900	2073062
G	149m E	Brick Works	1900	2096976
H	150m E	Unspecified Works	1959	2046268
G	153m E	Brick Works	1924	2096976
H	155m E	Railway Sidings	1924	2073062
I	157m SE	Cuttings	1938	2074736
I	157m SE	Cuttings	1948	2074736
I	157m SE	Cuttings	1900	2075652
I	157m SE	Cuttings	1924	2067323
H	159m E	Brick Works	1971	2122200
H	159m SE	Unspecified Disused Works	1978	2053703
J	159m SE	Cuttings	1971	2094316
J	159m SE	Cuttings	1987	2107952
J	159m SE	Cuttings	1978	2107952
J	159m SE	Cuttings	1959	2094316
G	160m E	Brick Works	1948	2067822
K	162m NE	Clay Pit	1938	2103361
G	163m E	Bricks Works	1938	2104510
G	163m E	Bricks Works	1938	2104510
K	165m NE	Clay Pit	1938	2116530
K	166m NE	Clay Pit	1924	2103361
11	168m NE	Unspecified Ground Workings	1948	2084382
12	170m SE	Cuttings	1882	2095329



ID	Location	Land Use	Date	Group ID
G	170m E	Railway Sidings	1938	2072099
D	178m SW	Unspecified Ground Workings	1948	2060269
G	178m E	Unspecified Heap	1900	2110403
G	183m E	Railway Sidings	1924	2092438
L	183m NE	Refuse Heap	1987	2098965
13	184m NE	Unspecified Ground Workings	1959	2114018
G	190m E	Unspecified Heap	1900	2110403
L	196m NE	Unspecified Pit	1959	2041039
M	207m S	Unspecified Disused Pit	1989	2114565
M	207m S	Unspecified Disused Pit	1980	2114565
O	220m N	Unspecified Warehouses	1971	2072338
O	220m N	Unspecified Warehouses	1978	2123353
P	220m N	Industrial Estate	1987	2051261
N	225m N	Abattoir	1987	2062698
H	226m E	Chimneys	1971	2055369
H	226m E	Chimney	1978	2058681
G	230m E	Unspecified Ground Workings	1938	2101524
G	230m E	Unspecified Ground Workings	1938	2101524
N	232m N	Slaughter House	1971	2114992
N	232m N	Slaughter House	1978	2099564
G	232m E	Unspecified Ground Workings	1924	2103858
L	238m NE	Refuse Heap	1978	2085130
14	243m SE	Wind Pump	1924	2059025
G	244m E	Unspecified Pit	1900	2041042
G	246m E	Tramway Sidings	1924	2052184
G	248m E	Unspecified Heaps	1948	2049731
Q	254m E	Unspecified Pit	1971	2041041
15	254m N	Cuttings	1882	2061440



ID	Location	Land Use	Date	Group ID
G	257m E	Unspecified Ground Workings	1924	2067018
Q	269m E	Tramway Sidings	1938	2113935
R	271m E	Unspecified Ground Workings	1971	2067019
Q	273m E	Tramway Sidings	1938	2101872
Q	273m E	Tramway Sidings	1948	2113935
Q	281m E	Tramway Sidings	1924	2064424
U	282m NW	Sewage Works	1938	2115997
U	282m NW	Sewage Works	1948	2115997
U	282m NW	Sewage Works	1971	2118893
U	282m NW	Sewage Works	1978	2077974
U	282m NW	Unspecified Works	1959	2046255
U	282m NW	Sewage Works	1938	2115997
U	282m NW	Sewage Works	1938	2115997
U	283m NW	Sewage Works	1924	2095398
U	286m NW	Industrial Estate	1987	2099571
H	287m E	Chimney	1959	2123332
G	288m E	Unspecified Heap	1948	2053941
H	288m E	Chimneys	1971	2055370
H	288m E	Chimney	1978	2071047
X	307m SW	Brick Works	1971	2107269
X	307m SW	Brick Works	1987	2064290
X	307m SW	Brick Works	1978	2064290
16	309m S	Unspecified Pit	1948	2041043
17	311m NW	Refuse Heap	1971	2063107
18	314m S	Clay Pit	1959	2048205
G	316m E	Unspecified Heap	1971	2053942
X	325m SW	Railway Sidings	1948	2065517
X	325m SW	Railway Sidings	1959	2092166



ID	Location	Land Use	Date	Group ID
Y	326m E	Chimney	1959	2114823
X	327m SW	Railway Sidings	1971	2086766
Y	329m E	Chimney	1978	2116315
U	330m NW	Filter Beds	1978	2050536
U	340m NW	Unspecified Tanks	1971	2074529
U	340m NW	Filter Beds	1978	2050537
U	340m NW	Unspecified Tanks	1959	2074529
U	341m NW	Unspecified Tanks	1948	2085539
19	354m N	Unspecified Works	1978	2111805
R	355m E	Unspecified Tanks	1938	2076739
R	355m E	Unspecified Tanks	1948	2076739
R	357m E	Unspecified Tanks	1924	2076739
AC	360m SW	Bricks Works	1938	2094376
AC	360m SW	Bricks Works	1938	2094376
R	363m E	Unspecified Tanks	1938	2121122
R	363m E	Unspecified Tanks	1948	2121122
R	364m E	Unspecified Tanks	1924	2075677
R	364m E	Unspecified Tanks	1938	2090192
AD	374m N	Engineering Works	1971	2059808
AD	374m N	Unspecified Works	1978	2111805
R	384m E	Shooting Range	1971	2093432
R	384m E	Shooting Range	1987	2079841
R	384m E	Shooting Range	1978	2107451
AF	388m E	Clay Pit	1971	2048213
AF	391m E	Unspecified Disused Pit	1987	2097301
AF	391m E	Unspecified Disused Pit	1978	2117563
X	393m SW	Unspecified Ground Workings	1948	2076602
X	396m SW	Unspecified Heap	1959	2053934



ID	Location	Land Use	Date	Group ID
G	397m E	Unspecified Ground Workings	1948	2079812
AG	404m NW	Industrial Estate	1987	2067243
U	425m NW	Unspecified Tanks	1924	2054907
20	439m E	Unspecified Heap	1948	2053940
AI	446m NE	Railway Building	1938	2111991
AI	446m NE	Railway Building	1948	2111991
AJ	447m SW	Unspecified Works	1959	2046254
AJ	450m SW	Brick Works	1989	2064290
AJ	450m SW	Brick Works	1980	2064290
AK	456m SE	Cuttings	1959	2099204
AK	458m SE	Cuttings	1989	2107952
AK	458m SE	Cuttings	1980	2107952
AI	461m NE	Railway Building	1938	2082508
AI	461m NE	Railway Building	1948	2082508
21	467m SE	Railway Sidings	1948	2073425
U	497m NW	Pump House	1938	2094874
U	497m NW	Pump House	1938	2094874
U	497m NW	Pump House	1948	2094874
U	499m NW	Pump House	1924	2066236

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.2 Historical tanks

**Records within 500m**

**54**

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 23 >](#)

ID	Location	Land Use	Date	Group ID
A	70m SE	Unspecified Tank	1997	343516



ID	Location	Land Use	Date	Group ID
A	100m SE	Unspecified Tank	1926	343513
N	221m N	Unspecified Tank	1982	351912
N	222m N	Unspecified Tank	1987	351912
N	222m N	Unspecified Tank	1986	351912
N	249m N	Unspecified Tank	1982	356017
N	250m N	Unspecified Tank	1987	356017
N	250m N	Unspecified Tank	1986	356017
N	259m N	Unspecified Tank	1982	358611
N	260m N	Unspecified Tank	1987	351173
N	260m N	Unspecified Tank	1986	351173
H	266m E	Tanks	1926	348133
T	282m N	Unspecified Tank	1994	354497
T	283m N	Unspecified Tank	1990	354497
T	283m N	Unspecified Tank	1989	354497
V	287m N	Unspecified Tank	1997	343512
V	291m N	Unspecified Tank	1996	350508
V	291m N	Unspecified Tank	1997	350508
T	294m N	Unspecified Tank	1994	356006
T	295m N	Unspecified Tank	1990	351002
T	295m N	Unspecified Tank	1989	351002
W	296m W	Unspecified Tank	1968	353940
W	296m W	Unspecified Tank	1993	353940
AA	330m W	Tanks	1968	352680
AA	331m W	Tanks	1993	352680
U	331m NW	Unspecified Tank	1968	349764
U	334m NW	Unspecified Tank	1968	349764
Z	343m N	Tanks	1983	354114
Z	343m N	Tanks	1988	354114





ID	Location	Land Use	Date	Group ID
Z	343m N	Tanks	1990	354114
Z	343m N	Tanks	1989	354114
R	360m E	Tanks	1926	348132
R	365m E	Tanks	1926	348131
U	377m NW	Unspecified Tank	1968	343519
U	394m NW	Unspecified Tank	1986	352896
U	394m NW	Unspecified Tank	1990	352896
U	473m NW	Tanks	1968	350226
U	473m NW	Tanks	1971	349951
U	473m NW	Tanks	1966	349951
U	473m NW	Tanks	1986	350226
U	473m NW	Tanks	1990	350226
U	492m NW	Tanks	1968	355663
U	492m NW	Tanks	1971	349835
U	492m NW	Tanks	1966	349835
AD	492m N	Unspecified Tank	1982	343509
U	493m NW	Tanks	1986	353793
U	493m NW	Tanks	1990	353793
U	493m NW	Tanks	1926	356320
U	499m NW	Tanks	1968	351809
U	499m NW	Tanks	1926	353683
U	499m NW	Tanks	1971	351809
U	499m NW	Tanks	1966	351809
U	499m NW	Tanks	1986	354453
U	499m NW	Tanks	1990	354453

*This data is sourced from Ordnance Survey / Groundsure.*



## 2.3 Historical energy features

### Records within 500m

50

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 23 >](#)

ID	Location	Land Use	Date	Group ID
B	2m E	Electricity Substation	1997	225225
B	8m E	Electricity Substation	1991	230609
B	8m E	Electricity Substation	1991	230609
C	9m SE	Electricity Substation	1997	233414
C	9m SE	Electricity Substation	1991	225224
C	12m SE	Electricity Substation	1968	233414
C	12m SE	Electricity Substation	1991	233414
N	218m N	Electricity Substation	1997	231179
N	220m N	Electricity Substation	1996	231179
S	276m NW	Electricity Substation	1990	228752
S	276m NW	Electricity Substation	1993	227886
T	302m N	Electricity Substation	1994	235694
T	303m N	Electricity Substation	1990	235694
T	303m N	Electricity Substation	1989	235694
U	314m NW	Electricity Substation	1990	229696
U	315m NW	Electricity Substation	1993	229696
Z	327m N	Electricity Substation	1994	231288
Z	329m N	Electricity Substation	1990	231288
AB	354m N	Electricity Substation	1997	239657
AB	354m N	Electricity Substation	1994	239657
AB	361m N	Electricity Substation	1987	236022
AB	361m N	Electricity Substation	1986	236022
AB	361m N	Electricity Substation	1982	236022



ID	Location	Land Use	Date	Group ID
AB	362m N	Electricity Substation	1996	228809
O	364m N	Electricity Substation	1976	236847
O	364m N	Electricity Substation	1983	238681
O	364m N	Electricity Substation	1988	238681
O	364m N	Electricity Substation	1990	238681
O	364m N	Electricity Substation	1989	238681
O	365m N	Electricity Substation	1994	225273
AE	387m N	Electricity Substation	1997	228579
AE	390m N	Electricity Substation	1996	228450
AH	409m NW	Electricity Substation	1993	238099
AH	410m NW	Electricity Substation	1990	238099
P	454m N	Electricity Substation	1994	225272
AG	456m NW	Electricity Substation	1993	231736
AG	457m NW	Electricity Substation	1986	231736
AG	457m NW	Electricity Substation	1990	231736
U	478m NW	Electricity Substation	1991	233924
U	478m NW	Electricity Substation	1984	233924
U	478m NW	Electricity Substation	1988	233924
U	478m NW	Electricity Substation	1988	233924
U	478m NW	Electricity Substation	1990	233924
AL	480m N	Electricity Substation	1976	232307
AL	480m N	Electricity Substation	1994	232307
AL	481m N	Electricity Substation	1983	232307
AL	481m N	Electricity Substation	1988	232307
AL	481m N	Electricity Substation	1990	232307
AL	481m N	Electricity Substation	1989	232307
22	481m N	Electricity Substation	1994	225274

*This data is sourced from Ordnance Survey / Groundsure.*



## 2.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.5 Historical garages

Records within 500m

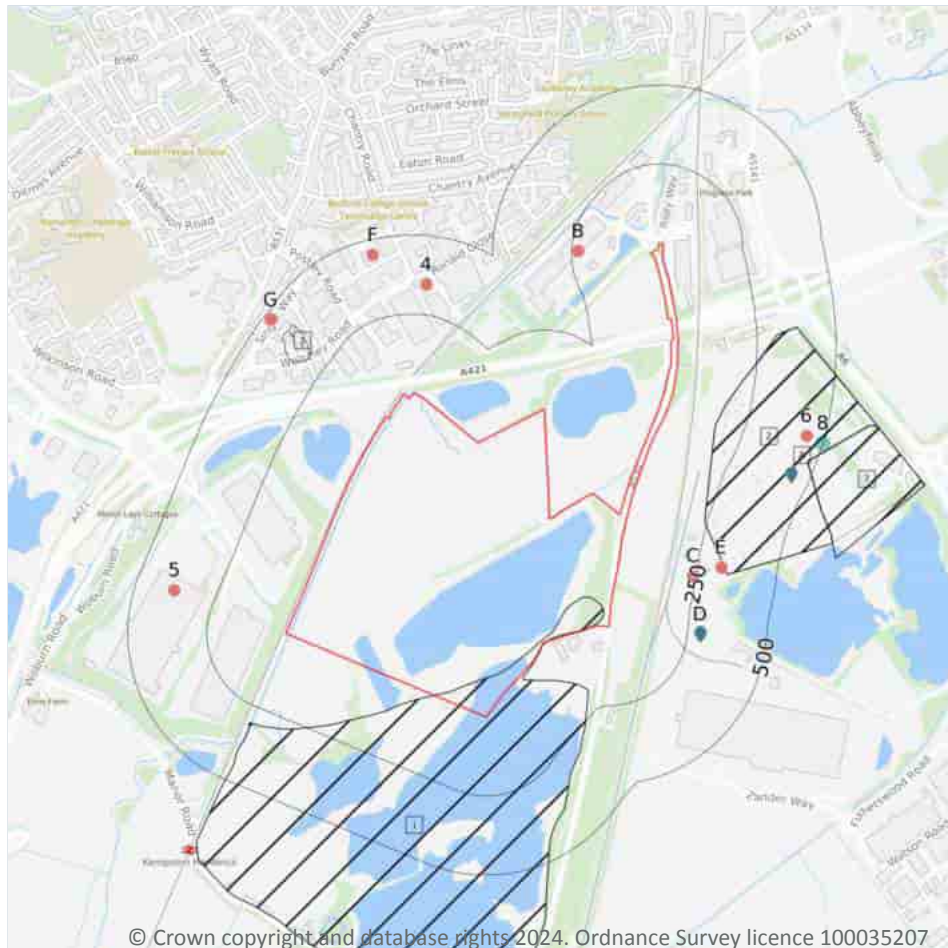
0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*



## 3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Active or recent landfill
- Historical landfill (EA/NRW)
- Historical landfill (BGS)
- Historical landfill (LA/OS)
- Licensed waste sites
- Waste exemptions

### 3.1 Active or recent landfill

#### Records within 500m

1

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation. Features are displayed on the Waste and landfill map on [page 35](#) >

ID	Location	Details	
A	159m NE	Operator: Bedfordshire County Council Site Address: Elstow Landfill Site A6, Wilstead Road, Elstow, Bedfordshire, MK42 9YU	WML Number: 70037 EPR Reference: BED005 Landfill type: A04: Household, Commercial & Industrial Waste Landfill Status: Closure IPPC Reference: - EPR Number: EA/EPR/UP3590NT/A001



*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.2 Historical landfill (BGS records)

#### Records within 500m

**1**

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

Features are displayed on the Waste and landfill map on [page 35 >](#)

ID	Location	Address	BGS Number	Risk	Waste Type
8	499m E	London Brick Land Ltd, Elstow, Bedford	2255	No risk to aquifer	N/A

*This data is sourced from the British Geological Survey.*

### 3.3 Historical landfill (LA/mapping records)

#### Records within 500m

**1**

Landfill sites identified from Local Authority records and high detail historical mapping.

Features are displayed on the Waste and landfill map on [page 35 >](#)

ID	Location	Site address	Source	Data type
3	307m NW	Refuse Tip	1968 mapping	Polygon

*This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.*

### 3.4 Historical landfill (EA/NRW records)

#### Records within 500m

**3**

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on [page 35 >](#)





ID	Location	Details		
1	On site	<b>Site Address:</b> Clay Pit, Adjacent Kempston Hardwick Works, Kempston Hardwick, Bedfordshire <b>Licence Holder Address:</b> Property Department, Stewartby, Bedford	<b>Waste Licence:</b> Yes <b>Site Reference:</b> 18/1977, PIT 63 <b>Waste Type:</b> Inert, Industrial, Commercial, Household <b>Environmental Permitting Regulations (Waste) Reference:</b> - <b>Licence Issue:</b> 05/12/1977 <b>Licence Surrender:</b> 28/04/1994	<b>Operator:</b> - <b>Licence Holder:</b> London Brick Landfill Limited <b>First Recorded:</b> 31/12/1977 <b>Last Recorded:</b> 31/12/1993
2	159m NE	<b>Site Address:</b> Elstow Brickworks, Estow, Bedfordshire <b>Licence Holder Address:</b> Department of Technical Services, Town Hall, St Pauls Square, Bedford	<b>Waste Licence:</b> - <b>Site Reference:</b> 5/1976, PIT 55 <b>Waste Type:</b> Inert, Industrial, Commercial, Household <b>Environmental Permitting Regulations (Waste) Reference:</b> - <b>Licence Issue:</b> - <b>Licence Surrender:</b> -	<b>Operator:</b> - <b>Licence Holder:</b> London Brickworks Company <b>First Recorded:</b> 01/09/1964 <b>Last Recorded:</b> 01/12/1996
7	473m E	<b>Site Address:</b> Elstow Landfill, Estow, Bedfordshire <b>Licence Holder Address:</b> Property Department, Stewartby, Bedford	<b>Waste Licence:</b> Yes <b>Site Reference:</b> 10/1977 <b>Waste Type:</b> Inert, Industrial, Commercial, Household, Special, Liquid sludge <b>Environmental Permitting Regulations (Waste) Reference:</b> - <b>Licence Issue:</b> 05/12/1977 <b>Licence Surrender:</b> 21/05/1993	<b>Operator:</b> - <b>Licence Holder:</b> Landfill Limited <b>First Recorded:</b> 01/09/1964 <b>Last Recorded:</b> 21/05/1993

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.5 Historical waste sites

<b>Records within 500m</b>	<b>0</b>
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Waste site records derived from Local Authority planning records and high detail historical mapping.

*This data is sourced from Ordnance Survey/Groundsure and Local Authority records.*

### 3.6 Licensed waste sites

<b>Records within 500m</b>	<b>5</b>
----------------------------	----------

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on [page 35 >](#)



ID	Location	Details		
D	288m E	Site Name: Elstow Recycling Site Address: Elstow Recycling, Wilstead Road, Elstow, Bedford, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Inert & excavation Waste TS + treatment Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TTL003 EPR reference: EA/EPR/EB3000HC/A001 Operator: Tarmac Trading Ltd Waste Management licence No: 403156 Annual Tonnage: 74999	Issue Date: 04/03/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
D	288m E	Site Name: Elstow Recycling Site Address: Elstow Recycling, Wilstead Road, Elstow, Bedford, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Inert & excavation Waste TS + treatment Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TTL003 EPR reference: EA/EPR/EB3000HC/A001 Operator: Tarmac Trading Ltd Waste Management licence No: 403156 Annual Tonnage: 74999	Issue Date: 04/03/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
D	288m E	Site Name: Elstow Recycling Site Address: Elstow Recycling, Wilstead Road, Elstow, Bedford, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Inert & excavation Waste TS + treatment Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TTL003 EPR reference: EA/EPR/EB3000HC/A001 Operator: Tarmac Trading Limited Waste Management licence No: 403156 Annual Tonnage: 74999	Issue Date: 04/03/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
D	288m E	Site Name: Elstow Recycling Site Address: Elstow Recycling, Wilstead Road, Elstow, Bedford, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Inert & excavation Waste TS + treatment Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 651322 EPR reference: EA/EPR/EB3000HC Operator: Tarmac Trading Limited Waste Management licence No: 403156 Annual Tonnage: 0	Issue Date: 04/03/2016 Effective Date: 04/03/2016 Modified: - Surrendered Date: 04/03/2016 Expiry Date: - Cancelled Date: - Status: Surrendered



ID	Location	Details		
A	440m E	Site Name: Elstow Landfill Fridge Storage Site Address: Elstow Landfill, Wilstead Road, Elstow, Bedfordshire, MK42 9YU Correspondence Address: -	Type of Site: Metal Recycling Site (mixed MRS's) Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 640689 EPR reference: EA/EPR/BP3396NJ Operator: Bedfordshire County Council Waste Management licence No: 75082 Annual Tonnage: 1250	Issue Date: 23/10/2002 Effective Date: 23/10/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued

This data is sourced from the Environment Agency and Natural Resources Wales.

### 3.7 Waste exemptions

<b>Records within 500m</b>	<b>14</b>
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Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on [page 35 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
B	230m N	Inside Pets at Home, Interchange Retail Park, Bedford, MK42 7AZ	WEX388958	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
B	230m N	-	WEX260573	Treating waste exemption	Not on a farm	Sorting and de-naturing of controlled drugs for disposal
C	236m E	The Old Brickworks Wilstead Road BEDFORD MK42 9YU	EPR/WE5580 WQ/A001	Storing waste exemption	Both agricultural and non-agricultural waste	Storage of waste in a secure place
C	236m E	The Old Brickworks Wilstead Road BEDFORD MK42 9YU	EPR/WE5580 WQ/A001	Treating waste exemption	Both agricultural and non-agricultural waste	Screening and blending of waste
E	321m E	THE OLD BRICKWORKS, WILSTEAD ROAD, ELSTOW, BEDFORD, MK42 9YU	WEX004194	Storing waste exemption	Not on a farm	Storage of waste in a secure place
E	321m E	THE OLD BRICKWORKS, WILSTEAD ROAD, ELSTOW, BEDFORD, MK42 9YU	WEX004194	Treating waste exemption	Not on a farm	Screening and blending of waste

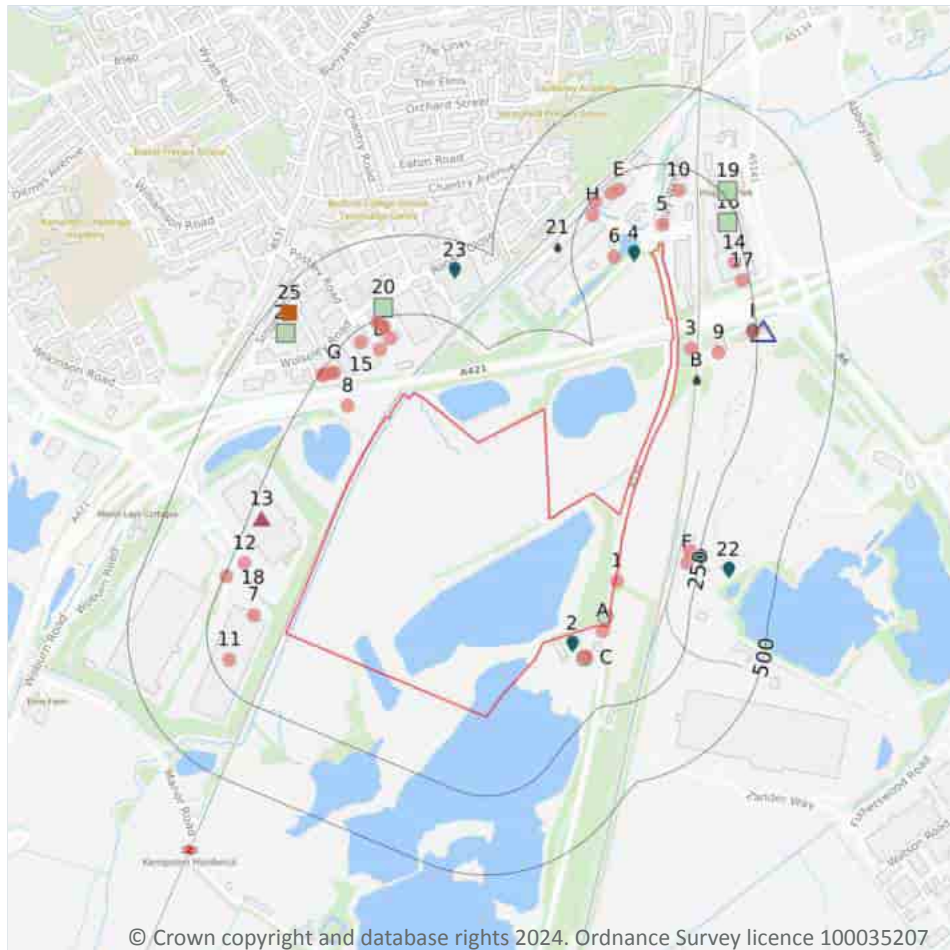


ID	Location	Site	Reference	Category	Sub-Category	Description
4	344m N	Flitwick frames ltd t/a yeomanupholstery, Unit 22 a chantry road, Woburn road ind estate, Kempston, Mk42 7su	WEX081966	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
5	379m W	Sainsburys Marsh Leys Industrial Estate Bedford Beds MK43 9AA	EPR/JF0606ST/A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes
6	442m E	-	WEX208328	Disposing of waste exemption	Not on a farm	Burning waste in the open
F	450m N	-	WEX262164	Storing waste exemption	Not on a farm	Storage of waste in a secure place
F	450m N	19, TRIUMPH WAY, WOBURN ROAD INDUSTRIAL ESTATE, KEMPSTON, BEDFORD, MK42 7QB	WEX121040	Storing waste exemption	Not on a farm	Storage of waste in a secure place
G	478m NW	34 Singer Way BEDFORD MK42 7AF	EPR/CE5580A U/A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of sludge
G	479m NW	-	WEX261154	Storing waste exemption	Not on a farm	Storage of waste in secure containers
G	479m NW	34, SINGER WAY, WOBURN ROAD INDUSTRIAL ESTATE, KEMPSTON, BEDFORD, MK42 7AF	WEX118850	Storing waste exemption	Not on a farm	Storage of waste in secure containers

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- △ Current or recent petrol stations
- ▲ Hazardous substance storage/usage
- ◆ Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollutant release to public sewer
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

### 4.1 Recent industrial land uses

Records within 250m

33

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 41](#) >

ID	Location	Company	Address	Activity	Category
1	6m E	Electricity Sub Station	Bedfordshire, MK45	Electrical Features	Infrastructure and Facilities
A	15m SE	Electricity Sub Station	Bedfordshire, MK45	Electrical Features	Infrastructure and Facilities
3	40m NE	Mast	Bedfordshire, MK45	Telecommunications Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
5	60m NE	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
C	82m SE	Unique Used Cars	Stanley Works 3, Ampthill Road, Kempston Hardwick, Bedfordshire, MK45 3JE	New Vehicles	Motoring
C	82m SE	A R Used Cars Ltd	Stanley Works 3, Ampthill Road, Kempston Hardwick, Bedfordshire, MK45 3JE	Secondhand Vehicles	Motoring
6	114m NE	webuyanycar.com	We Buy Any Car Pod, Race Meadows Way, Kempston, Bedfordshire, MK42 7AZ	Secondhand Vehicles	Motoring
7	118m W	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
8	122m NW	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
9	129m NE	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
D	159m N	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
10	178m NE	Motor Vogue	Unit 4, Riley Way, Kempston, Bedfordshire, MK42 7GB	New Vehicles	Motoring
D	182m N	Cranfield Precision	Woburn House 3, Adams Close, Kempston, Bedfordshire, MK42 7JE	Precision Engineers	Engineering Services
11	197m SW	Sainsburys D H L	Unit 3 Marsh Leys Farm, Woburn Road, Kempston, Bedfordshire, MK43 9AA	Distribution and Haulage	Transport, Storage and Delivery
12	207m W	Pumping Station	Bedfordshire, MK43	Water Pumping Stations	Industrial Features
E	212m NE	Bensons for Beds	Unit 3 Interchange Retail Park 3, Polo Field Way, Kempston, Bedfordshire, MK42 7AZ	Beds and Bedding	Consumer Products
14	213m NE	Movianto	1, Progress Park, Elstow, Bedfordshire, MK42 9XE	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
F	213m E	Hoppers	Bedfordshire, MK42	Hoppers and Silos	Farming
15	213m NW	Atlas Converting	-, Wolseley Road, Kempston, Bedfordshire, MK42 7XT	General Purpose Machinery	Industrial Products
F	217m E	Hoppers	Bedfordshire, MK42	Hoppers and Silos	Farming
G	217m NW	E R S	11-13 Wolseley Business Park, Kempston, Bedford, Bedfordshire, MK42 7PW	Office and Shop Equipment	Industrial Products





ID	Location	Company	Address	Activity	Category
E	218m N	Dreams Plc	Unit 2 Interchange Retail Park, Race Meadows Way, Kempston, Bedford, Bedfordshire, MK42 7AZ	Beds and Bedding	Consumer Products
D	220m N	Franco's Ices	2, Adams Close, Kempston, Bedfordshire, MK42 7JE	Dairy Products	Foodstuffs
D	220m N	Kartt Ltd	2, Adams Close, Kempston, Bedfordshire, MK42 7JE	Lifting and Handling Equipment	Industrial Products
H	221m N	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
G	222m NW	M & M International UK Ltd	12, Railton Road, Kempston, Bedfordshire, MK42 7PW	Seals, Tapes, Taps and Valves	Industrial Products
17	227m NE	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
G	235m NW	Instinctive Ltd	8, Railton Road, Kempston, Bedfordshire, MK42 7PN	Industrial Repairs and Servicing	Repair and Servicing
I	236m NE	BP Service Station	B P Connect, Wilstead Road, Elstow, Bedfordshire, MK42 9BF	Petrol and Fuel Stations	Road and Rail
H	239m N	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
D	239m N	Electricity Sub Station	Bedfordshire, MK42	Electrical Features	Infrastructure and Facilities
G	243m NW	Excelsior Medical Group Ltd	6, Railton Road, Kempston, Bedfordshire, MK42 7PW	Medical Equipment, Supplies and Pharmaceuticals	Industrial Products
18	244m W	Wind Generator	Bedfordshire, MK43	Energy Production	Industrial Features

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

<b>Records within 500m</b>	<b>1</b>
----------------------------	----------

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on [page 41](#) >



ID	Location	Company	Address	LPG	Status
I	270m NE	BP	Bedford Bypass Roundabout (A6/a421), A6, Elstow, Bedford, Bedford, MK42 9BF	No	Open

*This data is sourced from Experian.*

### 4.3 Electricity cables

Records within 500m	0
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High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*

### 4.4 Gas pipelines

Records within 500m	0
---------------------	---

High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*

### 4.5 Sites determined as Contaminated Land

Records within 500m	0
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Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

*This data is sourced from Local Authority records.*

### 4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0
---------------------	---

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

*This data is sourced from the Health and Safety Executive.*



## 4.7 Regulated explosive sites

### Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

*This data is sourced from the Health and Safety Executive.*

## 4.8 Hazardous substance storage/usage

### Records within 500m

1

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

Features are displayed on the Current industrial land use map on [page 41 >](#)

ID	Location	Details	
13	210m W	Application reference number: No Details Application status: Approved Application date: No Details Address: Asda Stores Ltd/Distribution Centre, Marsh Leys Farm, Woburn Road, Kempston, Bedford, Bedford Borough Council, England, MK43 9AB	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

### Records within 500m

0

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.10 Licensed industrial activities (Part A(1))

### Records within 500m

0

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4.11 Licensed pollutant release (Part A(2)/B)

### Records within 500m

7

Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 41](#) >

ID	Location	Address	Details	
2	30m SE	Supreme Concrete Ltd, Hardwick Hill Works, Ampthill Road, Kempston Hardwick, Bedford, MK45 3JE	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
4	54m NE	Arlington Motors, Ampthill Rd, Kempston	Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
I	236m NE	BP Bedford Service Station Connect, Wilstead Road, Elstow, Bedfordshire, MK42 9BF	Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
F	252m E	IKO Plc, The Old Brickworks, Wilstead Road (A6), Elstow, Nr. Bedford, MK42 9YU	Process: Bitumen and Tar Processes Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
F	254m E	LaFarge Aggregates Ltd, The Old Brickworks, Wilstead Road (A6), Elstow, Bedfordshire MK42 9YU	Process: Roadstone Coating Processes Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
22	345m E	Redland Aggregates, Elstow Depot, Wilstead Rd	Process: Other Mineral Processes Status: Historical Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
23	408m N	Interfoam Ltd, 15-17 Ronald Close, Woburn Road Industrial Estate, Kempston, Bedford, MK42 7SH	Process: Chemical & Acid Processes Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified

*This data is sourced from Local Authority records.*



Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com)

01273 257 755

Date: 28 March 2024

## 4.12 Radioactive Substance Authorisations

Records within 500m

0

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.13 Licensed Discharges to controlled waters

Records within 500m

6

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on [page 41](#) >

ID	Location	Address	Details	
B	65m NE	WASTE SITE ELSTOW, AREA 3, BEDFORDSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: PR1NF1329 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 21/01/1982 Effective Date: 21/01/1982 Revocation Date: 05/03/1992
B	65m NE	WASTE SITE ELSTOW, AREA 3, BEDFORDSHIRE	Effluent Type: TRADE DISCHARGES - PROCESS EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1329 Permit Version: 2 Receiving Water: Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 06/03/1992 Effective Date: 06/03/1992 Revocation Date: 01/10/1993
B	68m NE	ELSTOW LANDFILL (NW), WILSTEAD ROAD, ELSTOW, BEDFORD, BEDS, MK42 9YU	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: PRCNF17442 Permit Version: 2 Receiving Water: TRIBUTARY OF THE ELSTOW BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 07/09/2006 Effective Date: 07/09/2006 Revocation Date: 22/04/2013
B	68m NE	ELSTOW LANDFILL (NW), WILSTEAD ROAD, ELSTOW, BEDFORD, BEDS, MK42 9YU	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: PRCNF17442 Permit Version: 1 Receiving Water: TRIBUTARY OF THE ELSTOW BROOK	Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 22/04/2005 Effective Date: 22/04/2005 Revocation Date: 06/09/2006
B	68m NE	ELSTOW LANDFILL (NW), WILSTEAD ROAD, ELSTOW, BEDFORD, BEDS, MK42 9YU	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: PRCNF17442 Permit Version: 3 Receiving Water: TRIBUTARY OF THE ELSTOW BROOK	Status: VARIED UNDER EPR 2010 Issue date: 23/04/2013 Effective Date: 23/04/2013 Revocation Date: -



ID	Location	Address	Details	
21	295m N	INTERCHANGE PARK A421 AMPTHILL RD, KEMPSTON, BEDFORD	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PRCNF01802 Permit Version: 1 Receiving Water: Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 24/01/1990 Effective Date: 24/01/1990 Revocation Date: 30/10/1996

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.14 Pollutant release to surface waters (Red List)

<b>Records within 500m</b>	<b>0</b>
----------------------------	----------

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.15 Pollutant release to public sewer

<b>Records within 500m</b>	<b>1</b>
----------------------------	----------

Discharges of Special Category Effluents to the public sewer.

Features are displayed on the Current industrial land use map on [page 41 >](#)

ID	Location	Address	Details	
25	444m NW	CGI Creative Graphics International Limited, UNITS 6 - 8 SINGER WAY, WOBURN ROAD INDUSTRIAL ESTATE, KEMPSTON, BEDFORDSHIRE, MK42 7AN	Permission reference: SCE0148C1 Local Authority: BEDFORD BOROUGH COUNCIL First received date: 10/01/2014	Last received date: 01/01/2018 Status: EFFECTIVE

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.16 List 1 Dangerous Substances

<b>Records within 500m</b>	<b>0</b>
----------------------------	----------

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

*This data is sourced from the Environment Agency and Natural Resources Wales.*





## 4.17 List 2 Dangerous Substances

### Records within 500m

4

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on [page 41 >](#)

ID	Location	Name	Status	Receiving Water	Authorised Substances
16	216m NE	Healthcare Logistics Ltd	Not Active	Na	pH
19	267m NE	Vindis Audi	Not Active	Na	pH
20	281m N	Franco Ices Limited	Not Active	Na	pH
24	416m NW	Floor Protection Services Ltd	Not Active	Na	pH

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.18 Pollution Incidents (EA/NRW)

### Records within 500m

2

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 41 >](#)

ID	Location	Details	
A	On site	<b>Incident Date: 07/02/2002</b> <b>Incident Identification: 56978</b> <b>Pollutant: Oils and Fuel</b> <b>Pollutant Description: Kerosene and Aviation Fuel</b>	<b>Water Impact: Category 3 (Minor)</b> <b>Land Impact: Category 3 (Minor)</b> <b>Air Impact: Category 4 (No Impact)</b>
C	85m SE	Incident Date: 09/06/2002 Incident Identification: 83760 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4.19 Pollution inventory substances

Records within 500m

0

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*

## 4.20 Pollution inventory waste transfers

Records within 500m

0

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*

## 4.21 Pollution inventory radioactive waste

Records within 500m

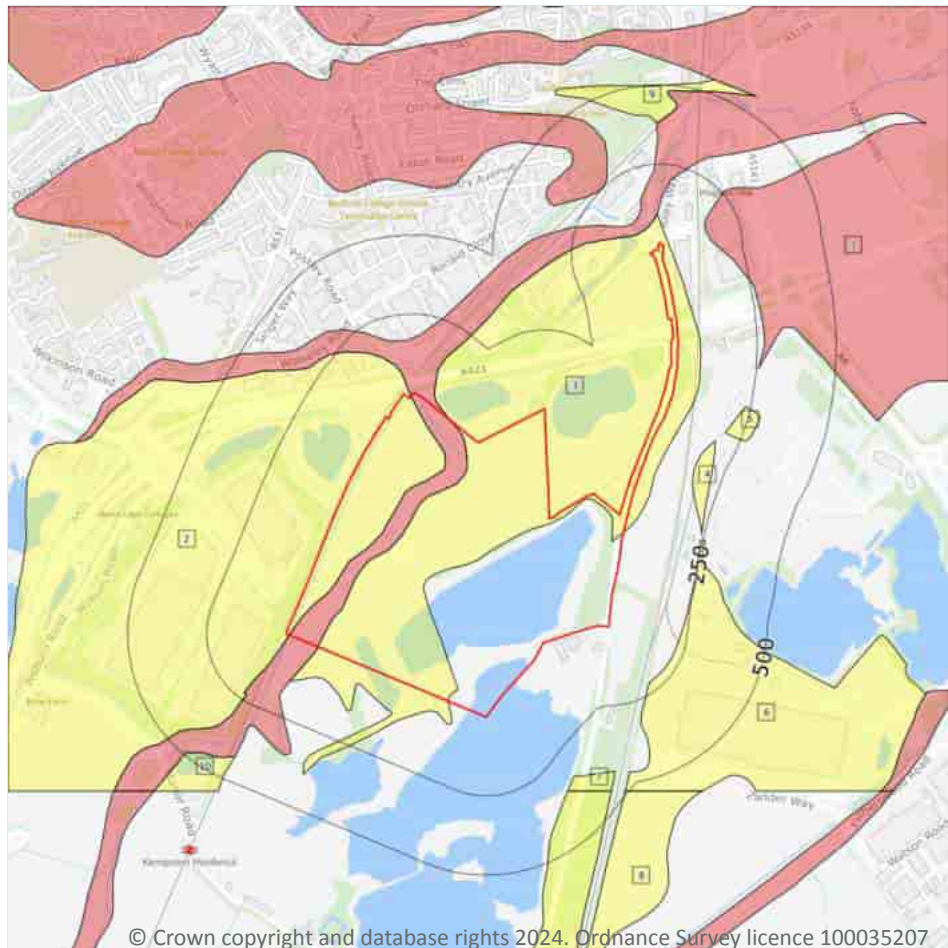
0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*



## 5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
  - Secondary A
  - Secondary B
  - Secondary Undifferentiated
  - Unproductive
  - Unknown

### 5.1 Superficial aquifer

Records within 500m

10

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 51](#) >

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

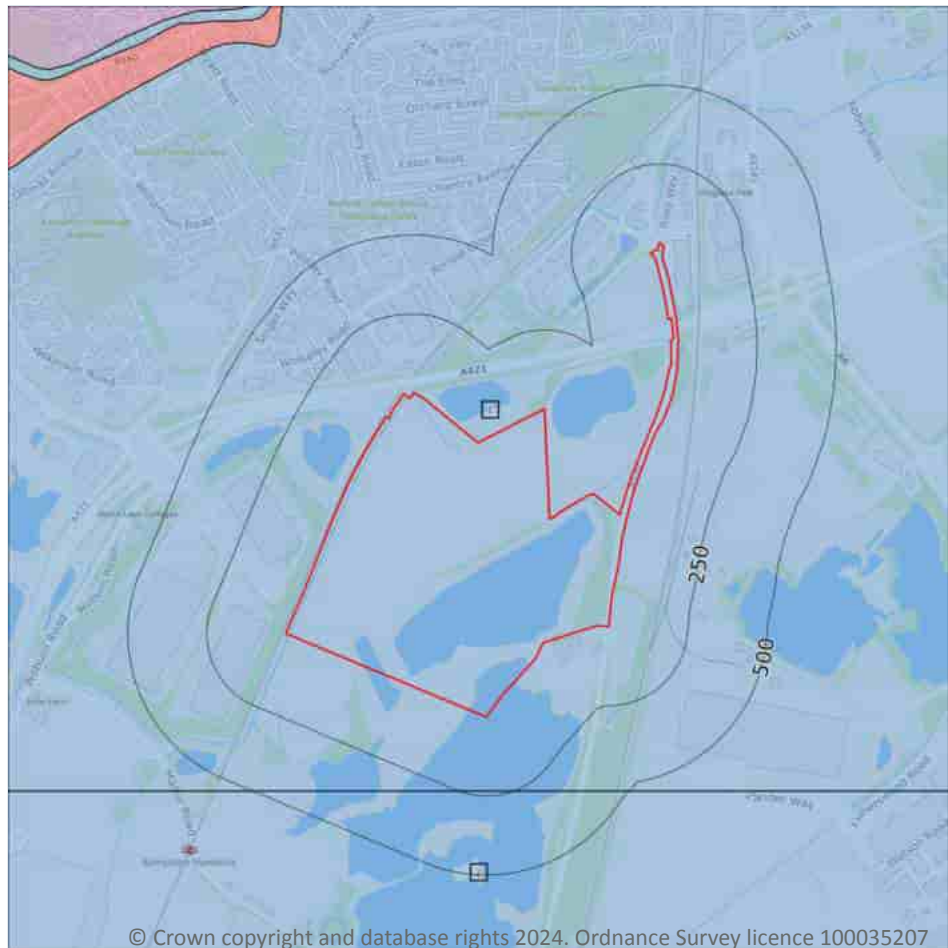


ID	Location	Designation	Description
3	On site	Secondary Undifferentiated	<b>Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type</b>
4	157m E	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	198m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	218m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	336m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
8	349m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
9	379m NE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
10	421m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*



## Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
  - Secondary A
  - Secondary B
  - Secondary Undifferentiated
  - Unproductive

### 5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on [page 53](#) >

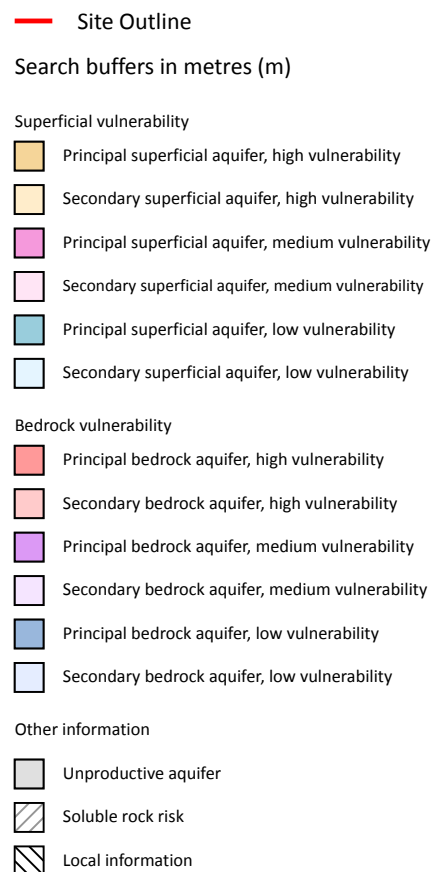
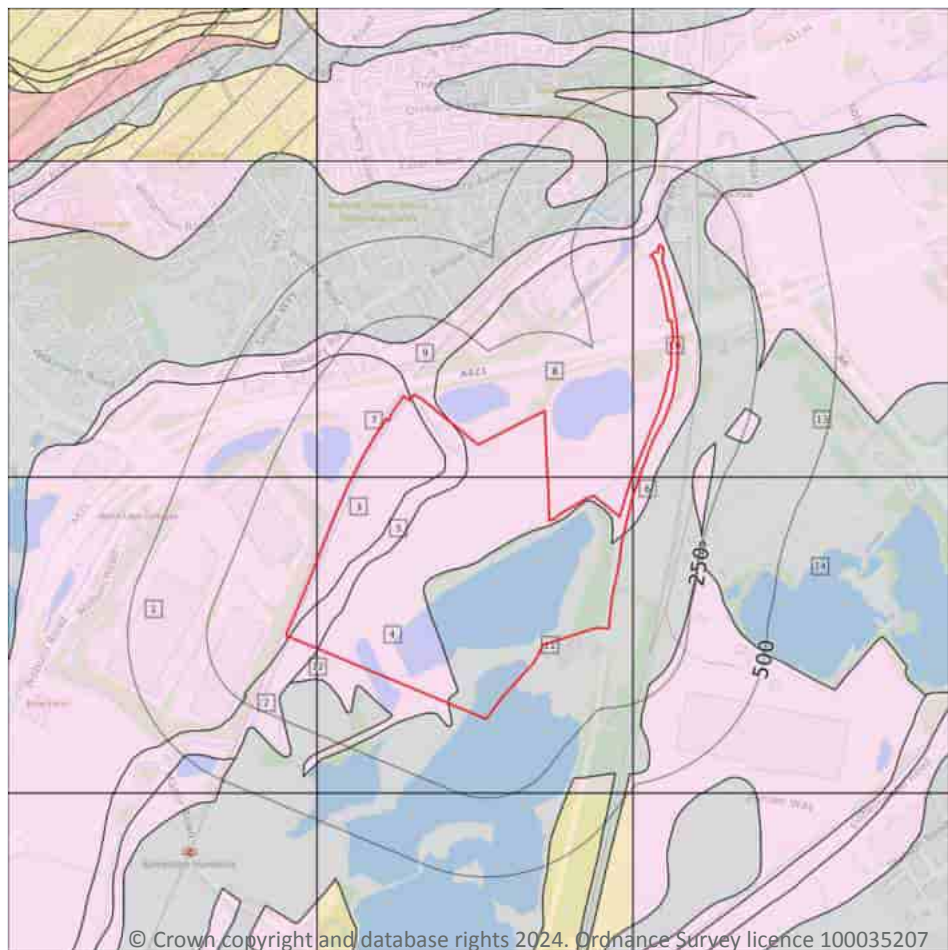
ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	234m S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*





## Groundwater vulnerability



### 5.3 Groundwater vulnerability

Records within 50m

14

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 54](#) >





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
6	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
7	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: High	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
11	On site	<b>Summary Classification:</b> Unproductive aquifer (may have productive aquifer beneath) <b>Combined classification:</b> Unproductive Bedrock Aquifer, No Superficial Aquifer	<b>Leaching class:</b> Intermediate <b>Infiltration value:</b> 40-70% <b>Dilution value:</b> <300mm/year	<b>Vulnerability:</b> - <b>Aquifer type:</b> - <b>Thickness:</b> <3m <b>Patchiness value:</b> >90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures
12	6m SW	<b>Summary Classification:</b> Secondary superficial aquifer - Medium Vulnerability <b>Combined classification:</b> Unproductive Bedrock Aquifer, Productive Superficial Aquifer	<b>Leaching class:</b> Intermediate <b>Infiltration value:</b> 40-70% <b>Dilution value:</b> <300mm/year	<b>Vulnerability:</b> Medium <b>Aquifer type:</b> Secondary <b>Thickness:</b> <3m <b>Patchiness value:</b> <90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures
13	17m NE	<b>Summary Classification:</b> Unproductive aquifer (may have productive aquifer beneath) <b>Combined classification:</b> Unproductive Bedrock Aquifer, No Superficial Aquifer	<b>Leaching class:</b> Intermediate <b>Infiltration value:</b> 40-70% <b>Dilution value:</b> <300mm/year	<b>Vulnerability:</b> - <b>Aquifer type:</b> - <b>Thickness:</b> <3m <b>Patchiness value:</b> <90% <b>Recharge potential:</b> High	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures
14	22m E	<b>Summary Classification:</b> Unproductive aquifer (may have productive aquifer beneath) <b>Combined classification:</b> Unproductive Bedrock Aquifer, No Superficial Aquifer	<b>Leaching class:</b> Intermediate <b>Infiltration value:</b> 40-70% <b>Dilution value:</b> <300mm/year	<b>Vulnerability:</b> - <b>Aquifer type:</b> - <b>Thickness:</b> <3m <b>Patchiness value:</b> <90% <b>Recharge potential:</b> No Data	<b>Vulnerability:</b> Unproductive <b>Aquifer type:</b> Unproductive <b>Flow mechanism:</b> Well connected fractures

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*

## 5.4 Groundwater vulnerability- soluble rock risk

### Records on site

0

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

*This data is sourced from the British Geological Survey and the Environment Agency.*



## 5.5 Groundwater vulnerability- local information

### Records on site

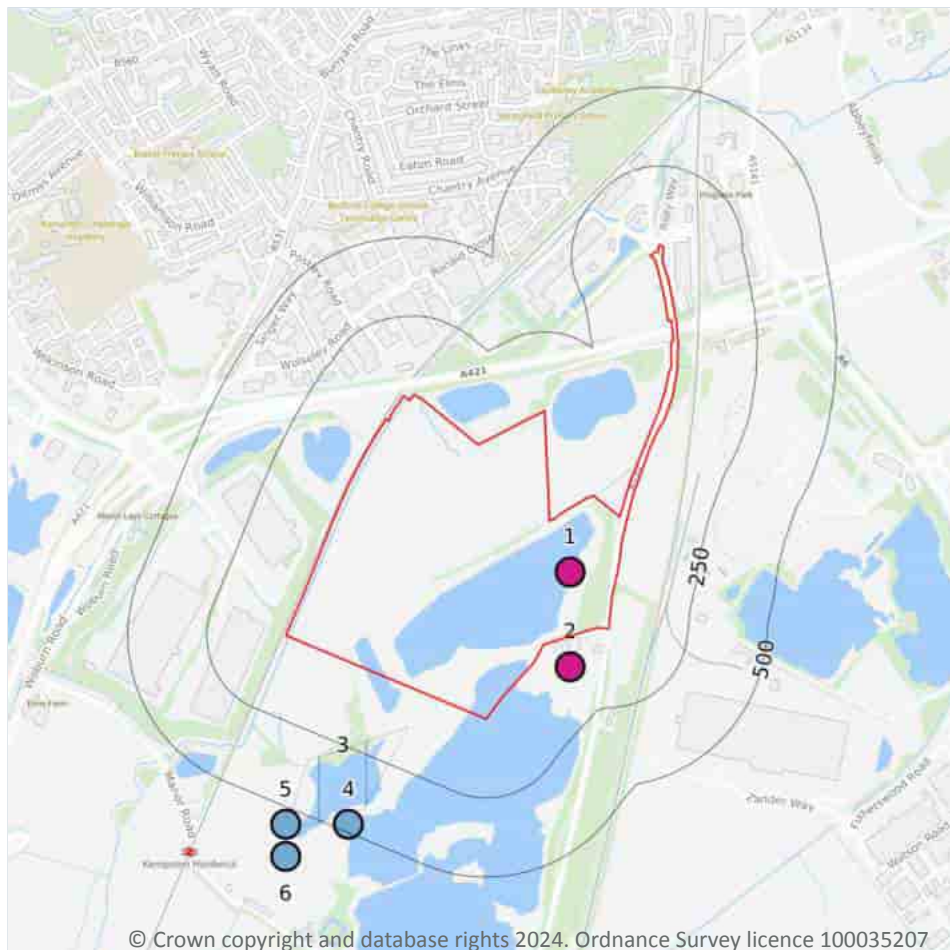
**0**

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk) ↗.

*This data is sourced from the British Geological Survey and the Environment Agency.*



## Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1  
Inner catchment
- Source Protection Zone 2  
Outer catchment
- Source Protection Zone 3  
Total catchment
- Source Protection Zone 4  
Zone of Special Interest
- Source Protection Zone 1c  
Inner catchment - confined aquifer
- Source Protection Zone 2c  
Outer catchment - confined aquifer
- Source Protection Zone 3c  
Total catchment - confined aquifer
- Drinking water abstraction licences  
Polygon features
- Drinking water abstraction licences  
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

### 5.6 Groundwater abstractions

#### Records within 2000m

2

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 59 >](#)



ID	Location	Details	
1	On site	<b>Status: Historical</b> <b>Licence No: 6/33/12/*G/0031</b> <b>Details: General Farming &amp; Domestic</b> <b>Direct Source: GROUND WATER SOURCE OF SUPPLY</b> <b>Point: WELL-RACEMEADOW FARM</b> <b>Data Type: Point</b> <b>Name: LONDON BRICK CO LTD</b> <b>Easting: 503800</b> <b>Northing: 245700</b>	<b>Annual Volume (m³): -</b> <b>Max Daily Volume (m³): -</b> <b>Original Application No: -</b> <b>Original Start Date: 01/06/1967</b> <b>Expiry Date: -</b> <b>Issue No: 100</b> <b>Version Start Date: 01/06/1967</b> <b>Version End Date: -</b>
2	91m SE	<b>Status: Historical</b> <b>Licence No: 6/33/12/*G/0139</b> <b>Details: General use relating to Secondary Category (Medium Loss)</b> <b>Direct Source: GROUND WATER SOURCE OF SUPPLY</b> <b>Point: BOREHOLE AT KEMPSTON HARDWICK</b> <b>Data Type: Point</b> <b>Name: SUPREME CONCRETE LTD</b> <b>Easting: 503800</b> <b>Northing: 245400</b>	<b>Annual Volume (m³): -</b> <b>Max Daily Volume (m³): -</b> <b>Original Application No: -</b> <b>Original Start Date: 30/11/1996</b> <b>Expiry Date: -</b> <b>Issue No: 102</b> <b>Version Start Date: 13/07/2004</b> <b>Version End Date: -</b>

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.7 Surface water abstractions

<b>Records within 2000m</b>	<b>10</b>
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Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 59 >](#)

ID	Location	Details	
3	117m S	<b>Status: Historical</b> <b>Licence No: 6/33/12/*S/0027</b> <b>Details: General Use Relating To Secondary Category (Medium Loss)</b> <b>Direct Source: SURFACE WATER SOURCE OF SUPPLY</b> <b>Point: FLOODED KNOTHOLE-KEMPSTON HARD</b> <b>Data Type: Poly4</b> <b>Name: HANSON BRICK LTD</b> <b>Easting: 503290</b> <b>Northing: 245210</b>	<b>Annual Volume (m³): 30000</b> <b>Max Daily Volume (m³): 150</b> <b>Original Application No: -</b> <b>Original Start Date: 01/04/1968</b> <b>Expiry Date: -</b> <b>Issue No: 101</b> <b>Version Start Date: 20/10/2003</b> <b>Version End Date: -</b>





ID	Location	Details	
4	476m SW	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 503100 Northing: 244900	Annual Volume (m <sup>3</sup> ): 5164 Max Daily Volume (m <sup>3</sup> ): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
5	553m SW	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 502900 Northing: 244900	Annual Volume (m <sup>3</sup> ): 5164 Max Daily Volume (m <sup>3</sup> ): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
6	645m SW	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: KEMPSTON HARD KNOTHOLE Data Type: Point Name: HANSON BRICK LTD Easting: 502900 Northing: 244800	Annual Volume (m <sup>3</sup> ): 5164 Max Daily Volume (m <sup>3</sup> ): 16.55 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2008 Version End Date: -
-	1225m E	Status: Active Licence No: AN/033/0012/009 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: WATERCOURSE AT ELSTOW Data Type: Line Name: M K H Farming Easting: 506018 Northing: 246926	Annual Volume (m <sup>3</sup> ): 7863 Max Daily Volume (m <sup>3</sup> ): 491 Original Application No: NPS/WR/034975 Original Start Date: 04/09/2017 Expiry Date: 31/03/2024 Issue No: 3 Version Start Date: 11/03/2021 Version End Date: -
-	1263m E	Status: Historical Licence No: 6/33/12/*S/0062 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: WATERCOURSE AT ELSTOW Data Type: Line Name: CLARK Easting: 505200 Northing: 245500	Annual Volume (m <sup>3</sup> ): 7864.6 Max Daily Volume (m <sup>3</sup> ): 490.9 Original Application No: - Original Start Date: 01/10/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/10/1967 Version End Date: -



ID	Location	Details	
-	1687m NW	Status: Historical Licence No: 6/33/11/*S/0028 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER OUSE AT KEMPSTON Data Type: Line Name: JOHN CLOVER ESTATES Easting: 501600 Northing: 248180	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1996 Version End Date: -
-	1687m NW	Status: Historical Licence No: 6/33/11/*S/0028 Details: General use relating to Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: RIVER OUSE AT KEMPSTON Data Type: Line Name: JOHN CLOVER ESTATES Easting: 501600 Northing: 248180	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/04/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/03/1996 Version End Date: -
-	1745m SE	Status: Historical Licence No: 6/33/12/*S/0012 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT WILSTEAD Data Type: Point Name: H MASKELL & SON Easting: 505430 Northing: 244640	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1970 Version End Date: -
-	1745m SE	Status: Historical Licence No: 6/33/12/*S/0012 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT WILSTEAD Data Type: Point Name: H MASKELL & SON Easting: 505430 Northing: 244640	Annual Volume (m <sup>3</sup> ): 4545 Max Daily Volume (m <sup>3</sup> ): 654.54 Original Application No: - Original Start Date: 01/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1970 Version End Date: -

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.8 Potable abstractions

**Records within 2000m**

**0**

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.



*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.9 Source Protection Zones

Records within 500m

0

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.10 Source Protection Zones (confined aquifer)

Records within 500m

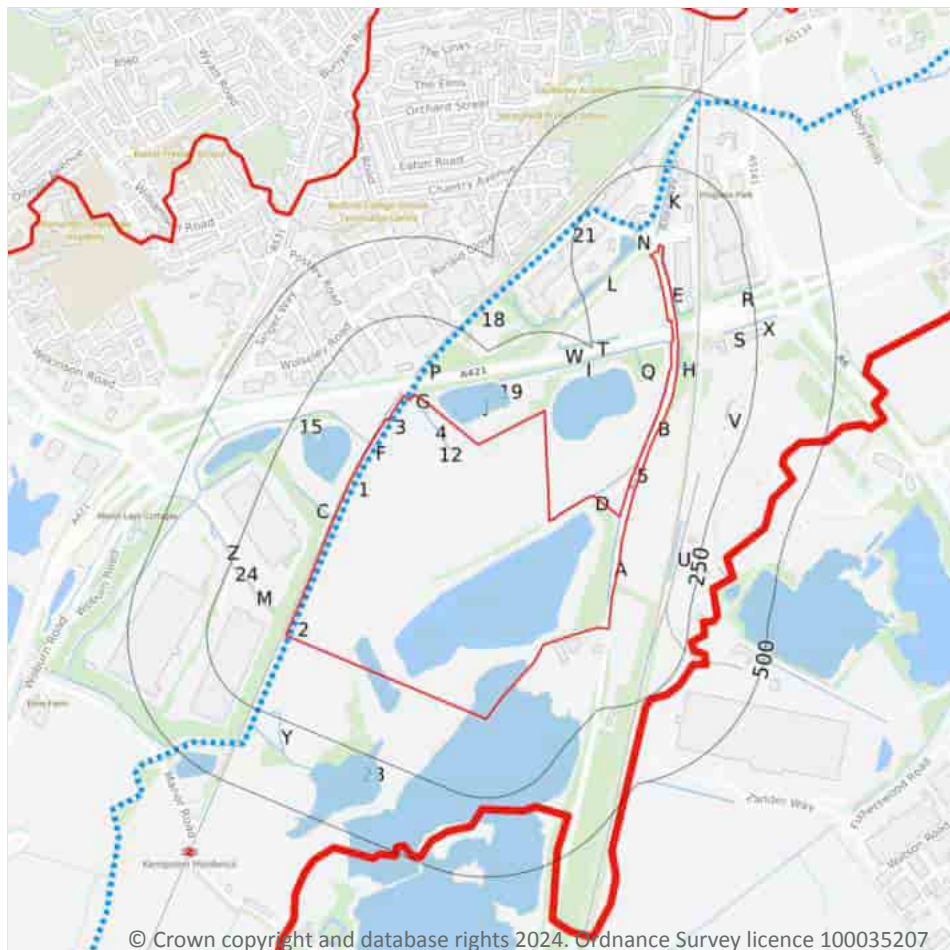
0

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

### 6.1 Water Network (OS MasterMap)

Records within 250m

48

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 64 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
G	4m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	7m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
I	7m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
G	10m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
15	22m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	32m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
M	64m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	71m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	76m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	77m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	79m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	81m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	82m N	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	83m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	111m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-





ID	Location	Type of water feature	Ground level	Permanence	Name
P	120m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	126m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	133m N	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
18	134m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	134m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	141m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
19	144m N	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
21	147m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
T	164m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
U	165m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	178m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
V	179m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
V	180m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
23	186m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
S	201m NE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
W	205m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
X	214m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
W	221m NE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
24	231m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
Y	237m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Z	249m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

*This data is sourced from the Ordnance Survey.*

## 6.2 Surface water features

### Records within 250m

**27**

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 64](#) >

*This data is sourced from the Ordnance Survey.*



## 6.3 WFD Surface water body catchments

<b>Records on site</b>	<b>1</b>
------------------------	----------

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on [page 64 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
12	On site	River	Elstow Brook (US Shortstown)	GB105033038050	Great Ouse Bedford	Ouse Upper and Bedford

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 6.4 WFD Surface water bodies

<b>Records identified</b>	<b>1</b>
---------------------------	----------

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 64 >](#)

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
13	On site	River	Elstow Brook (US Shortstown)	<a href="#">GB105033038050</a> ↗	Moderate	Fail	Moderate	2019

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 6.5 WFD Groundwater bodies

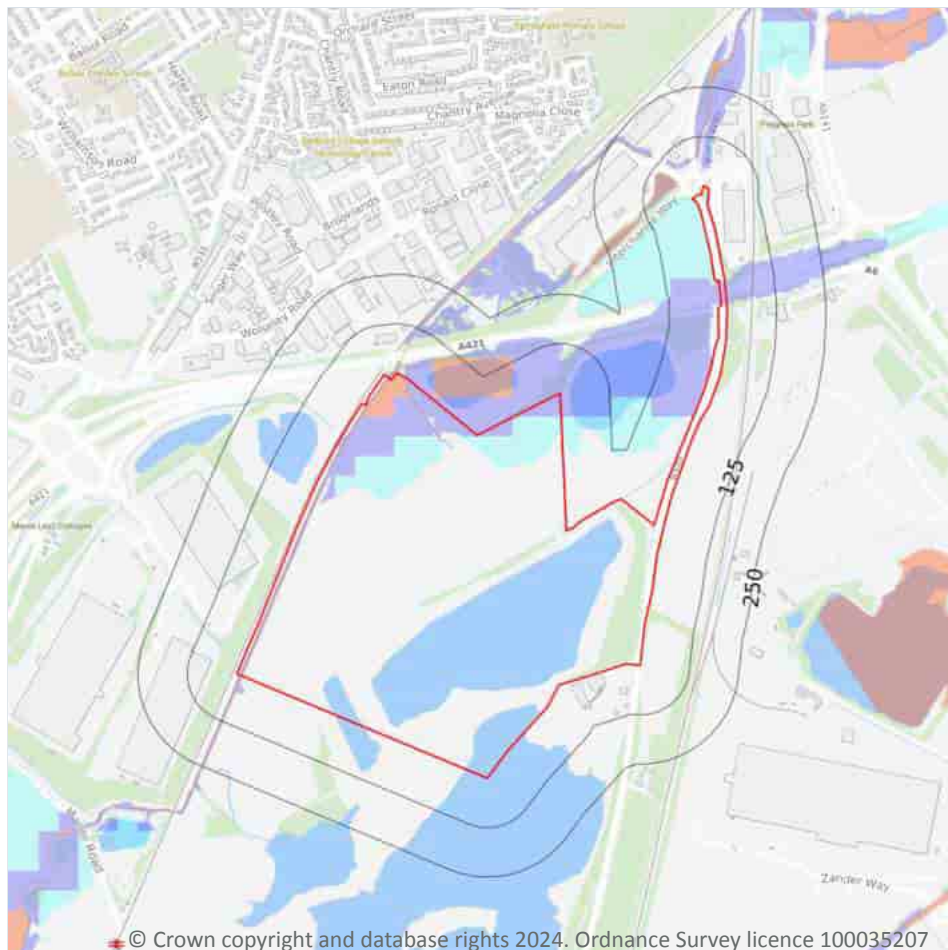
<b>Records on site</b>	<b>0</b>
------------------------	----------

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 7 River and coastal flooding



- Site Outline
- Search buffers in metres (m)
- River and coastal flooding:
- High
- Medium
- Low
- Very Low
- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences
- Flood Defences

### 7.1 Risk of flooding from rivers and the sea

#### Records within 50m

21

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on [page 70 >](#)



Distance	Flood risk category
<b>On site</b>	<b>High</b>
0 - 50m	High

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.2 Historical Flood Events

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.3 Flood Defences

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.4 Areas Benefiting from Flood Defences

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.5 Flood Storage Areas

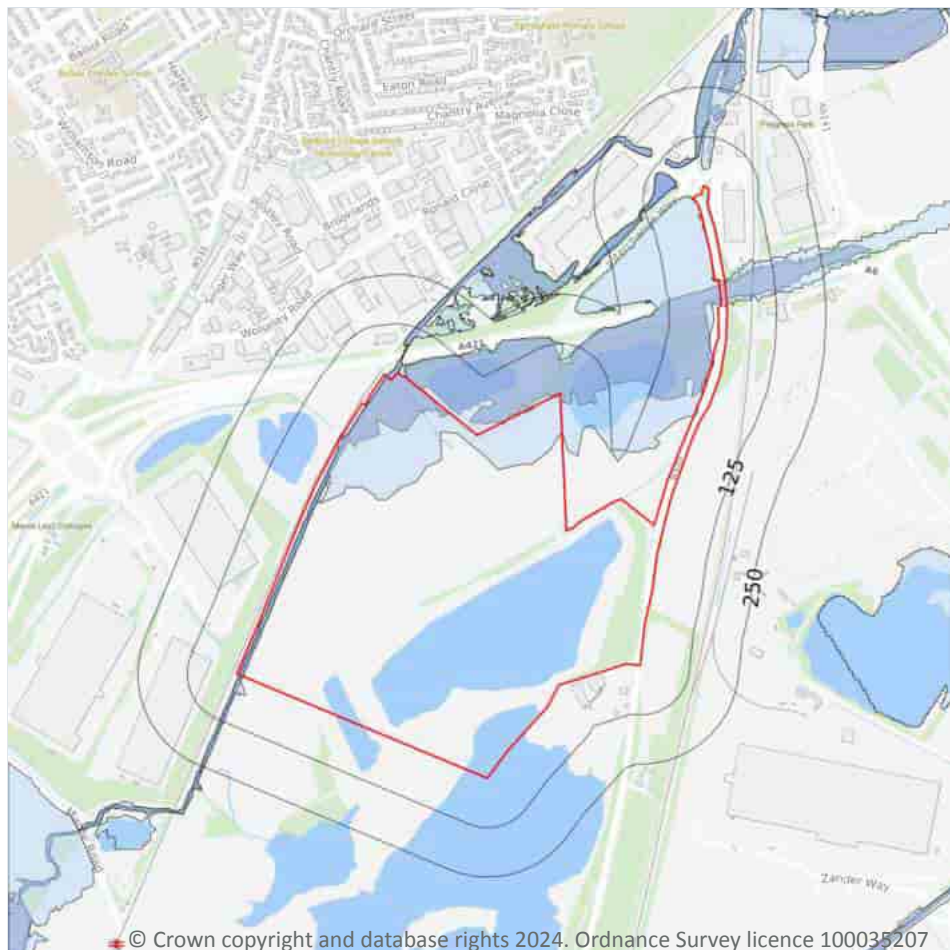
<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## River and coastal flooding - Flood Zones



- Site Outline
- Search buffers in metres (m)
- Flood zone 2
- Flood zone 3

### 7.6 Flood Zone 2

#### Records within 50m

1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on [page 70 >](#)

Location	Type
On site	Zone 2 - (Fluvial /Tidal Models)

*This data is sourced from the Environment Agency and Natural Resources Wales.*





## 7.7 Flood Zone 3

### Records within 50m

**1**

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

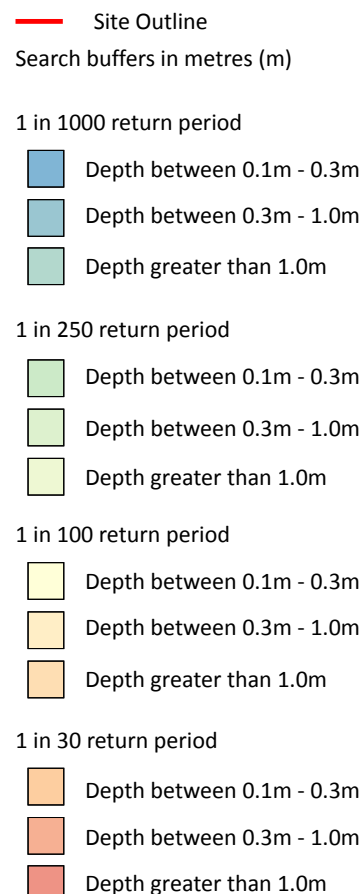
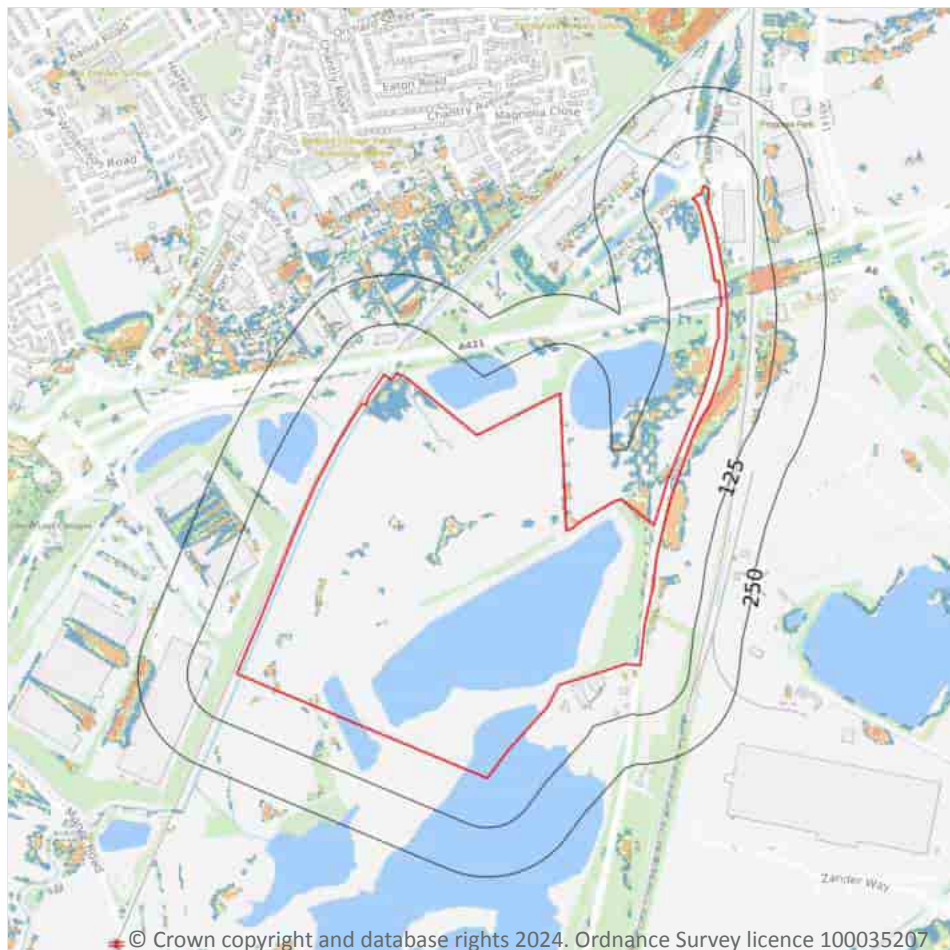
Features are displayed on the River and coastal flooding map on [page 70 >](#)

Location	Type
On site	Zone 3 - (Fluvial Models)

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 8 Surface water flooding



### 8.1 Surface water flooding

**Highest risk on site**

**1 in 30 year, 0.3m - 1.0m**

**Highest risk within 50m**

**1 in 30 year, 0.3m - 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 74 >](#)

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.



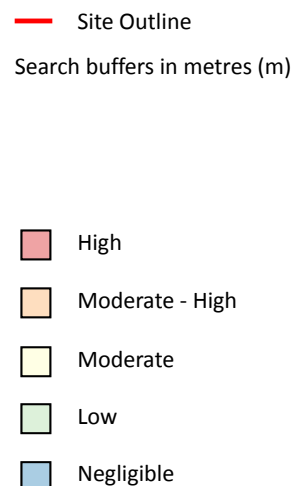
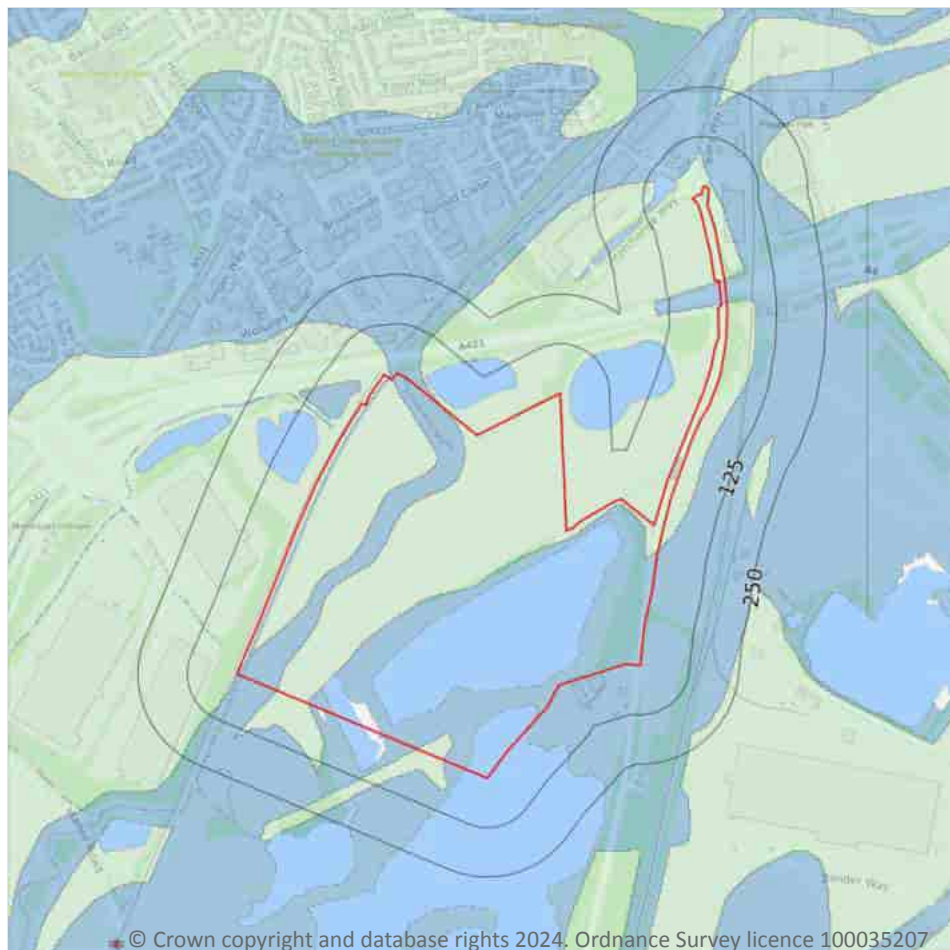
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Between 0.3m and 1.0m
1 in 100 year	Between 0.3m and 1.0m
1 in 30 year	Between 0.3m and 1.0m

*This data is sourced from Ambiantal Risk Analytics.*



## 9 Groundwater flooding



### 9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

Low

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 76 >](#)

*This data is sourced from Ambiantal Risk Analytics.*



## 10 Environmental designations

### 10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

### 10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

### 10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

### 10.4 Special Protection Areas (SPA)

Records within 2000m

0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*



## 10.5 National Nature Reserves (NNR)

Records within 2000m

0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.6 Local Nature Reserves (LNR)

Records within 2000m

0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.7 Designated Ancient Woodland

Records within 2000m

0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*





## 10.9 Forest Parks

Records within 2000m

0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

*This data is sourced from the Forestry Commission.*

## 10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.11 Green Belt

Records within 2000m

0

Areas designated to prevent urban sprawl by keeping land permanently open.

*This data is sourced from the Ministry of Housing, Communities and Local Government.*

## 10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

*This data is sourced from Natural England and Natural Resources Wales.*



## 10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

*This data is sourced from Natural England.*

## 10.16 Nitrate Vulnerable Zones

Records within 2000m

11

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	Great Ouse NVZ	Surface Water	391	Existing
On site	Great Ouse NVZ	Surface Water	391	Existing
On site	Great Ouse NVZ	Surface Water	391	Existing
On site	Huntingdon River Gravels	Groundwater	144	Existing
On site	Huntingdon River Gravels	Groundwater	144	Existing
On site	Huntingdon River Gravels	Groundwater	144	Existing
73m E	Great Ouse NVZ	Surface Water	391	Existing
73m E	Huntingdon River Gravels	Groundwater	144	Existing

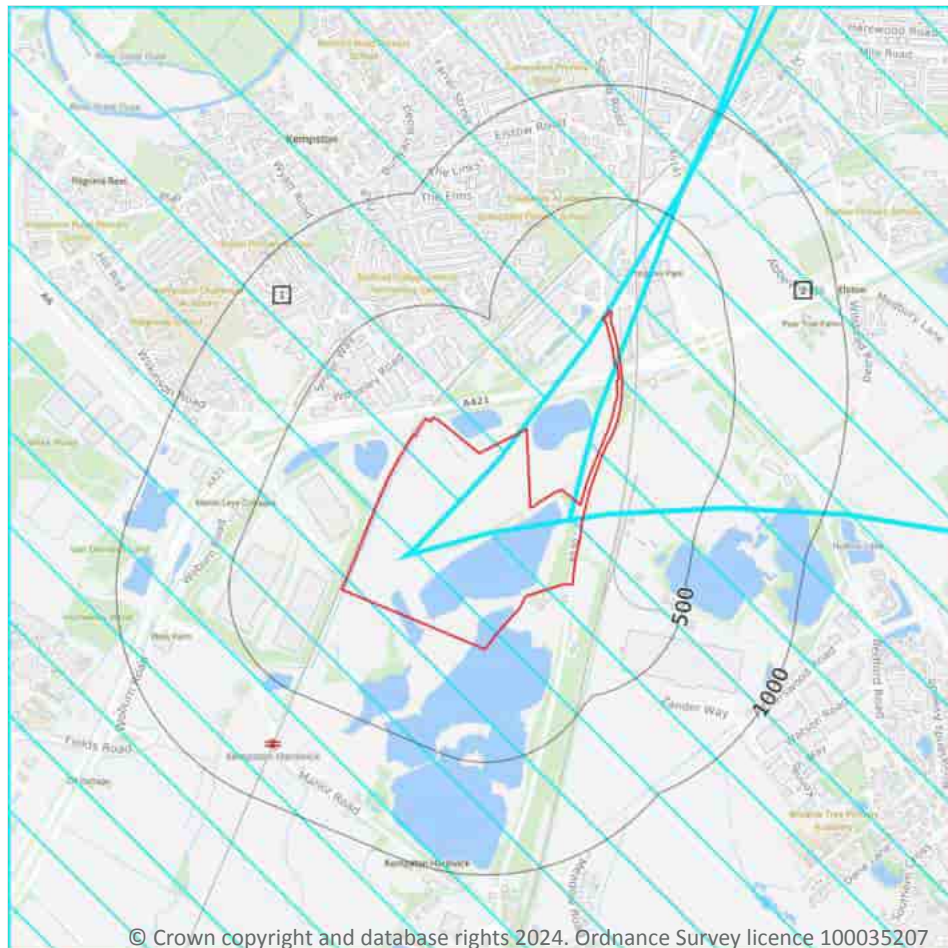


Location	Name	Type	NVZ ID	Status
811m N	Bedford Great Oolite	Groundwater	74	Existing
1215m N	Bedford Great Oolite	Groundwater	74	Existing
1870m W	Bedford Great Oolite	Groundwater	74	Existing

*This data is sourced from Natural England and Natural Resources Wales.*



## SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- ▨ SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

### 10.17 SSSI Impact Risk Zones

#### Records on site

2

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on [page 82 >](#)

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Livestock & poultry units with floorspace > 500m <sup>2</sup> , slurry lagoons & digestate stores > 750m <sup>2</sup> , manure stores > 3500t.
2	On site	Infrastructure - Airports, helipads and other aviation proposals.



*This data is sourced from Natural England.*

## 10.18 SSSI Units

**Records within 2000m**

**0**

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

*This data is sourced from Natural England and Natural Resources Wales.*



## 11 Visual and cultural designations

### 11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

### 11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

### 11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

*This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.*

### 11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.





*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.7 Registered Parks and Gardens

Records within 250m

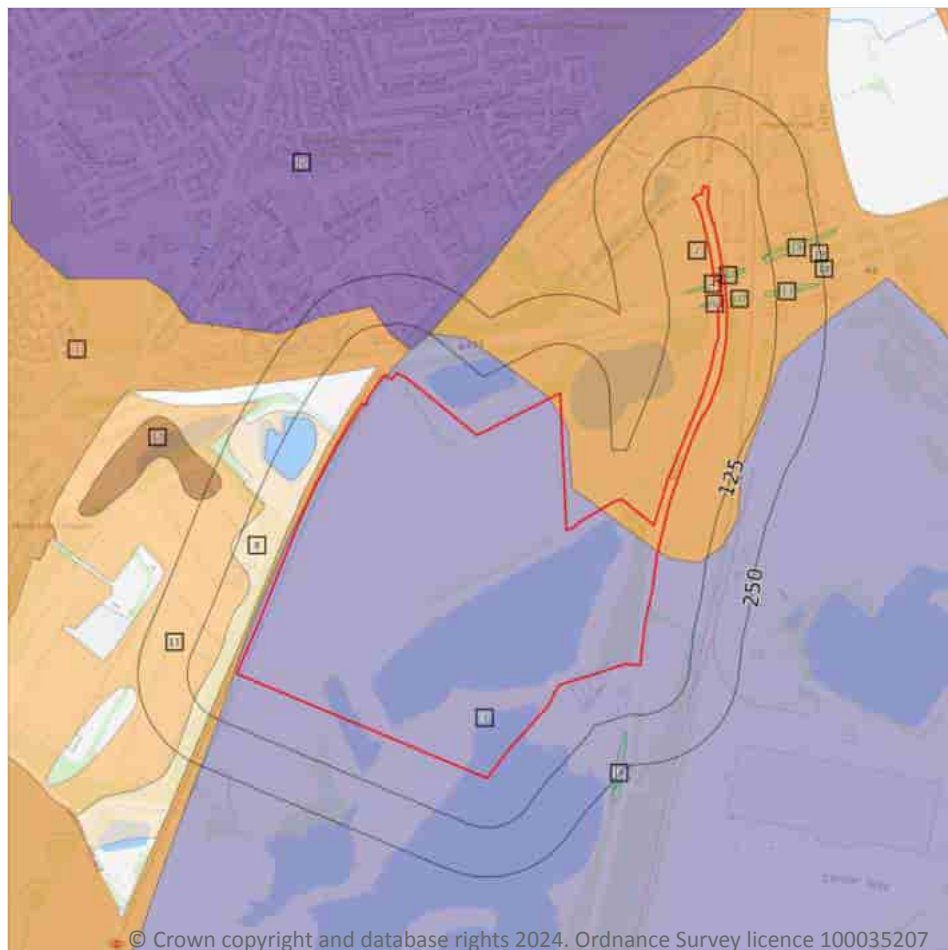
0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*



## 12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

### 12.1 Agricultural Land Classification

Records within 250m

7

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on [page 86](#) >

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.



ID	Location	Classification	Description
2	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.
3	On site	Non Agricultural	-
8	18m NW	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
11	53m W	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
12	68m N	Urban	-
17	218m W	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

*This data is sourced from Natural England.*

## 12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

*This data is sourced from Natural England and Natural Resources Wales.*

## 12.3 Tree Felling Licences

Records within 250m

9

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

Features are displayed on the Agricultural designations map on [page 86 >](#)



ID	Location	Description	Reference	Application date
4	On site	Selective Fell/Thin (Unconditional)	018/366/15-16	-
5	2m NE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
6	3m NE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
7	9m NE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
13	97m NE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
14	104m NE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
16	162m SE	Selective Fell/Thin (Conditional)	017/63/11-12	18/08/2011
18	242m NE	Selective Fell/Thin (Unconditional)	018/366/15-16	-
19	242m NE	Selective Fell/Thin (Unconditional)	018/366/15-16	-

*This data is sourced from the Forestry Commission.*

## 12.4 Environmental Stewardship Schemes

**Records within 250m**

**0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

*This data is sourced from Natural England.*

## 12.5 Countryside Stewardship Schemes

**Records within 250m**

**3**

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

Location	Reference	Scheme	Start Date	End Date
On site	1271066	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026
On site	1271066	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026
5m SE	1271066	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026

*This data is sourced from Natural England.*



## 13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

### 13.1 Priority Habitat Inventory

Records within 250m

16

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on [page 89](#) >

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
5	13m E	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
6	32m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	38m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	49m NE	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
9	50m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	53m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	54m N	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	72m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	147m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
16	176m N	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
17	178m SW	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
18	187m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
19	202m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

*This data is sourced from Natural England.*

## 13.2 Habitat Networks

**Records within 250m**

**0**

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

*This data is sourced from Natural England.*

## 13.3 Open Mosaic Habitat

**Records within 250m**

**3**

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

Features are displayed on the Habitat designations map on [page 89](#) >





ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
4	On site	BRITPITS ref: 35270	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
14	159m SE	BRITPITS ref: 35277	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
15	168m NE	BRITPITS ref: 35277	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography

*This data is sourced from Natural England.*

## 13.4 Limestone Pavement Orders

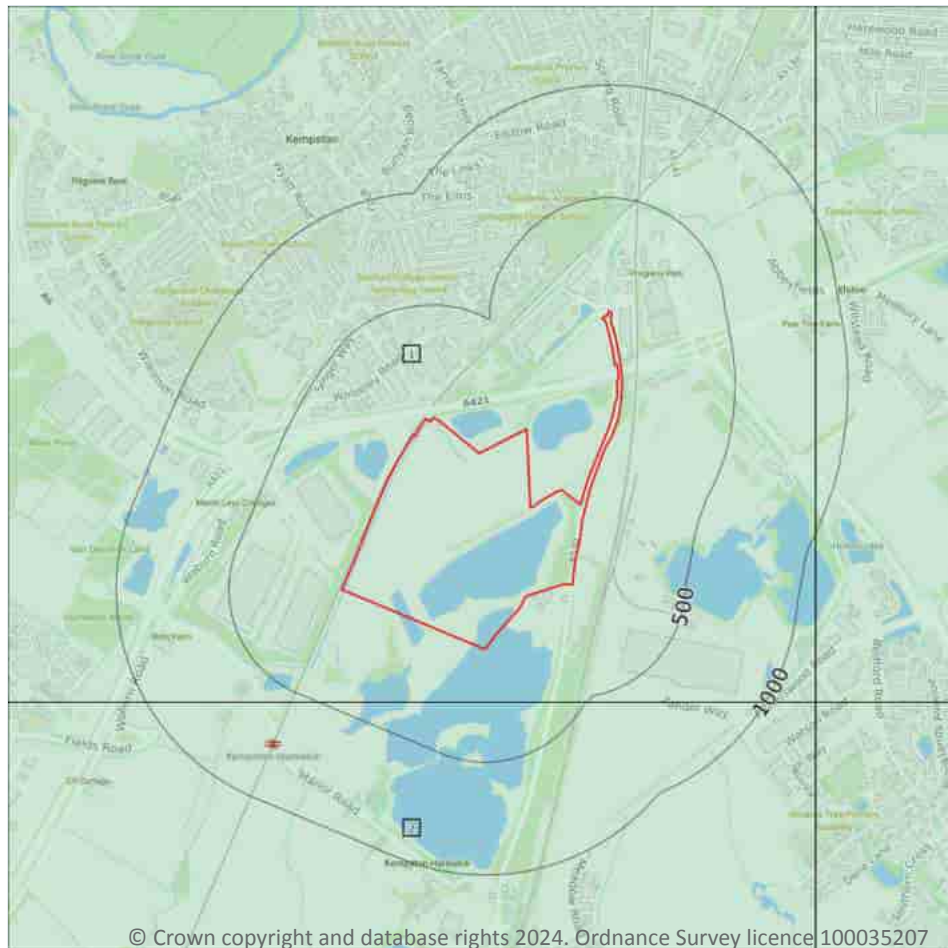
<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

*This data is sourced from Natural England.*



## 14 Geology 1:10,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

### 14.1 10k Availability

#### Records within 500m

2

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

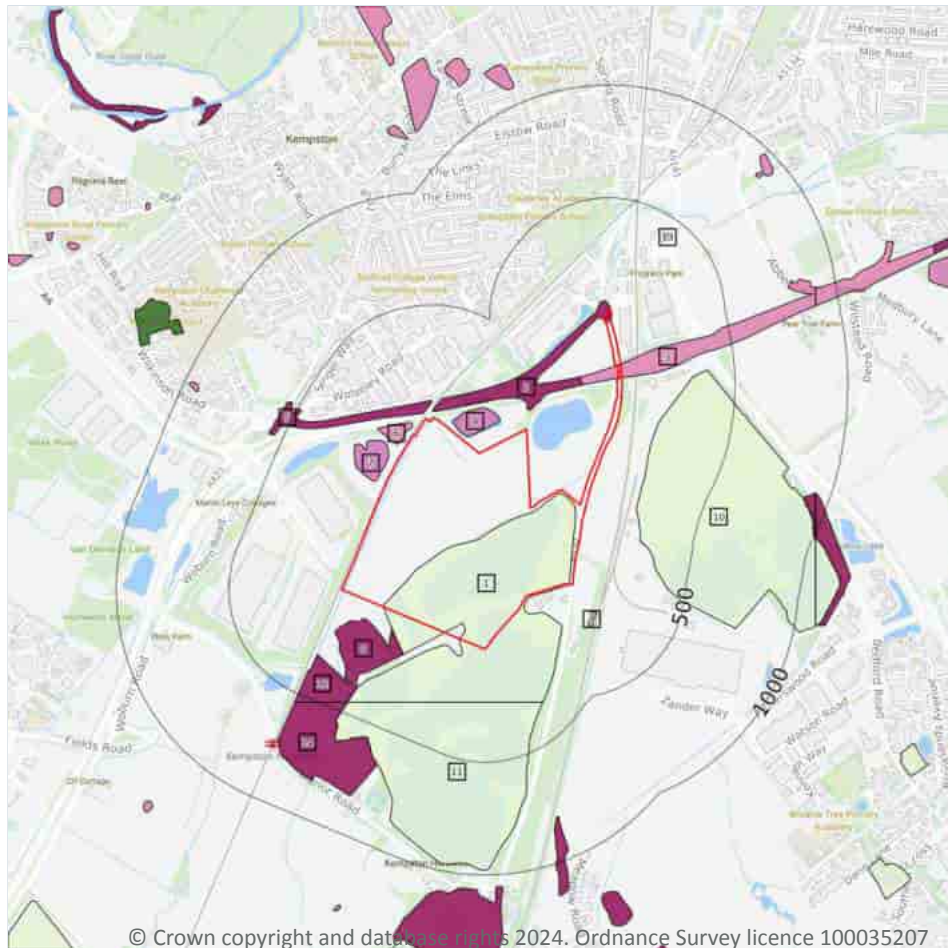
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 92](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	TL04NW
2	234m S	Full	Full	Full	Full	TL04SW

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Artificial and made ground



— Site Outline  
Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

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### 14.2 Artificial and made ground (10k)

Records within 500m

14

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 93](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	WMGR-ARTDP	Infilled Ground	Artificial Deposit
2	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	On site	WGR-VOID	Worked Ground (Undivided)	Void
4	21m N	WGR-VOID	Worked Ground (Undivided)	Void

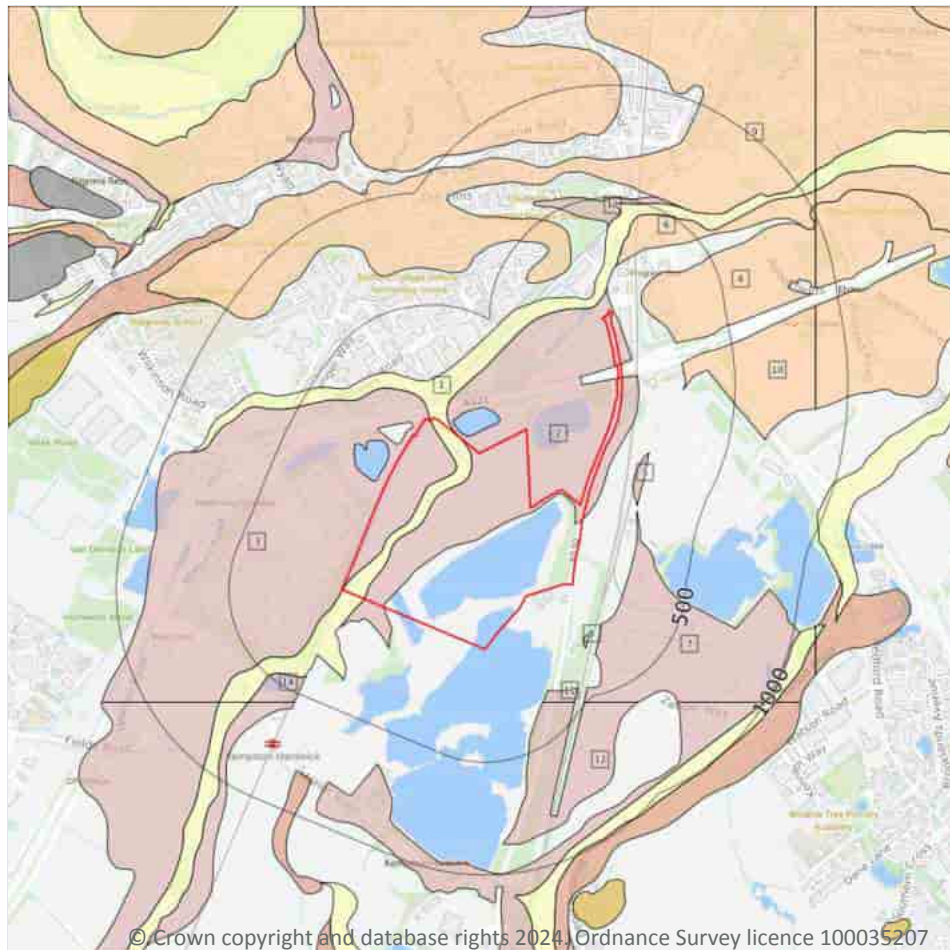


ID	Location	LEX Code	Description	Rock description
5	28m N	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
6	28m NW	WGR-VOID	Worked Ground (Undivided)	Void
7	40m NW	WGR-VOID	Worked Ground (Undivided)	Void
8	75m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	144m SE	WGR-VOID	Worked Ground (Undivided)	Void
10	173m NE	WMGR-ARTDP	Infilled Ground	Artificial Deposit
11	234m S	WMGR-ARTDP	Infilled Ground	Artificial Deposit
12	308m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
13	405m NE	WGR-VOID	Worked Ground (Undivided)	Void
14	451m SW	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Superficial



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- Site Outline
- Search buffers in metres (m)
- Landslip (10k)
- Superficial geology (10k)  
Please see table for more details.

### 14.3 Superficial geology (10k)

Records within 500m

14

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 95 >](#)

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
2	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
3	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel



ID	Location	LEX Code	Description	Rock description
4	141m NE	STGO-XSV	Stoke Goldington Member - Sand And Gravel	Sand And Gravel
5	166m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
6	200m NE	FELM-XSV	Felmersham Member - Sand And Gravel	Sand And Gravel
7	215m SE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
8	225m SE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
9	258m N	STGO-XSV	Stoke Goldington Member - Sand And Gravel	Sand And Gravel
10	271m NE	STGO-XSV	Stoke Goldington Member - Sand And Gravel	Sand And Gravel
11	331m SE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
12	347m SE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
13	372m NE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
14	415m SW	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

*This data is sourced from the British Geological Survey.*

## 14.4 Landslip (10k)

**Records within 500m**

**0**

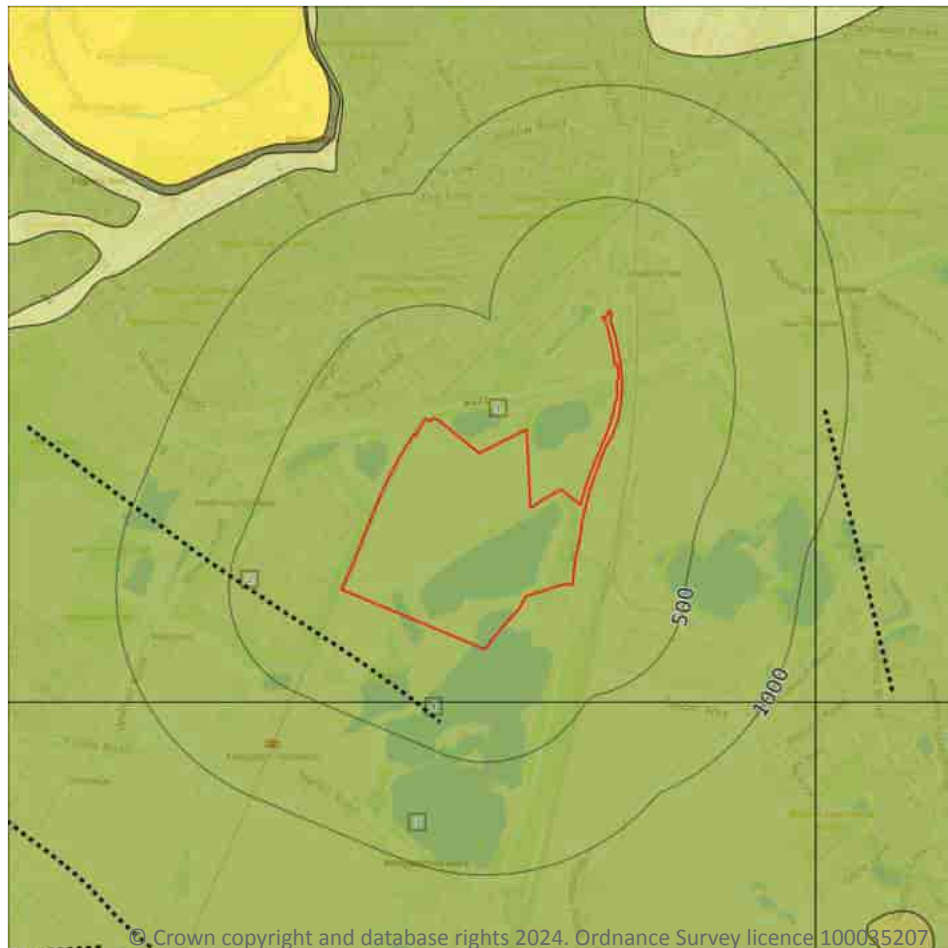
Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*





## Geology 1:10,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- .... Bedrock faults and other linear features (10k)
- Bedrock geology (10k)  
Please see table for more details.

### 14.5 Bedrock geology (10k)

Records within 500m

2

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 97 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	Peterborough Member - Mudstone	Callovian Age
3	234m S	PET-MDST	Peterborough Member - Mudstone	Callovian Age

*This data is sourced from the British Geological Survey.*



## 14.6 Bedrock faults and other linear features (10k)

### Records within 500m

2

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 97 >](#)

ID	Location	Category	Description
2	221m SW	FAULT	Normal fault, inferred; crossmarks on downthrow side
4	334m S	FAULT	Normal fault, inferred; crossmarks on downthrow side

*This data is sourced from the British Geological Survey.*

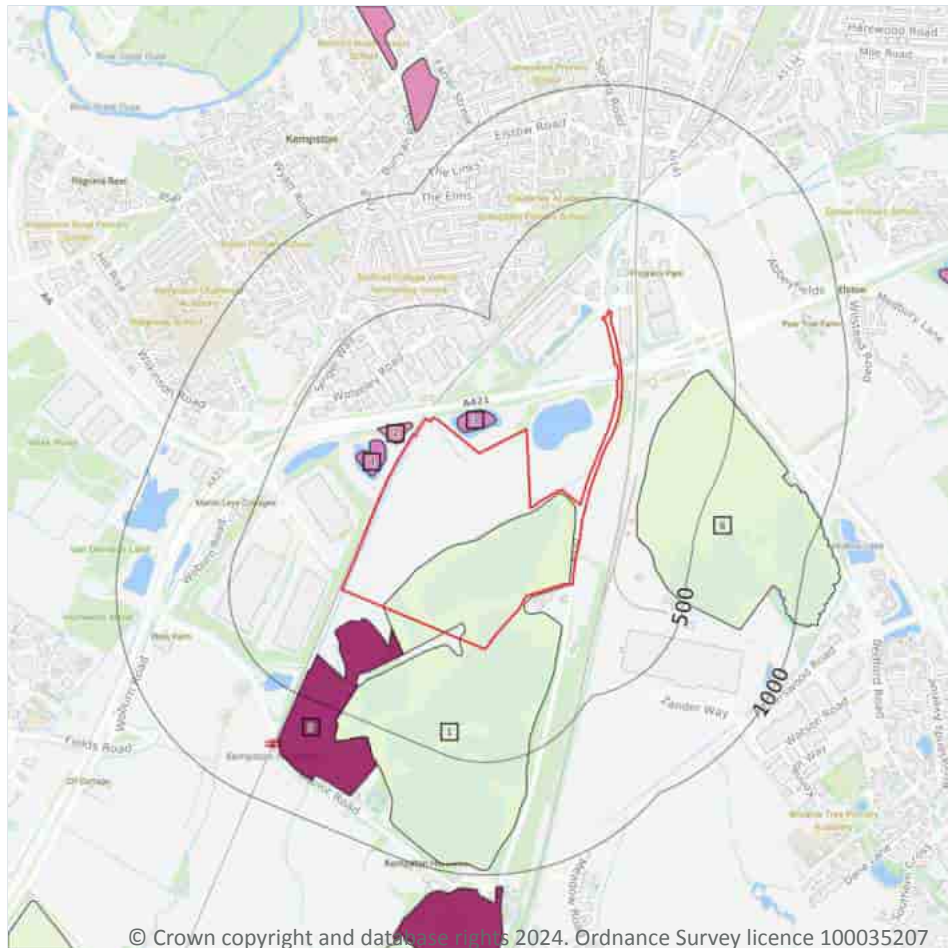


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☐ Geological map tile

## 99

## Geology 1:50,000 scale - Artificial and made ground



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— Site Outline  
Search buffers in metres (m)

- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

### 15.2 Artificial and made ground (50k)

Records within 500m

6

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 100](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
2	28m NW	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
3	28m N	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID
4	51m NW	WGR-VOID	WORKED GROUND (UNDIVIDED)	VOID



ID	Location	LEX Code	Description	Rock description
5	76m SW	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
6	173m NE	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT

*This data is sourced from the British Geological Survey.*

### 15.3 Artificial ground permeability (50k)

#### Records within 50m

**1**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

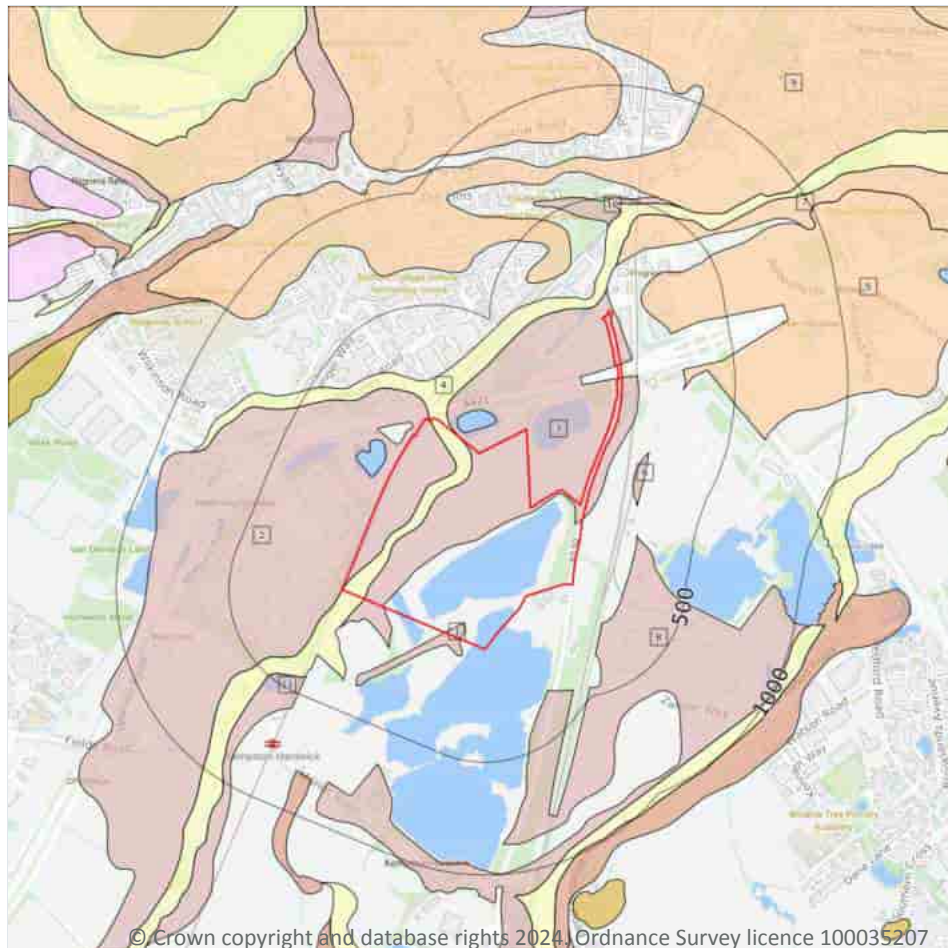
Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low

*This data is sourced from the British Geological Survey.*






## Geology 1:50,000 scale - Superficial



— Site Outline

Search buffers in metres (m)

 Landslip (50k)

Superficial geology (50k)  
Please see table for more details.

### 15.4 Superficial geology (50k)

Records within 500m

11

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 102](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
2	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL





ID	Location	LEX Code	Description	Rock description
3	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
4	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT
5	141m NE	STGO-XSV	STOKE GOLDINGTON MEMBER	SAND AND GRAVEL
6	166m E	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
7	200m NE	FELM-XSV	FELMERSHAM MEMBER	SAND AND GRAVEL
8	215m SE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
9	258m N	STGO-XSV	STOKE GOLDINGTON MEMBER	SAND AND GRAVEL
10	372m NE	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
11	416m SW	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

### Records within 50m

**4**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Intergranular	Low	Very Low
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low

*This data is sourced from the British Geological Survey.*



## 15.6 Landslip (50k)

Records within 500m

0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*

## 15.7 Landslip permeability (50k)

Records within 50m

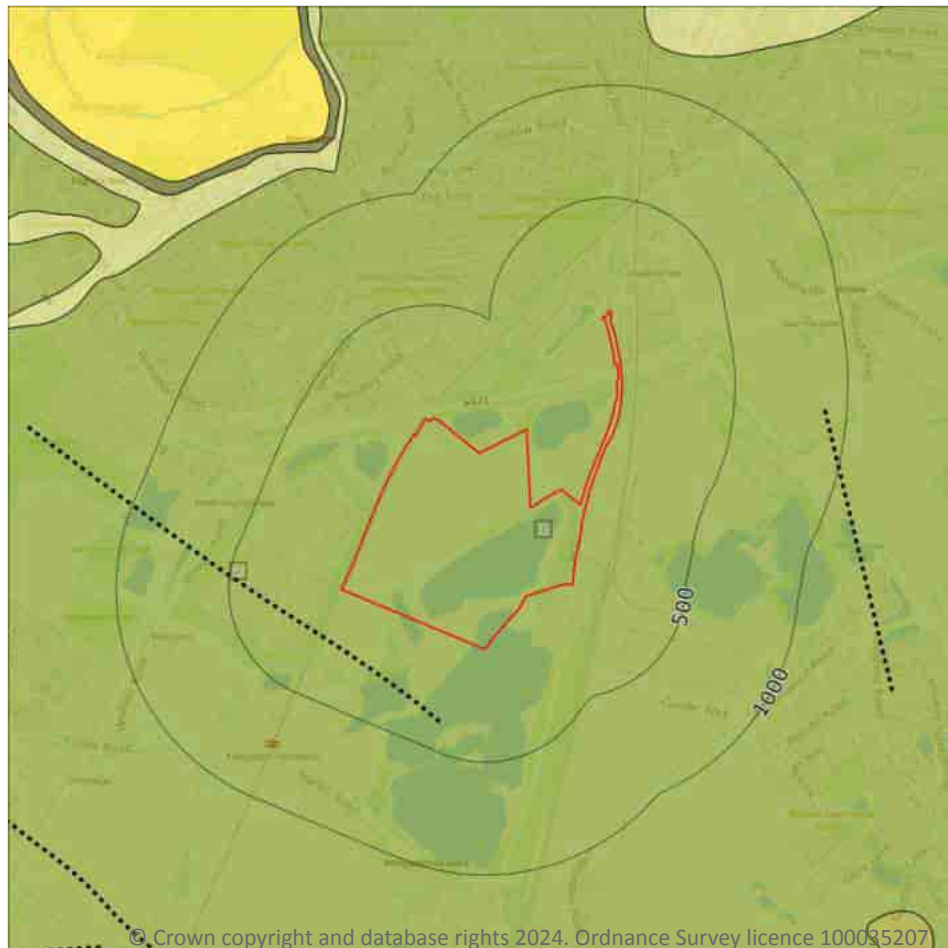
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (50k)
- Bedrock geology (50k)  
Please see table for more details.

### 15.8 Bedrock geology (50k)

#### Records within 500m

1

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 105 >](#)

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	PETERBOROUGH MEMBER - MUDSTONE	CALLOVIAN

*This data is sourced from the British Geological Survey.*



## 15.9 Bedrock permeability (50k)

### Records within 50m

1

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Very Low

*This data is sourced from the British Geological Survey.*

## 15.10 Bedrock faults and other linear features (50k)

### Records within 500m

1

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

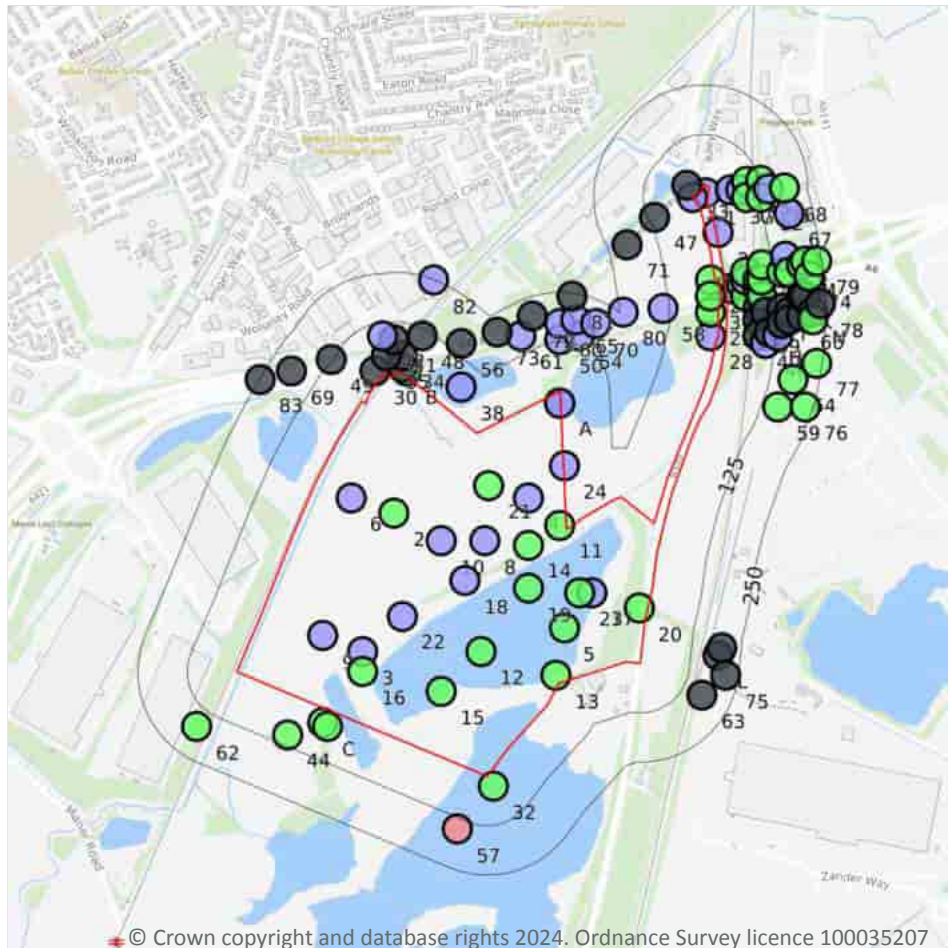
Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 105 >](#)

ID	Location	Category	Description
2	222m SW	FAULT	Fault, inferred

*This data is sourced from the British Geological Survey.*



## 16 Boreholes



— Site Outline  
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

### 16.1 BGS Boreholes

Records within 250m

116

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on [page 107 >](#)

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	504089 246713	A428 TRUNKROAD FELIXSTOWE WEEDON TP 224	3.75	N	<a href="#">524205 ↗</a>
2	On site	503300 245900	COW MEADOW KEMPSTON	24.38	N	<a href="#">524261 ↗</a>



ID	Location	Grid reference	Name	Length	Confidential	Web link
3	On site	503220 245550	L B C (REDLANDS) KEMPSTON HARDWICK 13	9.14	N	<a href="#">523751 ↗</a>
4	On site	503640 245940	L B C (REDLANDS) KEMPSTON HARDWICK 2	9.14	N	<a href="#">523741 ↗</a>
5	On site	503730 245610	L B C (REDLANDS) KEMPSTON HARDWICK 5	15.84	N	<a href="#">523744 ↗</a>
6	On site	503190 245940	L B C (REDLANDS) KEMPSTON HARDWICK 3	6.7	N	<a href="#">523742 ↗</a>
7	On site	504056 246701	A428 TRUNKROAD FELIXSTOWE WEEDON 223	6.0	N	<a href="#">524204 ↗</a>
8	On site	503530 245830	L B C (REDLANDS) KEMPSTON HARDWICK 16	8.99	N	<a href="#">523754 ↗</a>
9	On site	503120 245590	L B C (REDLANDS) KEMPSTON HARDWICK 6	8.38	N	<a href="#">523745 ↗</a>
10	On site	503420 245830	L B C (REDLANDS) KEMPSTON HARDWICK 4	8.68	N	<a href="#">523743 ↗</a>
11	On site	503720 245870	L B C (REDLANDS) KEMPSTON HARDWICK 10	10.51	N	<a href="#">523748 ↗</a>
12	On site	503520 245550	L B C (REDLANDS) KEMPSTON HARDWICK 14	12.8	N	<a href="#">523752 ↗</a>
13	On site	503710 245490	SUSSEX & DORKING UNITED BRICK CO K/B	22.2	N	<a href="#">523638 ↗</a>
14	On site	503640 245820	L B C KEMPSTON HARDWICK 5/71	10.97	N	<a href="#">523736 ↗</a>
15	On site	503420 245450	L B C (REDLANDS) KEMPSTON HARDWICK 7	12.8	N	<a href="#">523746 ↗</a>
16	On site	503220 245500	L B C KEMPSTON HARDWICK 2/71	14.02	N	<a href="#">523733 ↗</a>
17	On site	503800 245700	RACEMEADOW FARM	9.14	N	<a href="#">524258 ↗</a>
18	On site	503480 245730	L B C KEMPSTON HARDWICK 4/71	9.44	N	<a href="#">523735 ↗</a>
19	On site	503640 245710	L B C (REDLANDS) KEMPSTON HARDWICK 15	10.66	N	<a href="#">523753 ↗</a>
20	On site	503920 245660	SUSSEX & DORKING UNITED BRICK CO K/C	19.81	N	<a href="#">523639 ↗</a>
21	On site	503540 245970	L B C KEMPSTON HARDWICK 6/71	12.49	N	<a href="#">523737 ↗</a>
22	On site	503320 245640	L B C KEMPSTON HARDWICK 3/71	9.44	N	<a href="#">523734 ↗</a>
23	On site	503770 245700	L B C (REDLANDS) KEMPSTON HARDWICK 12	13.56	N	<a href="#">523750 ↗</a>
A	On site	503720 246180	L B C (REDLANDS) KEMPSTON HARDWICK 11	7.46	N	<a href="#">523749 ↗</a>
A	On site	503720 246180	L B C KEMPSTON HARDWICK 8/71	7.92	N	<a href="#">523739 ↗</a>
24	1m NE	503730 246020	L B C KEMPSTON HARDWICK 7/71	9.44	N	<a href="#">523738 ↗</a>
25	4m NE	504120 246610	BEDFORD SOUTHERN BYPASS TP216	4.0	N	<a href="#">524289 ↗</a>
B	10m N	503330 246260	SUSSEX & DORKING UNITED BRICK CO K/E	13.72	N	<a href="#">523641 ↗</a>
26	11m NE	504150 246470	BEDFORD SOUTHERN BYPASS TP217	4.2	N	<a href="#">524290 ↗</a>
27	12m NE	504100 246490	BEDFORD SOUTHERN BYPASS 214	20.0	N	<a href="#">524288 ↗</a>





ID	Location	Grid reference	Name	Length	Confidential	Web link
B	15m N	503320 246270	KEMPSTON SOUTHERN RELIEF ROAD 10	-	Y	N/A
28	20m NE	504100 246350	BEDFORD SOUTHERN BYPASS TP213	4.2	N	<a href="#">524287 ↗</a>
29	21m NE	504100 246410	BEDFORD SOUTHERN BYPASS 212	20.0	N	<a href="#">524286 ↗</a>
30	22m N	503250 246260	KEMPSTON SOUTHERN RELIEF ROAD 9	-	Y	N/A
31	27m NE	504100 246450	BEDFORD SOUTHERN BYPASS 211	30.0	N	<a href="#">524285 ↗</a>
32	28m S	503550 245210	L B C (REDLANDS) KEMPSTON HARDWICK 17	28.04	N	<a href="#">523755 ↗</a>
33	32m NE	504040 246730	KEMPSTON SOUTHERN RELIEF ROAD 20	-	Y	N/A
C	35m SW	503120 245370	L B C KEMPSTON HARDWICK 1/71	10.97	N	<a href="#">523732 ↗</a>
C	40m SW	503130 245360	SUSSEX & DORKING UNITED BRICK CO K/D	18.29	N	<a href="#">523640 ↗</a>
D	42m NE	504180 246480	BEDFORD SOUTHERN BYPASS ADDITIONAL GI NO 1 BH3171	12.5	N	<a href="#">524267 ↗</a>
34	42m N	503320 246300	KEMPSTON SOUTHERN RELIEF ROAD 11	-	Y	N/A
35	44m N	503280 246300	KEMPSTON SOUTHERN RELIEF ROAD 8	-	Y	N/A
36	49m NE	504190 246450	BEDFORD SOUTHERN BYPASS 219	30.0	N	<a href="#">524291 ↗</a>
D	52m NE	504190 246490	BEDFORD SOUTHERN BYPASS TP2278	3.3	N	<a href="#">524318 ↗</a>
37	55m NE	504151 246718	A428 TRUNKROAD FELIXSTOWE WEEDON 225	10.0	N	<a href="#">524206 ↗</a>
D	55m NE	504190 246510	BEDFORD SOUTHERN BYPASS 220	20.0	N	<a href="#">524292 ↗</a>
38	66m N	503470 246220	L B C (REDLANDS) KEMPSTON HARDWICK 1	6.4	N	<a href="#">523740 ↗</a>
E	77m NE	504220 246420	PROPOSED MOTORIST SERVICE AREA BEDFORD TP2	-	Y	N/A
39	78m NE	504220 246390	PROPOSED MOTORIST SERVICE AREA BEDFORD TP1	-	Y	N/A
40	79m NE	504220 246350	PROPOSED MOTORIST SERVICE AREA BEDFORD 1	-	Y	N/A
41	80m N	503300 246340	KEMPSTON SOUTHERN RELIEF ROAD 7	-	Y	N/A
F	80m NE	504220 246470	BEDFORD SOUTHERN BYPASS TP2279	2.7	N	<a href="#">524319 ↗</a>
G	81m NE	504177 246718	A428 TRUNKROAD FELIXSTOWE WEEDON TP 227	4.0	N	<a href="#">524208 ↗</a>
F	82m NE	504220 246490	BEDFORD SOUTHERN BYPASS 222	30.0	N	<a href="#">524294 ↗</a>
F	89m NE	504230 246450	BEDFORD SOUTHERN BYPASS 224	20.0	N	<a href="#">524295 ↗</a>
F	92m NE	504230 246490	BEDFORD SOUTHERN BYPASS ADDITIONAL GI NO 1 BH3171A	13.05	N	<a href="#">524268 ↗</a>



ID	Location	Grid reference	Name	Length	Confidential	Web link
42	93m N	503270 246350	BEDFORD SOUTH ORBITAL SEWER 48	6.0	N	<a href="#">523991</a> ↗
43	96m NE	504192 246740	A428 TRUNKROAD FELIXSTOWE WEEDON 226	20.0	N	<a href="#">524207</a> ↗
44	97m SW	503030 245340	L B C (REDLANDS) KEMPSTON HARDWICK 9	10.97	N	<a href="#">523747</a> ↗
G	97m NE	504192 246701	A428 TRUNKROAD FELIXSTOWE WEEDON 228	20.0	N	<a href="#">524209</a> ↗
E	97m NE	504240 246410	PROPOSED MOTORIST SERVICE AREA BEDFORD 15	-	Y	N/A
45	98m NE	504230 246530	BEDFORD SOUTHERN BYPASS 221	20.0	N	<a href="#">524293</a> ↗
46	100m NE	504240 246330	L B C ELSTOW PIT NO 28	7.49	N	<a href="#">523768</a> ↗
47	108m NE	503960 246650	KEMPSTON SOUTHERN RELIEF ROAD 19	-	Y	N/A
48	108m N	503370 246350	KEMPSTON SOUTHERN RELIEF ROAD 12	-	Y	N/A
H	109m NE	504250 246360	PROPOSED MOTORIST SERVICE AREA BEDFORD 2	-	Y	N/A
H	129m NE	504270 246350	L B C ELSTOW PIT NO 27	9.82	N	<a href="#">523767</a> ↗
49	130m NW	503140 246290	KEMPSTON SOUTHERN RELIEF ROAD 6	-	Y	N/A
50	131m NE	503720 246340	BEDFORD SOUTHERN BYPASS 25	10.0	N	<a href="#">524281</a> ↗
51	132m NE	504228 246742	A428 TRUNKROAD FELIXSTOWE WEEDON 229	20.0	N	<a href="#">524210</a> ↗
52	133m NE	504228 246701	A428 TRUNKROAD FELIXSTOWE WEEDON 230	20.0	N	<a href="#">524211</a> ↗
I	137m NE	504280 246420	PROPOSED MOTORIST SERVICE AREA BEDFORD TP3	-	Y	N/A
I	138m NE	504280 246380	PROPOSED MOTORIST SERVICE AREA BEDFORD 3	-	Y	N/A
53	140m NE	503980 246420	BEDFORD SOUTHERN BYPASS TP29	4.0	N	<a href="#">524284</a> ↗
J	144m NE	504280 246510	BEDFORD SOUTHERN BYPASS ADDITIONAL GI NO 1 BH3171B	12.5	N	<a href="#">524269</a> ↗
54	149m NE	503770 246350	BEDFORD SOUTHERN BYPASS TP24	1.8	N	<a href="#">524280</a> ↗
55	150m NE	504247 246721	A428 TRUNKROAD FELIXSTOWE WEEDON TP 231	4.0	N	<a href="#">524212</a> ↗
56	151m N	503470 246330	KEMPSTON SOUTHERN RELIEF ROAD 13	-	Y	N/A
57	153m S	503460 245100	SUSSEX FACTORY UNITED BRICK CO K/A	36.57	N	<a href="#">523637</a> ↗
I	157m NE	504300 246410	PROPOSED MOTORIST SERVICE AREA BEDFORD 16	-	Y	N/A
I	158m NE	504300 246390	PROPOSED MOTORIST SERVICE AREA BEDFORD 4	-	Y	N/A
58	161m NE	504290 246550	BEDFORD SOUTHERN BYPASS TP225	4.0	N	<a href="#">524296</a> ↗



ID	Location	Grid reference	Name	Length	Confidential	Web link
J	164m NE	504300 246510	BEDFORD SOUTHERN BYPASS 226	20.0	N	<a href="#">524297 ↗</a>
59	164m NE	504270 246170	L B C ELSTOW PIT 1/49	13.53	N	<a href="#">523756 ↗</a>
60	171m N	503720 246380	BEDFORD SOUTHERN BYPASS TP22	4.5	N	<a href="#">524278 ↗</a>
61	171m N	503620 246350	BEDFORD SOUTHERN BYPASS 21	8.5	N	<a href="#">524277 ↗</a>
62	172m SW	502800 245360	SUSSEX & DORKING UNITED BRICK CO K/N	12.19	N	<a href="#">523647 ↗</a>
63	176m SE	504080 245440	LAND ADJACENT TO ELSTOW LANDFILL SITE BEDFORD TP6	-	Y	N/A
64	184m NE	504310 246240	LBC ELSTOW 3/49	14.47	N	<a href="#">523758 ↗</a>
65	185m NE	503760 246390	BEDFORD SOUTHERN BYPASS 23	8.6	N	<a href="#">524279 ↗</a>
66	188m NE	504330 246400	PROPOSED MOTORIST SERVICE AREA BEDFORD 5	-	Y	N/A
K	188m NE	504330 246450	PROPOSED MOTORIST SERVICE AREA BEDFORD TP4	-	Y	N/A
67	191m NE	504300 246660	LBC ELSTOW PIT 1/39	9.4	N	<a href="#">524045 ↗</a>
68	191m NE	504288 246723	A428 TRUNKROAD FELIXSTOWE WEEDON 232	14.1	N	<a href="#">524213 ↗</a>
69	192m NW	503040 246260	KEMPSTON SOUTHERN RELIEF ROAD 5	-	Y	N/A
70	193m NE	503810 246380	BEDFORD SOUTHERN BYPASS TP26	2.0	N	<a href="#">524282 ↗</a>
L	194m E	504120 245540	LAND ADJACENT TO ELSTOW LANDFILL SITE BEDFORD 2	-	Y	N/A
M	197m NE	504330 246530	BEDFORD SOUTHERN BYPASS ADDITIONAL GI NO 1 BH3171C	11.6	N	<a href="#">524270 ↗</a>
K	198m NE	504340 246450	PROPOSED MOTORIST SERVICE AREA BEDFORD 14	-	Y	N/A
71	202m NE	503890 246580	KEMPSTON SOUTHERN RELIEF ROAD 18	-	Y	N/A
L	202m E	504130 245560	LAND ADJACENT TO ELSTOW LANDFILL SITE BEDFORD TP3	-	Y	N/A
72	203m N	503650 246400	KEMPSTON SOUTHERN RELIEF ROAD 15	-	Y	N/A
73	207m N	503560 246360	KEMPSTON SOUTHERN RELIEF ROAD 14	-	Y	N/A
M	208m NE	504340 246540	BEDFORD SOUTHERN BYPASS 227	30.0	N	<a href="#">524298 ↗</a>
74	213m NE	504350 246500	BEDFORD SOUTHERN BYPASS 228	20.0	N	<a href="#">524299 ↗</a>
N	217m NE	504360 246410	PROPOSED MOTORIST SERVICE AREA BEDFORD 6	-	Y	N/A
N	218m NE	504360 246390	L B C ELSTOW PIT NO 26	11.83	N	<a href="#">523766 ↗</a>

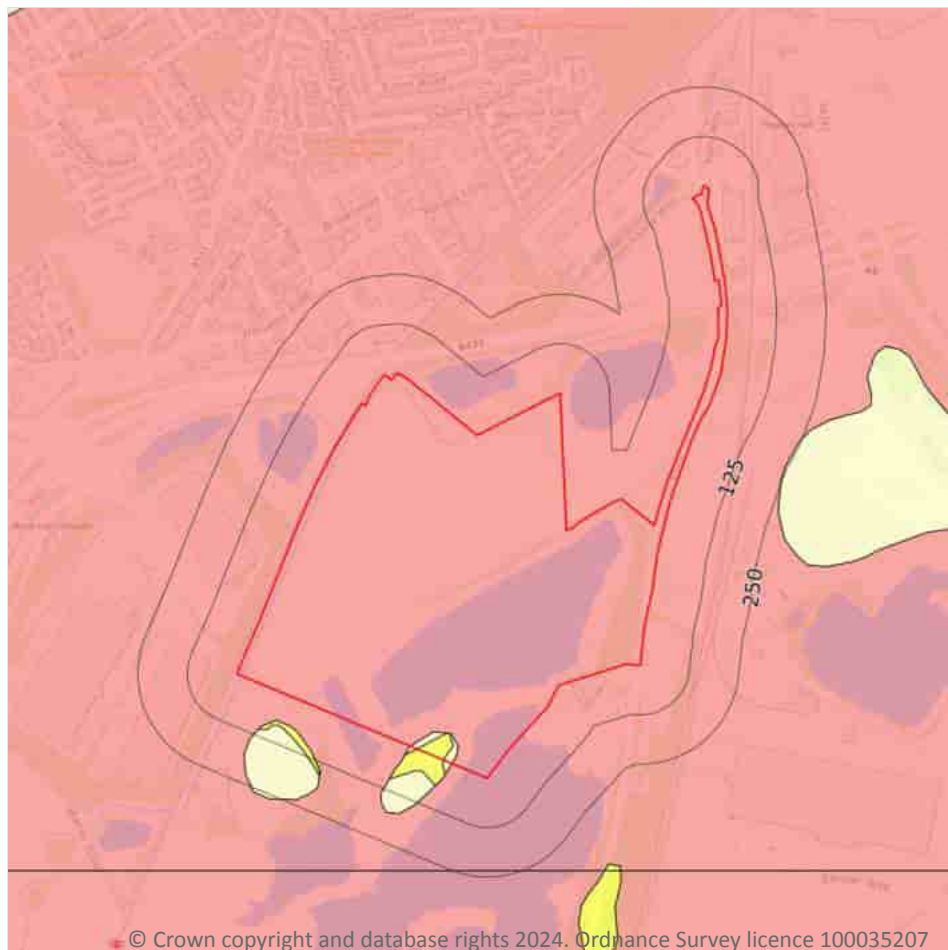


ID	Location	Grid reference	Name	Length	Confidential	Web link
75	219m E	504140 245490	LAND ADJACENT TO ELSTOW LANDFILL SITE BEDFORD TP4	-	Y	N/A
76	230m NE	504340 246170	LBC ELSTOW 2/49	17.62	N	<a href="#">523757 ↗</a>
77	237m NE	504370 246280	LBC ELSTOW 4/49	11.91	N	<a href="#">523759 ↗</a>
78	237m NE	504380 246430	PROPOSED MOTORIST SERVICE AREA BEDFORD 7	-	Y	N/A
79	238m NE	504370 246540	BEDFORD SOUTHERN BYPASS ADDITIONAL GI NO 1 BH3171D	12.5	N	<a href="#">524271 ↗</a>
80	240m NE	503880 246410	BEDFORD SOUTHERN BYPASS 27	10.0	N	<a href="#">524283 ↗</a>
81	242m N	503750 246450	KEMPSTON SOUTHERN RELIEF ROAD 16	-	Y	N/A
82	248m N	503400 246490	BEDFORD SOUTH ORBITAL SEWER 14	8.0	N	<a href="#">523998 ↗</a>
83	249m NW	502960 246240	KEMPSTON SOUTHERN RELIEF ROAD 4	-	Y	N/A

*This data is sourced from the British Geological Survey.*



## 17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.1 Shrink swell clays

#### Records within 50m

4

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 113 >](#)

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
On site	Very low	Ground conditions predominantly low plasticity.
On site	Moderate	Ground conditions predominantly high plasticity.



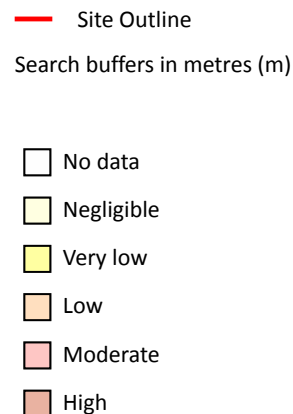
Location	Hazard rating	Details
46m S	Negligible	Ground conditions predominantly non-plastic.

*This data is sourced from the British Geological Survey.*





## Natural ground subsidence - Running sands



### 17.2 Running sands

#### Records within 50m

5

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on [page 115 >](#)

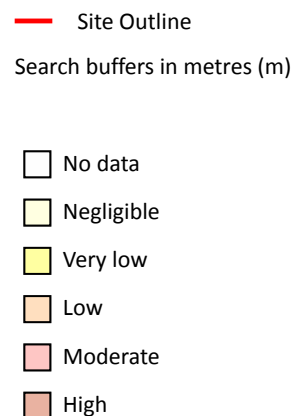
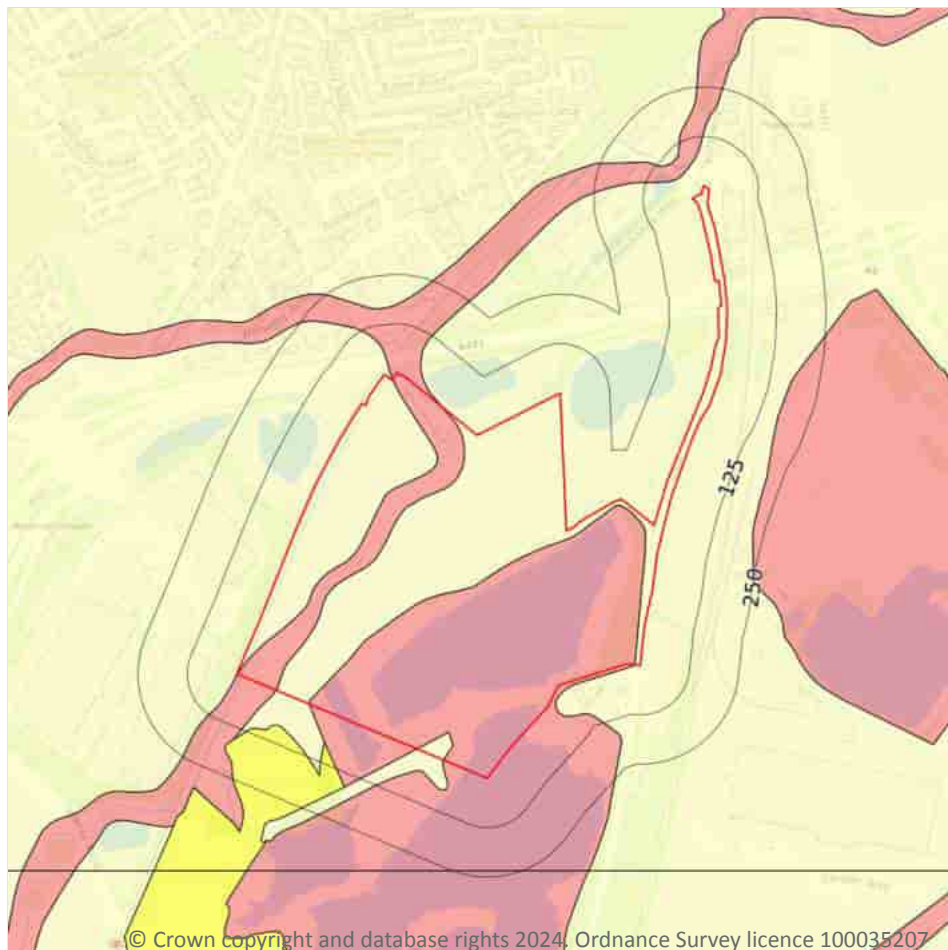
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.
28m NW	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.
28m N	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Compressible deposits



### 17.3 Compressible deposits

#### Records within 50m

2

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 117 >](#)

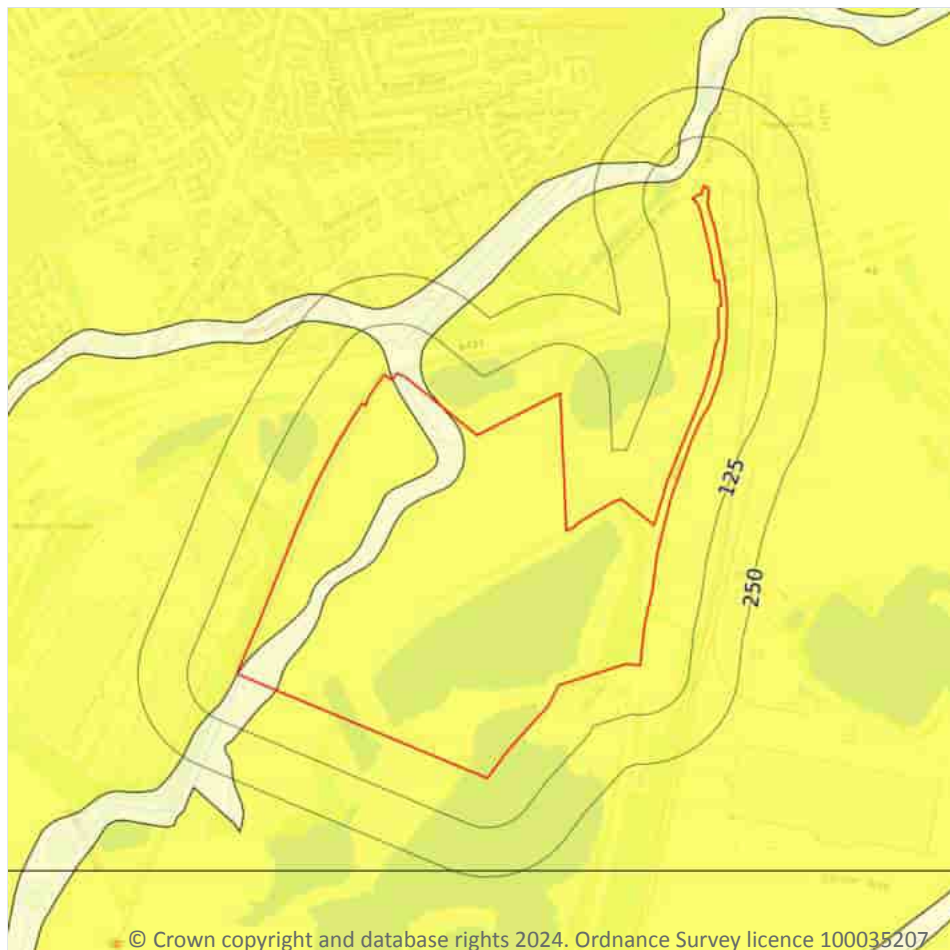
Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.



*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.4 Collapsible deposits

#### Records within 50m

2

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

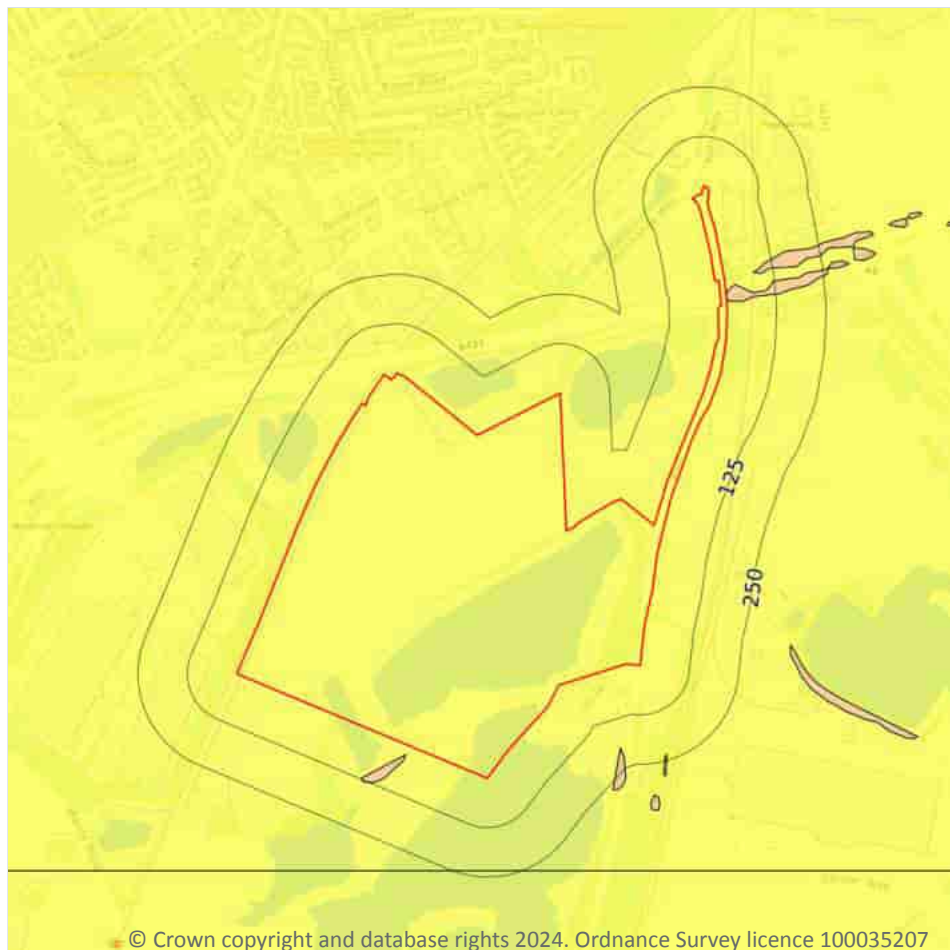
Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 119 >](#)

Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.5 Landslides

#### Records within 50m

3

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on [page 120](#) >

Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.



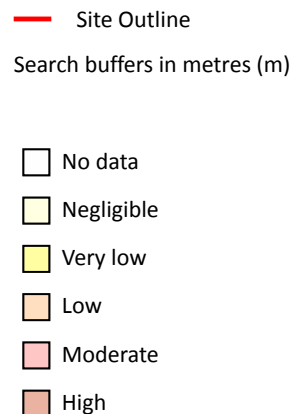
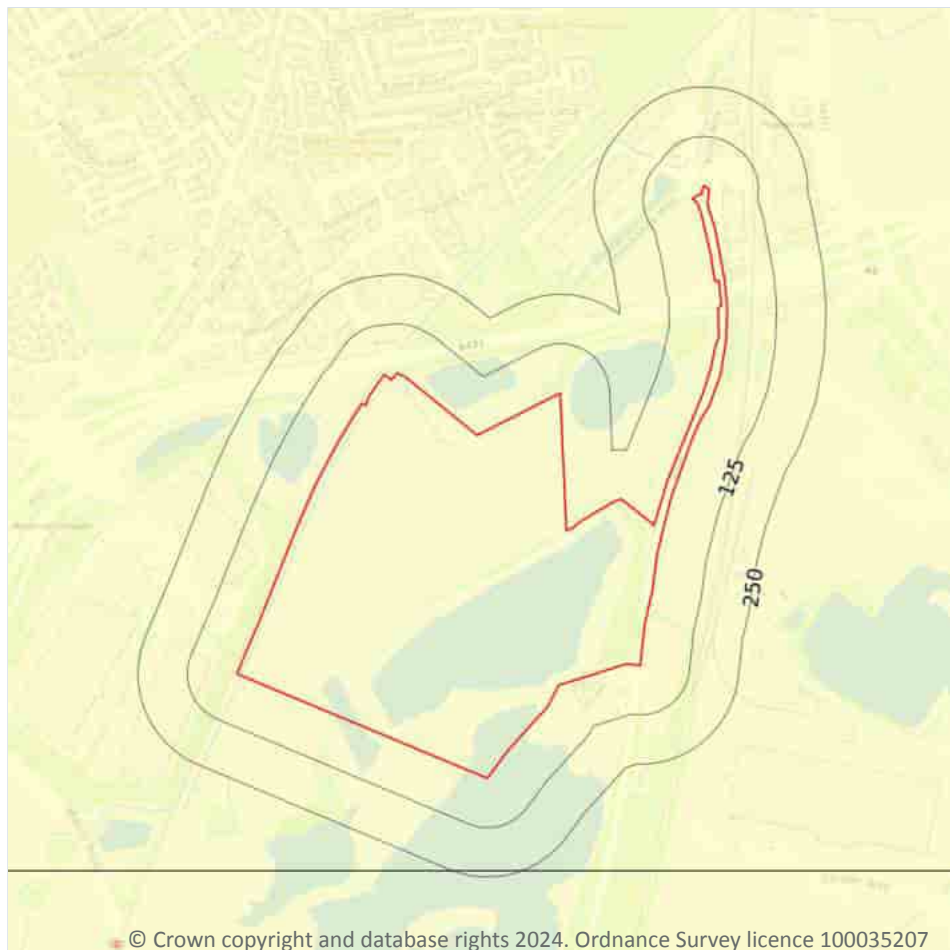


Location	Hazard rating	Details
On site	Low	<b>Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.</b>
25m S	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Ground dissolution of soluble rocks



### 17.6 Ground dissolution of soluble rocks

#### Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 122 >](#)

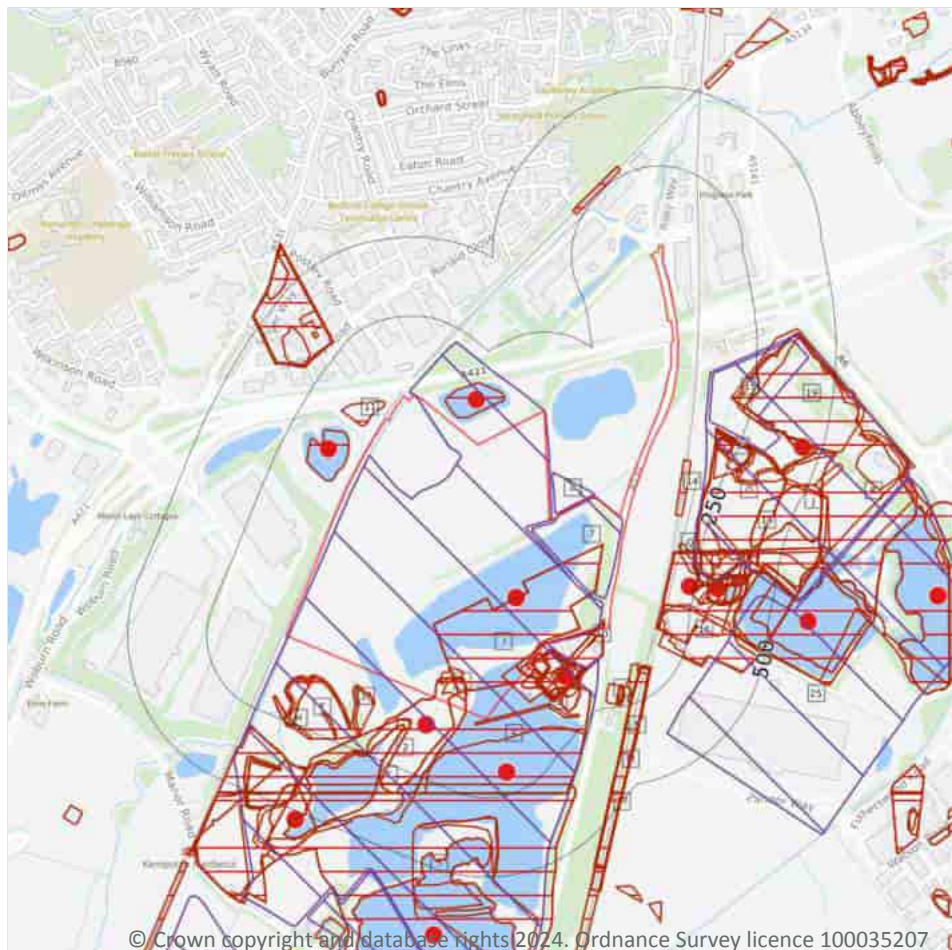
Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



*This data is sourced from the British Geological Survey.*



## 18 Mining and ground workings



- Site Outline
- Search buffers in metres (m)
- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining
- Non Coal Mining
  - Sporadic underground mining of restricted extent possible
  - Localised small scale underground mining possible
  - Small scale mining possible
  - Underground mining known or likely within or in close proximity
  - Underground mining known within or in very close proximity

### 18.1 BritPits

#### Records within 500m

9

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on [page 124](#) >



ID	Location	Details	Description
1	On site	<b>Name: Hardwick Hill Brick Works</b> <b>Address: Kempston Hardwick, KEMPSTON, Bedfordshire</b> <b>Commodity: Clay &amp; Shale</b> <b>Status: Ceased</b>	<b>Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site</b> <b>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority</b>
13	91m S	Name: Kempston Hardwick Brick Works Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
A	106m SE	Name: Hardwick Hill Brick Works Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
D	107m N	Name: Hardwick Hill Brick Works Address: KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
E	110m NW	Name: Marshleys Farm Address: KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
G	181m S	Name: Hardwick Hill Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority



ID	Location	Details	Description
L	232m E	Name: Elstow Rail Depot Address: Elstow, BEDFORD, Bedfordshire Commodity: Crushed Rock Status: Active	Type: A site where mineral commodities are unloaded from rail trucks and stored Status description: Site which is actively extracting mineral products, or in the case of wharfs and rail depots, is actively handing minerals
L	317m E	Name: Elstow Brick Works Address: Elstow, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
26	439m E	Name: Elstow Brick Works Address: Elstow, BEDFORD, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

*This data is sourced from the British Geological Survey.*

## 18.2 Surface ground workings

<b>Records within 250m</b>	<b>89</b>
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Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on [page 124 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
2	On site	Water Body	1959	1:10560
3	On site	Clay Pit	1987	1:10000
4	On site	Clay Pit	1978	1:10000
5	On site	Unspecified Disused Pit	1987	1:10000
A	On site	Pond	1959	1:10560
A	On site	Bricks Works	1938	1:10560
A	On site	Water Body	1971	1:10000
A	On site	Brick Works	1948	1:10560
A	On site	Bricks Works	1938	1:10560





ID	Location	Land Use	Year of mapping	Mapping scale
A	On site	Pond	1948	1:10560
A	On site	Brick Works	1924	1:10560
B	On site	Water Body	1971	1:10000
B	On site	Unspecified Heap	1971	1:10000
C	On site	Pond	1948	1:10560
9	3m S	Unspecified Ground Workings	1971	1:10000
A	17m SE	Unspecified Pit	1938	1:10560
A	17m SE	Unspecified Pit	1938	1:10560
A	19m SE	Unspecified Ground Workings	1924	1:10560
10	21m SE	Pond	1938	1:10560
A	24m SE	Brick Works	1900	1:10560
D	26m N	Water Body	1987	1:10000
11	32m NW	Unspecified Pit	1987	1:10000
E	41m NW	Water Body	1987	1:10000
12	58m SW	Unspecified Ground Workings	1948	1:10560
F	61m SW	Unspecified Heap	1959	1:10560
G	68m S	Clay Pit	1971	1:10000
A	74m SE	Unspecified Heap	1948	1:10560
H	81m SW	Unspecified Ground Workings	1948	1:10560
H	84m SW	Unspecified Heap	1971	1:10000
H	84m SW	Unspecified Heap	1987	1:10000
H	84m SW	Unspecified Heap	1978	1:10000
C	93m S	Water Body	1971	1:10000
C	99m S	Clay Pit	1978	1:10000
C	99m S	Unspecified Disused Pit	1987	1:10000
I	104m SE	Pond	1948	1:10560
I	105m SE	Pond	1959	1:10560
14	114m NE	Cuttings	1882	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
C	118m S	Water Body	1987	1:10000
C	118m S	Water Body	1978	1:10000
K	135m SE	Old Clay Pits	1882	1:10560
L	149m E	Brick Works	1900	1:10560
L	153m E	Brick Works	1924	1:10560
M	157m SE	Cuttings	1938	1:10560
M	157m SE	Cuttings	1900	1:10560
M	157m SE	Cuttings	1948	1:10560
M	157m SE	Cuttings	1924	1:10560
16	159m E	Brick Works	1971	1:10000
N	159m SE	Cuttings	1959	1:10560
N	159m SE	Cuttings	1971	1:10000
N	159m SE	Cuttings	1987	1:10000
N	159m SE	Cuttings	1978	1:10000
L	160m E	Brick Works	1948	1:10560
O	162m NE	Clay Pit	1938	1:10560
L	163m E	Bricks Works	1938	1:10560
L	163m E	Bricks Works	1938	1:10560
O	165m NE	Clay Pit	1938	1:10560
O	166m NE	Clay Pit	1924	1:10560
J	168m NE	Unspecified Ground Workings	1948	1:10560
P	169m NE	Pond	1959	1:10560
17	170m SE	Cuttings	1882	1:10560
P	177m NE	Pond	1938	1:10560
F	178m SW	Unspecified Ground Workings	1948	1:10560
Q	178m E	Unspecified Heap	1900	1:10560
P	179m NE	Pond	1924	1:10560
P	180m NE	Pond	1938	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
P	181m NE	Water Body	1971	1:10000
P	181m NE	Water Body	1987	1:10000
P	181m NE	Water Body	1978	1:10000
P	183m NE	Pond	1948	1:10560
K	183m SE	Pond	1938	1:10560
K	183m SE	Pond	1948	1:10560
R	183m NE	Refuse Heap	1987	1:10000
18	184m NE	Unspecified Ground Workings	1959	1:10560
K	185m SE	Pond	1924	1:10560
K	186m SE	Pond	1959	1:10560
K	186m SE	Pond	1971	1:10000
K	186m SE	Pond	1987	1:10000
K	186m SE	Pond	1978	1:10000
Q	190m E	Unspecified Heap	1900	1:10560
R	196m NE	Unspecified Pit	1959	1:10560
S	207m S	Unspecified Disused Pit	1989	1:10000
S	207m S	Unspecified Disused Pit	1980	1:10000
19	211m NE	Water Bodies	1971	1:10000
Q	230m E	Unspecified Ground Workings	1938	1:10560
Q	230m E	Unspecified Ground Workings	1938	1:10560
Q	232m E	Unspecified Ground Workings	1924	1:10560
R	238m NE	Refuse Heap	1978	1:10000
L	244m E	Unspecified Pit	1900	1:10560
Q	248m E	Unspecified Heaps	1948	1:10560

*This is data is sourced from Ordnance Survey/Groundsure.*



## 18.3 Underground workings

**Records within 1000m****0**

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

*This data is sourced from Ordnance Survey/Groundsure.*

## 18.4 Underground mining extents

**Records within 500m****0**

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

*This data is sourced from Groundsure.*

## 18.5 Historical Mineral Planning Areas

**Records within 500m****6**

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

Features are displayed on the Mining and ground workings map on [page 124 >](#)

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
6	On site	Hardwick Hill	Clay	Surface mineral working	Valid	31/07/52
7	On site	Hardwick Hill	Clay	Surface mineral working	Valid	04/07/56
8	On site	Hardwick Hill	Clay	Surface mineral working	Valid	29/03/56
J	105m NE	Elstow	Clay	Surface mineral working	Valid	26/5/49
15	115m NE	Elstow	Clay	Surface mineral working	Valid	26/5/49
25	334m SE	Elstow	Clay	Surface mineral working	Valid	26/5/49

*This data is sourced from the British Geological Survey.*



## 18.6 Non-coal mining

### Records within 1000m

0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

*This data is sourced from the British Geological Survey.*

## 18.7 JPB mining areas

### Records on site

0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

*This data is sourced from Johnson Poole and Bloomer.*

## 18.8 The Coal Authority non-coal mining

### Records within 500m

0

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

*This data is sourced from The Coal Authority.*

## 18.9 Researched mining

### Records within 500m

2

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
<b>On site</b>	<b>Stone</b>
173m NE	Stone



*This data is sourced from Groundsure.*

### 18.10 Mining record office plans

**Records within 500m**

**0**

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

### 18.11 BGS mine plans

**Records within 500m**

**0**

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

### 18.12 Coal mining

**Records on site**

**0**

Areas which could be affected by past, current or future coal mining.

*This data is sourced from the Coal Authority.*

### 18.13 Brine areas

**Records on site**

**0**

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

*This data is sourced from the Cheshire Brine Subsidence Compensation Board.*

### 18.14 Gypsum areas

**Records on site**

**0**

Generalised areas that may be affected by gypsum extraction.

*This data is sourced from British Gypsum.*





## 18.15 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

*This data is sourced from Groundsure.*

## 18.16 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

*This data is sourced from the Kaolin and Ball Clay Association (UK).*



## 19 Ground cavities and sinkholes

### 19.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

*This data is sourced from Stantec UK Ltd.*

### 19.2 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

*This data is sourced from Stantec UK Ltd.*

### 19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

*This data is sourced from Groundsure.*

### 19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



*This data is sourced from Groundsure.*

## 19.5 National karst database

Records within 500m

0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

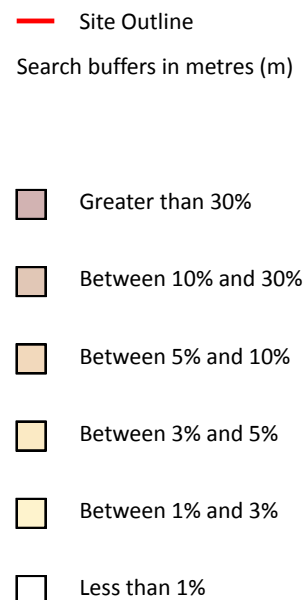
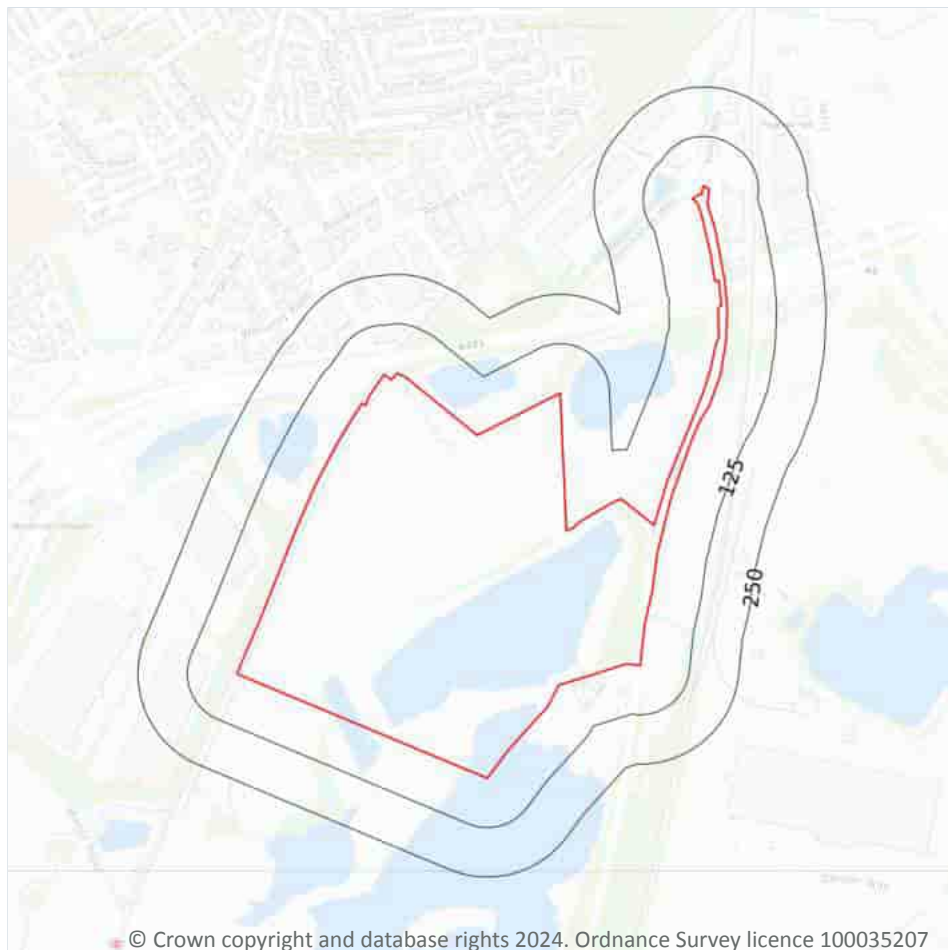
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

*This data is sourced from the British Geological Survey.*



## 20 Radon



### 20.1 Radon

#### Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 136 >](#)

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None



*This data is sourced from the British Geological Survey and UK Health Security Agency.*



## 21 Soil chemistry

### 21.1 BGS Estimated Background Soil Chemistry

Records within 50m

25

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km<sup>2</sup>. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km<sup>2</sup>; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg





Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
6m SW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
17m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
23m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
44m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg

*This data is sourced from the British Geological Survey.*

## 21.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km<sup>2</sup>).

*This data is sourced from the British Geological Survey.*



## 21.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km<sup>2</sup>.

*This data is sourced from the British Geological Survey.*



## 22 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

### 22.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

*This data is sourced from publicly available information by Groundsure.*

### 22.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



*This data is sourced from publicly available information by Groundsure.*

## 22.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

*This data is sourced from the Ordnance Survey.*

## 22.4 Historical railway and tunnel features

Records within 250m

19

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on [page 141](#) >

Location	Land Use	Year of mapping	Mapping scale
89m SE	Railway Sidings	1924	10560
92m SE	Railway Sidings	1926	2500
129m SE	Railway Sidings	1959	10560
132m SE	Railway Sidings	1971	10000
139m E	Railway Sidings	1948	10560
142m E	Railway Sidings	1938	10560
143m SE	Railway Sidings	1926	2500
145m SE	Railway Sidings	1901	2500
146m SE	Railway Sidings	1968	2500
147m E	Railway Sidings	1938	10560
147m SE	Railway Sidings	1900	10560
155m E	Railway Sidings	1924	10560
167m E	Railway Sidings	1997	2500
170m E	Railway Sidings	1938	10560
179m E	Railway Sidings	1926	2500
183m E	Railway Sidings	1924	10560
241m E	Railway Sidings	1901	2500



Location	Land Use	Year of mapping	Mapping scale
246m E	Tramway Sidings	1924	10560
247m E	Tramway Sidings	1926	2500

*This data is sourced from Ordnance Survey/Groundsure.*

## 22.5 Royal Mail tunnels

**Records within 250m**

**0**

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

*This data is sourced from Groundsure/the Postal Museum.*

## 22.6 Historical railways

**Records within 250m**

**0**

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

*This data is sourced from OpenStreetMap.*

## 22.7 Railways

**Records within 250m**

**59**

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. Features are displayed on the Railway infrastructure and projects map on [page 141 >](#)

Location	Name	Type
2m NW	Marston Vale Line	rail
3m NW	Not given	Multi Track
5m W	Not given	Multi Track
5m NW	Marston Vale Line	rail
9m NW	Not given	Multi Track
10m NW	Marston Vale Line	rail
55m N	Not given	Multi Track



Location	Name	Type
56m NE	Midland Main Line	rail
56m NE	Midland Main Line	rail
56m NE	Midland Main Line	rail
60m NE	Midland Main Line	rail
60m NE	Midland Main Line	rail
60m NE	Midland Main Line	rail
60m NE	Midland Main Line	rail
62m NE	Not given	Multi Track
62m NE	Not given	Multi Track
62m NE	Not given	Multi Track
63m NE	Midland Main Line	rail
64m NE	Midland Main Line	rail
64m NE	Midland Main Line	rail
64m NE	Midland Main Line	rail
68m NE	Midland Main Line	rail
68m NE	Not given	Multi Track
68m NE	Midland Main Line	rail
68m NE	Midland Main Line	rail
68m NE	Midland Main Line	rail
71m NE	Midland Main Line	rail
72m NE	Midland Main Line	rail
75m NE	Not given	Multi Track
76m NE	Midland Main Line	rail
79m NE	Not given	Multi Track
80m NE	Midland Main Line	rail
83m NE	Midland Main Line	rail
107m NE	Not given	Multi Track
142m SE	Not given	Multi Track





Location	Name	Type
142m SE	Not given	Multi Track
147m E	Not given	Multi Track
147m SE	Not given	Single Track
148m SE	Not given	Single Track
150m SE	Not given	Multi Track
150m SE	Tarmac Elstow	rail
155m E	Not given	Multi Track
156m E	Not given	Single Track
160m E	Not given	Multi Track
168m E	Tarmac Elstow	rail
173m E	Not given	Single Track
175m E	Not given	Single Track
176m E	Tarmac Elstow	rail
177m E	Not given	Single Track
195m NE	Midland Main Line	rail
197m NE	Midland Main Line	rail
200m NE	Midland Main Line	rail
200m E	Not given	Single Track
202m NE	Midland Main Line	rail
203m E	Not given	Single Track
213m NE	Midland Main Line	rail
215m NE	Midland Main Line	rail
218m NE	Midland Main Line	rail
220m NE	Midland Main Line	rail

*This data is sourced from Ordnance Survey and OpenStreetMap.*



## 22.8 Crossrail 1

**Records within 500m****0**

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

*This data is sourced from publicly available information by Groundsure.*

## 22.9 Crossrail 2

**Records within 500m****0**

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

*This data is sourced from publicly available information by Groundsure.*

## 22.10 HS2

**Records within 500m****0**

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

*This data is sourced from HS2 Ltd.*



## Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

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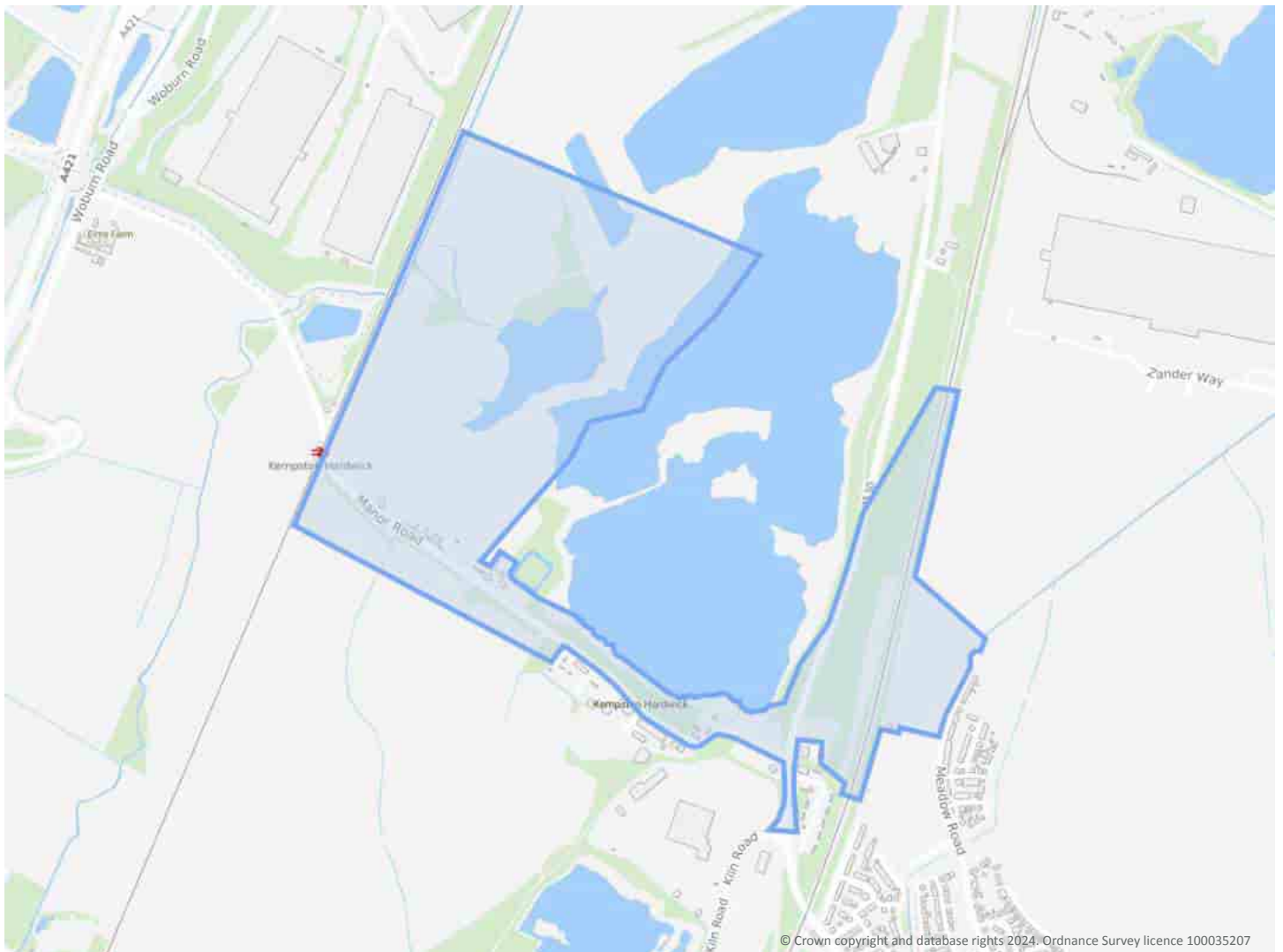
70116516 Rev B

## Order Details

**Date:** 28/03/2024  
**Your ref:** 70116516 Rev B  
**Our Ref:** GSIP-2024-14754-18113\_C

## Site Details

**Location:** 503427 244394  
**Area:** 73.2 ha  
**Authority:** [Bedford Council \(Unitary\)](#) ↗



**Summary of findings**

[p. 2 >](#)

**Aerial image**

[p. 9 >](#)

**OS MasterMap site plan**

N/A: >10ha

[groundsure.com/insightuserguide](https://groundsure.com/insightuserguide) ↗

Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com) ↗

01273 257 755

## Summary of findings

Page	Section	<a href="#">Past land use &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">14 &gt;</a>	<a href="#">1.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	45	14	31	19	-
<a href="#">19 &gt;</a>	<a href="#">1.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	0	0	0	5	-
<a href="#">19 &gt;</a>	<a href="#">1.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	4	1	0	2	-
20	1.4	Historical petrol stations	0	0	0	0	-
20	1.5	Historical garages	0	0	0	0	-
<a href="#">20 &gt;</a>	<a href="#">1.6 &gt;</a>	<a href="#">Historical military land &gt;</a>	1	0	0	0	-
Page	Section	<a href="#">Past land use - un-grouped &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">21 &gt;</a>	<a href="#">2.1 &gt;</a>	<a href="#">Historical industrial land uses &gt;</a>	58	14	40	25	-
<a href="#">26 &gt;</a>	<a href="#">2.2 &gt;</a>	<a href="#">Historical tanks &gt;</a>	0	0	0	7	-
<a href="#">27 &gt;</a>	<a href="#">2.3 &gt;</a>	<a href="#">Historical energy features &gt;</a>	5	1	0	4	-
28	2.4	Historical petrol stations	0	0	0	0	-
28	2.5	Historical garages	0	0	0	0	-
Page	Section	<a href="#">Waste and landfill &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
29	3.1	Active or recent landfill	0	0	0	0	-
29	3.2	Historical landfill (BGS records)	0	0	0	0	-
30	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
<a href="#">30 &gt;</a>	<a href="#">3.4 &gt;</a>	<a href="#">Historical landfill (EA/NRW records) &gt;</a>	1	0	0	0	-
<a href="#">30 &gt;</a>	<a href="#">3.5 &gt;</a>	<a href="#">Historical waste sites &gt;</a>	1	1	1	0	-
<a href="#">31 &gt;</a>	<a href="#">3.6 &gt;</a>	<a href="#">Licensed waste sites &gt;</a>	1	2	7	0	-
<a href="#">35 &gt;</a>	<a href="#">3.7 &gt;</a>	<a href="#">Waste exemptions &gt;</a>	0	4	2	5	-
Page	Section	<a href="#">Current industrial land use &gt;</a>	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">37 &gt;</a>	<a href="#">4.1 &gt;</a>	<a href="#">Recent industrial land uses &gt;</a>	5	11	9	-	-
39	4.2	Current or recent petrol stations	0	0	0	0	-
39	4.3	Electricity cables	0	0	0	0	-
40	4.4	Gas pipelines	0	0	0	0	-
40	4.5	Sites determined as Contaminated Land	0	0	0	0	-



40	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
40	4.7	Regulated explosive sites	0	0	0	0	-
<a href="#">40</a> >	<a href="#">4.8</a> >	<a href="#">Hazardous substance storage/usage</a> >	0	0	0	1	-
<a href="#">41</a> >	<a href="#">4.9</a> >	<a href="#">Historical licensed industrial activities (IPC)</a> >	4	0	0	0	-
<a href="#">42</a> >	<a href="#">4.10</a> >	<a href="#">Licensed industrial activities (Part A(1))</a> >	0	4	0	0	-
<a href="#">43</a> >	<a href="#">4.11</a> >	<a href="#">Licensed pollutant release (Part A(2)/B)</a> >	1	2	0	1	-
43	4.12	Radioactive Substance Authorisations	0	0	0	0	-
<a href="#">43</a> >	<a href="#">4.13</a> >	<a href="#">Licensed Discharges to controlled waters</a> >	26	9	1	2	-
49	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
49	4.15	Pollutant release to public sewer	0	0	0	0	-
50	4.16	List 1 Dangerous Substances	0	0	0	0	-
50	4.17	List 2 Dangerous Substances	0	0	0	0	-
<a href="#">50</a> >	<a href="#">4.18</a> >	<a href="#">Pollution Incidents (EA/NRW)</a> >	0	5	0	5	-
51	4.19	Pollution inventory substances	0	0	0	0	-
52	4.20	Pollution inventory waste transfers	0	0	0	0	-
52	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	<a href="#">Hydrogeology</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">53</a> >	<a href="#">5.1</a> >	<a href="#">Superficial aquifer</a> >	Identified (within 500m)				
<a href="#">56</a> >	<a href="#">5.2</a> >	<a href="#">Bedrock aquifer</a> >	Identified (within 500m)				
<a href="#">57</a> >	<a href="#">5.3</a> >	<a href="#">Groundwater vulnerability</a> >	Identified (within 50m)				
63	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
63	5.5	Groundwater vulnerability- local information	None (within 0m)				
<a href="#">64</a> >	<a href="#">5.6</a> >	<a href="#">Groundwater abstractions</a> >	0	0	0	1	1
<a href="#">65</a> >	<a href="#">5.7</a> >	<a href="#">Surface water abstractions</a> >	4	0	0	0	4
67	5.8	Potable abstractions	0	0	0	0	0
67	5.9	Source Protection Zones	0	0	0	0	-
67	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	<a href="#">Hydrology</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">68</a> >	<a href="#">6.1</a> >	<a href="#">Water Network (OS MasterMap)</a> >	18	7	13	-	-





<a href="#">72</a> >	<a href="#">6.2</a> >	<a href="#">Surface water features</a> >	1	7	10	-	-
<a href="#">72</a> >	<a href="#">6.3</a> >	<a href="#">WFD Surface water body catchments</a> >	2	-	-	-	-
<a href="#">72</a> >	<a href="#">6.4</a> >	<a href="#">WFD Surface water bodies</a> >	2	0	0	-	-
73	6.5	WFD Groundwater bodies	0	-	-	-	-
Page	Section	<a href="#">River and coastal flooding</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">74</a> >	<a href="#">7.1</a> >	<a href="#">Risk of flooding from rivers and the sea</a> >	High (within 50m)				
75	7.2	Historical Flood Events	0	0	0	-	-
75	7.3	Flood Defences	0	0	0	-	-
75	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
75	7.5	Flood Storage Areas	0	0	0	-	-
<a href="#">76</a> >	<a href="#">7.6</a> >	<a href="#">Flood Zone 2</a> >	Identified (within 50m)				
<a href="#">77</a> >	<a href="#">7.7</a> >	<a href="#">Flood Zone 3</a> >	Identified (within 50m)				
Page	Section	<a href="#">Surface water flooding</a> >					
<a href="#">78</a> >	<a href="#">8.1</a> >	<a href="#">Surface water flooding</a> >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	<a href="#">Groundwater flooding</a> >					
<a href="#">80</a> >	<a href="#">9.1</a> >	<a href="#">Groundwater flooding</a> >	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
81	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
81	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
81	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
81	10.4	Special Protection Areas (SPA)	0	0	0	0	0
82	10.5	National Nature Reserves (NNR)	0	0	0	0	0
82	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
82	10.7	Designated Ancient Woodland	0	0	0	0	0
82	10.8	Biosphere Reserves	0	0	0	0	0
83	10.9	Forest Parks	0	0	0	0	0
83	10.10	Marine Conservation Zones	0	0	0	0	0
83	10.11	Green Belt	0	0	0	0	0
83	10.12	Proposed Ramsar sites	0	0	0	0	0



83	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
84	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
84	10.15	Nitrate Sensitive Areas	0	0	0	0	0
<a href="#">84</a> >	<a href="#">10.16</a> >	<a href="#">Nitrate Vulnerable Zones</a> >	2	0	2	2	4
<a href="#">86</a> >	<a href="#">10.17</a> >	<a href="#">SSSI Impact Risk Zones</a> >	1	-	-	-	-
87	10.18	SSSI Units	0	0	0	0	0
Page	Section	<a href="#">Visual and cultural designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
88	11.1	World Heritage Sites	0	0	0	-	-
89	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
89	11.3	National Parks	0	0	0	-	-
89	11.4	Listed Buildings	0	0	0	-	-
89	11.5	Conservation Areas	0	0	0	-	-
<a href="#">90</a> >	<a href="#">11.6</a> >	<a href="#">Scheduled Ancient Monuments</a> >	1	0	0	-	-
90	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	<a href="#">Agricultural designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">91</a> >	<a href="#">12.1</a> >	<a href="#">Agricultural Land Classification</a> >	Grade 2 (within 250m)				
92	12.2	Open Access Land	0	0	0	-	-
<a href="#">92</a> >	<a href="#">12.3</a> >	<a href="#">Tree Felling Licences</a> >	1	0	1	-	-
93	12.4	Environmental Stewardship Schemes	0	0	0	-	-
<a href="#">93</a> >	<a href="#">12.5</a> >	<a href="#">Countryside Stewardship Schemes</a> >	1	0	0	-	-
Page	Section	<a href="#">Habitat designations</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">94</a> >	<a href="#">13.1</a> >	<a href="#">Priority Habitat Inventory</a> >	18	2	8	-	-
96	13.2	Habitat Networks	0	0	0	-	-
<a href="#">96</a> >	<a href="#">13.3</a> >	<a href="#">Open Mosaic Habitat</a> >	2	1	1	-	-
96	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	<a href="#">Geology 1:10,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">98</a> >	<a href="#">14.1</a> >	<a href="#">10k Availability</a> >	Identified (within 500m)				
<a href="#">99</a> >	<a href="#">14.2</a> >	<a href="#">Artificial and made ground (10k)</a> >	7	0	2	6	-
<a href="#">101</a> >	<a href="#">14.3</a> >	<a href="#">Superficial geology (10k)</a> >	10	1	4	3	-



102	14.4	Landslip (10k)	0	0	0	0	-
<a href="#">103</a> >	<a href="#">14.5</a> >	<a href="#">Bedrock geology (10k)</a> >	2	0	0	0	-
<a href="#">104</a> >	<a href="#">14.6</a> >	<a href="#">Bedrock faults and other linear features (10k)</a> >	2	0	0	0	-
Page	Section	<a href="#">Geology 1:50,000 scale</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">105</a> >	<a href="#">15.1</a> >	<a href="#">50k Availability</a> >	Identified (within 500m)				
<a href="#">106</a> >	<a href="#">15.2</a> >	<a href="#">Artificial and made ground (50k)</a> >	3	0	1	0	-
<a href="#">107</a> >	<a href="#">15.3</a> >	<a href="#">Artificial ground permeability (50k)</a> >	5	0	-	-	-
<a href="#">108</a> >	<a href="#">15.4</a> >	<a href="#">Superficial geology (50k)</a> >	9	0	2	1	-
<a href="#">109</a> >	<a href="#">15.5</a> >	<a href="#">Superficial permeability (50k)</a> >	Identified (within 50m)				
110	15.6	Landslip (50k)	0	0	0	0	-
110	15.7	Landslip permeability (50k)	None (within 50m)				
<a href="#">111</a> >	<a href="#">15.8</a> >	<a href="#">Bedrock geology (50k)</a> >	1	0	0	0	-
<a href="#">112</a> >	<a href="#">15.9</a> >	<a href="#">Bedrock permeability (50k)</a> >	Identified (within 50m)				
<a href="#">112</a> >	<a href="#">15.10</a> >	<a href="#">Bedrock faults and other linear features (50k)</a> >	1	0	0	0	-
Page	Section	<a href="#">Boreholes</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">113</a> >	<a href="#">16.1</a> >	<a href="#">BGS Boreholes</a> >	18	9	47	-	-
Page	Section	<a href="#">Natural ground subsidence</a> >					
<a href="#">117</a> >	<a href="#">17.1</a> >	<a href="#">Shrink swell clays</a> >	Moderate (within 50m)				
<a href="#">119</a> >	<a href="#">17.2</a> >	<a href="#">Running sands</a> >	Low (within 50m)				
<a href="#">121</a> >	<a href="#">17.3</a> >	<a href="#">Compressible deposits</a> >	Moderate (within 50m)				
<a href="#">123</a> >	<a href="#">17.4</a> >	<a href="#">Collapsible deposits</a> >	Very low (within 50m)				
<a href="#">124</a> >	<a href="#">17.5</a> >	<a href="#">Landslides</a> >	Low (within 50m)				
<a href="#">126</a> >	<a href="#">17.6</a> >	<a href="#">Ground dissolution of soluble rocks</a> >	Negligible (within 50m)				
Page	Section	<a href="#">Mining and ground workings</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">128</a> >	<a href="#">18.1</a> >	<a href="#">BritPits</a> >	2	0	2	3	-
<a href="#">130</a> >	<a href="#">18.2</a> >	<a href="#">Surface ground workings</a> >	60	14	32	-	-
134	18.3	Underground workings	0	0	0	0	0
134	18.4	Underground mining extents	0	0	0	0	-
<a href="#">134</a> >	<a href="#">18.5</a> >	<a href="#">Historical Mineral Planning Areas</a> >	4	0	0	2	-



135	18.6	Non-coal mining	0	0	0	0	0
135	18.7	JPB mining areas	None (within 0m)				
135	18.8	The Coal Authority non-coal mining	0	0	0	0	-
<a href="#">136</a> >	<a href="#">18.9</a> >	<a href="#">Researched mining</a> >	1	0	1	0	-
136	18.10	Mining record office plans	0	0	0	0	-
136	18.11	BGS mine plans	0	0	0	0	-
136	18.12	Coal mining	None (within 0m)				
137	18.13	Brine areas	None (within 0m)				
137	18.14	Gypsum areas	None (within 0m)				
137	18.15	Tin mining	None (within 0m)				
137	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
138	19.1	Natural cavities	0	0	0	0	-
138	19.2	Mining cavities	0	0	0	0	0
138	19.3	Reported recent incidents	0	0	0	0	-
138	19.4	Historical incidents	0	0	0	0	-
139	19.5	National karst database	0	0	0	0	-
Page	Section	<a href="#">Radon</a> >					
<a href="#">140</a> >	<a href="#">20.1</a> >	<a href="#">Radon</a> >	Less than 1% (within 0m)				
Page	Section	<a href="#">Soil chemistry</a> >	On site	0-50m	50-250m	250-500m	500-2000m
<a href="#">142</a> >	<a href="#">21.1</a> >	<a href="#">BGS Estimated Background Soil Chemistry</a> >	38	15	-	-	-
145	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
145	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	<a href="#">Railway infrastructure and projects</a> >	On site	0-50m	50-250m	250-500m	500-2000m
146	22.1	Underground railways (London)	0	0	0	-	-
146	22.2	Underground railways (Non-London)	0	0	0	-	-
147	22.3	Railway tunnels	0	0	0	-	-
<a href="#">147</a> >	<a href="#">22.4</a> >	<a href="#">Historical railway and tunnel features</a> >	5	7	3	-	-
148	22.5	Royal Mail tunnels	0	0	0	-	-



148	22.6	Historical railways	0	0	0	-	-
<a href="#">148</a> >	<a href="#">22.7</a> >	<a href="#">Railways</a> >	6	13	13	-	-
149	22.8	Crossrail 1	0	0	0	0	-
150	22.9	Crossrail 2	0	0	0	0	-
150	22.10	HS2	0	0	0	0	-

## Recent aerial photograph



Capture Date: 15/04/2020

Site Area: 73.2ha



Contact us with any questions at:

[info@groundsure.com](mailto:info@groundsure.com) ↗

01273 257 755

Date: 28 March 2024



## Recent site history - 2017 aerial photograph



Capture Date: 21/06/2017

Site Area: 73.2ha



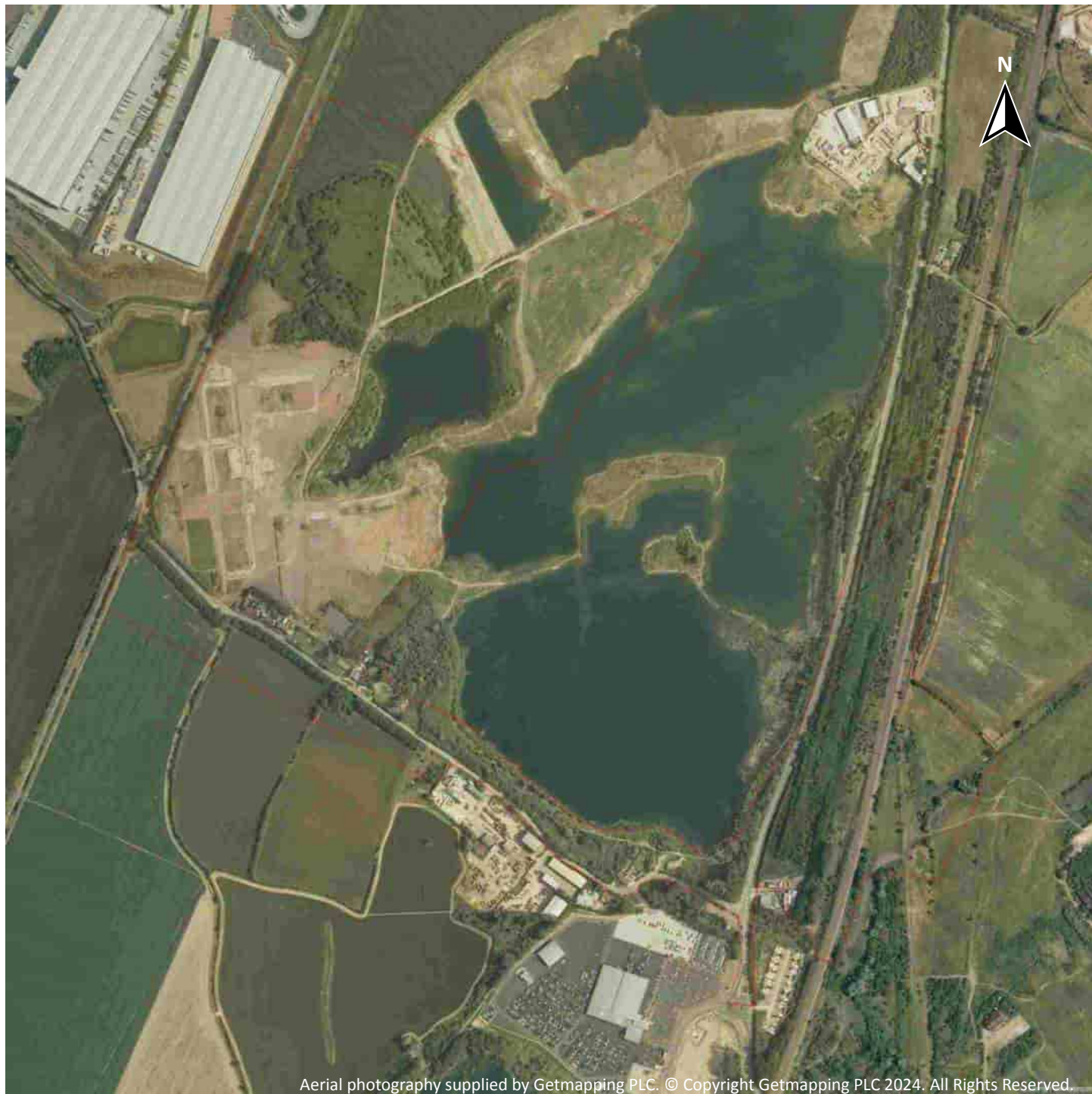
Contact us with any questions at:

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01273 257 755

Date: 28 March 2024

## Recent site history - 2006 aerial photograph



Capture Date: 01/07/2006

Site Area: 73.2ha



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01273 257 755

Date: 28 March 2024



## Recent site history - 2000 aerial photograph



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Capture Date: 10/06/2000

Site Area: 73.2ha



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01273 257 755

Date: 28 March 2024



## Recent site history - 1999 aerial photograph



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Capture Date: 25/05/1999

Site Area: 73.2ha



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01273 257 755

Date: 28 March 2024

## 1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical military land

### 1.1 Historical industrial land uses

Records within 500m

109

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
1	On site	Clay Pit	1978	2048209



ID	Location	Land use	Dates present	Group ID
2	On site	Railway Building	1959	2051484
3	On site	Railway Building	1959	2051487
4	On site	Unspecified Heap	1948	2053933
5	On site	Unspecified Ground Workings	1948	2060261
6	On site	Unspecified Ground Workings	1971	2060262
7	On site	Railway Sidings	1948	2073425
8	On site	Railway Station	1980 - 1989	2083773
9	On site	Unspecified Works	1980 - 1989	2086450
10	On site	Bricks Works	1938	2094376
11	On site	Cuttings	1882	2095329
12	On site	Cuttings	1959	2099204
13	On site	Brick Works	1980	2100587
14	On site	Clay Pit	1978	2102834
15	On site	Railway Sidings	1959	2106388
16	On site	Clay Pit	1971	2106481
17	On site	Railway Sidings	1948 - 1959	2111154
18	On site	Unspecified Disused Pit	1980 - 1989	2114565
19	On site	Railway Sidings	1959	2117293
A	On site	Unspecified Works	1959	2046254
A	On site	Railway Sidings	1959	2087313
A	On site	Brick Works	1948	2121667
B	On site	Unspecified Heap	1959	2053934
B	On site	Railway Sidings	1948	2065517
B	On site	Unspecified Ground Workings	1948	2076602
B	On site	Railway Sidings	1971	2086766
B	On site	Railway Sidings	1959	2092166
B	On site	Brick Works	1971	2107269
C	On site	Unspecified Commercial/Industrial	1948	2058240





ID	Location	Land use	Dates present	Group ID
D	On site	Unspecified Ground Workings	1948	2060260
D	On site	Unspecified Heap	1978	2075768
D	On site	Unspecified Heap	1971	2108128
D	On site	Unspecified Heap	1987	2109310
E	On site	Unspecified Ground Workings	1948	2060269
E	On site	Unspecified Heap	1959	2121811
F	On site	Brick Works	1978 - 1989	2064290
F	On site	Unspecified Ground Workings	1959	2096069
G	On site	Cuttings	1924	2067323
G	On site	Cuttings	1938 - 1948	2074736
G	On site	Cuttings	1900	2075652
G	On site	Cuttings	1978 - 1989	2107952
H	On site	Storage Depot	1980	2070474
H	On site	Storage Depot	1989	2098293
I	On site	Bricks Works	1938	2081316
J	On site	Unspecified Works	1959	2122589
21	0m W	Cuttings	1882	2061444
L	1m SE	Unspecified Old Quarry	1920	2056739
J	9m SE	Tramway Sidings	1959	2052185
22	11m S	Railway Sidings	1980	2114587
M	14m SE	Unspecified Kilns	1980	2057484
M	16m SE	Unspecified Kilns	1980	2057483
23	21m SE	Clay Pit	1959	2048205
24	22m SE	Railway Sidings	1989	2112083
M	36m S	Unspecified Kilns	1980	2057485
25	40m NE	Unspecified Pit	1948	2041043
26	44m NE	Clay Pit	1987	2114637
27	44m E	Unspecified Old Quarries	1920	2056728



ID	Location	Land use	Dates present	Group ID
28	48m N	Unspecified Heap	1971	2053935
M	50m SE	Unspecified Tank	1948	2044076
29	55m SE	Storage Depot	1980 - 1989	2087455
30	55m E	Cuttings	1959 - 1971	2094316
31	68m S	Chimney	1980	2058682
L	91m S	Chimney	1980	2058683
I	125m S	Unspecified Tank	1948	2044077
N	130m NE	Unspecified Works	1959	2103920
32	131m S	Unspecified Ground Workings	1948	2060264
N	134m NE	Brick Works	1948	2080190
O	154m SE	Unspecified Heap	1980 - 1989	2109740
33	156m E	Unspecified Old Quarries	1920	2056727
O	157m SE	Unspecified Heap	1948	2100485
34	179m SE	Unspecified Heap	1948	2053932
J	186m S	Brick Works	1948	2066509
N	193m NE	Brick Works	1924	2072027
N	195m NE	Unspecified Pit	1938	2077132
N	195m NE	Bricks Works	1938	2082047
N	195m NE	Unspecified Ground Workings	1924	2060263
N	197m NE	Unspecified Works	1971	2068043
35	198m SE	Unspecified Pit	1948	2041046
36	201m S	Unspecified Disused Pit	1980 - 1989	2096934
P	202m SE	Unspecified Tanks	1959	2054910
Q	205m S	Unspecified Tank	1980	2044078
N	205m NE	Brick Works	1900	2082454
37	206m SE	Storage Depot	1980 - 1989	2120606
P	211m SE	Railway Building	1959	2051485
Q	216m S	Unspecified Tank	1948	2044079



ID	Location	Land use	Dates present	Group ID
38	219m NW	Smithy	1920	2059241
39	231m S	Unspecified Ground Workings	1948	2060265
J	233m S	Unspecified Pit	1948	2041045
J	236m S	Clay Pit	1959	2048208
40	247m SE	Unspecified Tank	1948	2044071
N	258m NE	Unspecified Heap	1948	2053936
41	271m S	Unspecified Heap	1948	2053931
N	297m NE	Railway Sidings	1924	2062189
N	323m NE	Unspecified Works	1987	2115196
N	323m NE	Unspecified Works	1978	2120101
43	326m NE	Wind Pump	1924	2059025
44	329m SE	Unspecified Heap	1980 - 1989	2119094
45	330m NE	Old Clay Pits	1882	2042509
47	364m S	Unspecified Ground Workings	1948 - 1959	2114957
48	371m W	Cemetery	1920	2047446
R	403m S	Unspecified Ground Workings	1959 - 1989	2089945
R	407m S	Unspecified Ground Workings	1948	2084826
R	410m S	Unspecified Heap	1938	2100501
50	427m SE	Unspecified Tank	1948	2044080
51	447m SE	Unspecified Tank	1948	2044069
R	457m S	Brick Field	1882	2063537
52	463m SE	Unspecified Tank	1948	2044070
53	468m SE	Unspecified Heap	1980 - 1989	2094075
54	490m S	Railway Building	1959	2051482

*This data is sourced from Ordnance Survey / Groundsure.*



## 1.2 Historical tanks

### Records within 500m

5

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
N	302m NE	Unspecified Tank	1997	343516
42	302m NW	Unspecified Tank	1968 - 1993	353940
46	358m NW	Tanks	1968 - 1993	352680
N	371m NE	Unspecified Tank	1926	343513
49	416m S	Tanks	1997	348105

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.3 Historical energy features

### Records within 500m

7

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on [page 14 >](#)

ID	Location	Land use	Dates present	Group ID
20	On site	Electricity Substation	1968 - 1993	234047
K	On site	Electricity Substation	1997	228091
K	On site	Electricity Substation	1979	228341
K	On site	Electricity Substation	1988	228407
K	9m SE	Electricity Substation	1968	227812
S	454m NE	Electricity Substation	1968 - 1997	233414



ID	Location	Land use	Dates present	Group ID
S	459m NE	Electricity Substation	1991	225224

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.4 Historical petrol stations

<b>Records within 500m</b>	<b>0</b>
----------------------------	----------

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.5 Historical garages

<b>Records within 500m</b>	<b>0</b>
----------------------------	----------

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.6 Historical military land

<b>Records within 500m</b>	<b>1</b>
----------------------------	----------

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

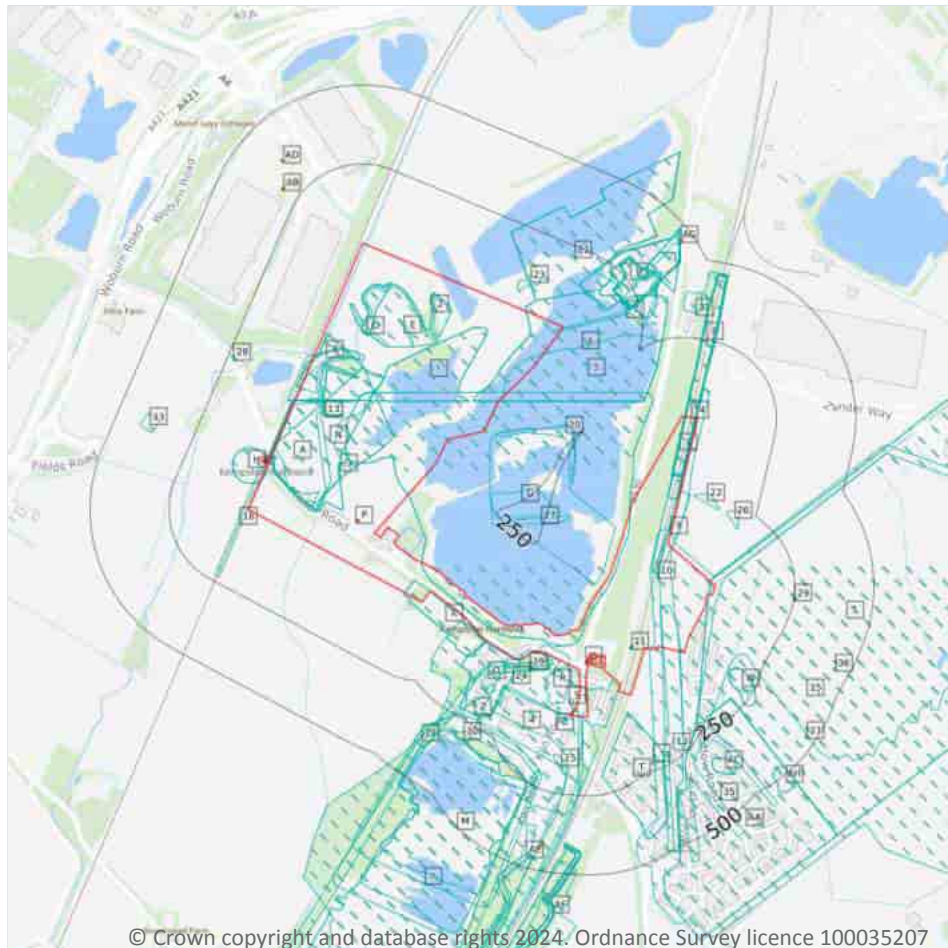
Features are displayed on the Past land use map on [page 14](#) >

ID	Location	Site Name	Date of Operation	Activities
C	On site	ROF Elstow	c.1942 - 1946	c.WW2: Filling/Packing munitions, including cartridges, high explosives, and 4000lb bombs; post-1943: Storage of surplus ammunition, components and machine tools; Filling Factory No.16

*This data is sourced from Ordnance Survey / Groundsure / other sources.*



## 2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

### 2.1 Historical industrial land uses

Records within 500m

137

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 21](#) >

ID	Location	Land Use	Date	Group ID
1	On site	Railway Sidings	1948	2073425
2	On site	Unspecified Ground Workings	1948	2060261
3	On site	Unspecified Heap	1948	2053933





ID	Location	Land Use	Date	Group ID
4	On site	Brick Works	1980	2100587
5	On site	Clay Pit	1971	2106481
6	On site	Clay Pit	1978	2102834
7	On site	Unspecified Ground Workings	1971	2060262
8	On site	Unspecified Disused Pit	1987	2114565
9	On site	Railway Sidings	1959	2106388
10	On site	Railway Building	1959	2051484
11	On site	Railway Building	1959	2051487
12	On site	Railway Sidings	1959	2117293
13	On site	Unspecified Ground Workings	1959	2096069
14	On site	Cuttings	1882	2095329
15	On site	Unspecified Commercial/Industrial	1948	2058240
A	On site	Brick Works	1948	2121667
A	On site	Brick Works	1989	2064290
A	On site	Railway Sidings	1959	2087313
A	On site	Unspecified Works	1959	2046254
A	On site	Brick Works	1980	2064290
B	On site	Railway Sidings	1948	2065517
B	On site	Unspecified Ground Workings	1948	2076602
B	On site	Railway Sidings	1971	2086766
B	On site	Brick Works	1971	2107269
B	On site	Brick Works	1987	2064290
B	On site	Brick Works	1978	2064290
B	On site	Railway Sidings	1959	2092166
B	On site	Unspecified Heap	1959	2053934
C	On site	Railway Sidings	1948	2111154
C	On site	Railway Sidings	1959	2111154
D	On site	Unspecified Ground Workings	1948	2060260



ID	Location	Land Use	Date	Group ID
D	On site	Unspecified Heap	1971	2108128
D	On site	Unspecified Heap	1987	2109310
D	On site	Unspecified Heap	1978	2075768
E	On site	Unspecified Ground Workings	1948	2060269
E	On site	Unspecified Heap	1959	2121811
F	On site	Cuttings	1948	2074736
F	On site	Cuttings	1924	2067323
F	On site	Cuttings	1900	2075652
F	On site	Cuttings	1938	2074736
G	On site	Unspecified Disused Pit	1989	2114565
G	On site	Unspecified Disused Pit	1980	2114565
H	On site	Railway Station	1989	2083773
H	On site	Railway Station	1980	2083773
I	On site	Clay Pit	1978	2048209
I	On site	Unspecified Disused Pit	1987	2114565
J	On site	Cuttings	1989	2107952
J	On site	Cuttings	1959	2099204
J	On site	Cuttings	1980	2107952
K	On site	Unspecified Works	1989	2086450
K	On site	Unspecified Works	1980	2086450
L	On site	Storage Depot	1989	2098293
L	On site	Storage Depot	1980	2070474
M	On site	Unspecified Works	1959	2122589
N	On site	Bricks Works	1938	2094376
N	On site	Bricks Works	1938	2094376
O	On site	Bricks Works	1938	2081316
O	On site	Bricks Works	1938	2081316
16	0m W	Cuttings	1882	2061444



ID	Location	Land Use	Date	Group ID
R	1m SE	Unspecified Old Quarry	1920	2056739
M	9m SE	Tramway Sidings	1959	2052185
17	11m S	Railway Sidings	1980	2114587
S	14m SE	Unspecified Kilns	1980	2057484
S	16m SE	Unspecified Kilns	1980	2057483
18	21m SE	Clay Pit	1959	2048205
19	22m SE	Railway Sidings	1989	2112083
S	36m S	Unspecified Kilns	1980	2057485
20	40m NE	Unspecified Pit	1948	2041043
21	44m NE	Clay Pit	1987	2114637
22	44m E	Unspecified Old Quarries	1920	2056728
23	48m N	Unspecified Heap	1971	2053935
S	50m SE	Unspecified Tank	1948	2044076
T	55m SE	Storage Depot	1989	2087455
T	55m SE	Storage Depot	1980	2087455
U	55m E	Cuttings	1971	2094316
U	55m E	Cuttings	1987	2107952
U	55m E	Cuttings	1978	2107952
U	55m E	Cuttings	1959	2094316
24	68m S	Chimney	1980	2058682
R	91m S	Chimney	1980	2058683
O	125m S	Unspecified Tank	1948	2044077
V	130m NE	Unspecified Works	1959	2103920
25	131m S	Unspecified Ground Workings	1948	2060264
V	134m NE	Brick Works	1948	2080190
W	154m SE	Unspecified Heap	1989	2109740
W	154m SE	Unspecified Heap	1980	2109740
26	156m E	Unspecified Old Quarries	1920	2056727



ID	Location	Land Use	Date	Group ID
W	157m SE	Unspecified Heap	1948	2100485
27	179m SE	Unspecified Heap	1948	2053932
M	186m S	Brick Works	1948	2066509
V	193m NE	Brick Works	1924	2072027
V	195m NE	Bricks Works	1938	2082047
V	195m NE	Unspecified Pit	1938	2077132
V	195m NE	Bricks Works	1938	2082047
V	195m NE	Unspecified Pit	1938	2077132
V	195m NE	Unspecified Ground Workings	1924	2060263
V	197m NE	Unspecified Works	1971	2068043
G	198m SE	Unspecified Pit	1948	2041046
X	201m S	Unspecified Disused Pit	1989	2096934
X	201m S	Unspecified Disused Pit	1980	2096934
Y	202m SE	Unspecified Tanks	1959	2054910
Z	205m S	Unspecified Tank	1980	2044078
V	205m NE	Brick Works	1900	2082454
AA	206m SE	Storage Depot	1989	2120606
AA	206m SE	Storage Depot	1980	2120606
Y	211m SE	Railway Building	1959	2051485
Z	216m S	Unspecified Tank	1948	2044079
28	219m NW	Smithy	1920	2059241
C	231m S	Unspecified Ground Workings	1948	2060265
M	233m S	Unspecified Pit	1948	2041045
M	236m S	Clay Pit	1959	2048208
29	247m SE	Unspecified Tank	1948	2044071
V	258m NE	Unspecified Heap	1948	2053936
30	271m S	Unspecified Heap	1948	2053931
V	297m NE	Railway Sidings	1924	2062189



ID	Location	Land Use	Date	Group ID
V	323m NE	Unspecified Works	1987	2115196
V	323m NE	Unspecified Works	1978	2120101
31	326m NE	Wind Pump	1924	2059025
AC	329m SE	Unspecified Heap	1989	2119094
AC	329m SE	Unspecified Heap	1980	2119094
32	330m NE	Old Clay Pits	1882	2042509
AE	364m S	Unspecified Ground Workings	1948	2114957
33	371m W	Cemetery	1920	2047446
AF	403m S	Unspecified Ground Workings	1989	2089945
AF	403m S	Unspecified Ground Workings	1959	2089945
AF	403m S	Unspecified Ground Workings	1980	2089945
AF	407m S	Unspecified Ground Workings	1948	2084826
AF	410m S	Unspecified Heap	1938	2100501
AF	410m S	Unspecified Heap	1938	2100501
35	427m SE	Unspecified Tank	1948	2044080
36	447m SE	Unspecified Tank	1948	2044069
AE	448m S	Unspecified Ground Workings	1959	2114957
AF	457m S	Brick Field	1882	2063537
37	463m SE	Unspecified Tank	1948	2044070
AH	468m SE	Unspecified Heap	1989	2094075
AH	468m SE	Unspecified Heap	1980	2094075
38	490m S	Railway Building	1959	2051482

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.2 Historical tanks

### Records within 500m

7

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.



Features are displayed on the Past land use - un-grouped map on [page 21 >](#)

ID	Location	Land Use	Date	Group ID
V	302m NE	Unspecified Tank	1997	343516
AB	302m NW	Unspecified Tank	1968	353940
AB	303m NW	Unspecified Tank	1993	353940
AD	358m NW	Tanks	1968	352680
AD	358m NW	Tanks	1993	352680
V	371m NE	Unspecified Tank	1926	343513
34	416m S	Tanks	1997	348105

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.3 Historical energy features

<b>Records within 500m</b>	<b>10</b>
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Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on [page 21 >](#)

ID	Location	Land Use	Date	Group ID
P	On site	Electricity Substation	1968	234047
P	On site	Electricity Substation	1993	234047
Q	On site	Electricity Substation	1979	228341
Q	On site	Electricity Substation	1988	228407
Q	On site	Electricity Substation	1997	228091
Q	9m SE	Electricity Substation	1968	227812
AG	454m NE	Electricity Substation	1991	233414
AG	454m NE	Electricity Substation	1968	233414
AG	456m NE	Electricity Substation	1997	233414
AG	459m NE	Electricity Substation	1991	225224

*This data is sourced from Ordnance Survey / Groundsure.*





## 2.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.5 Historical garages

Records within 500m

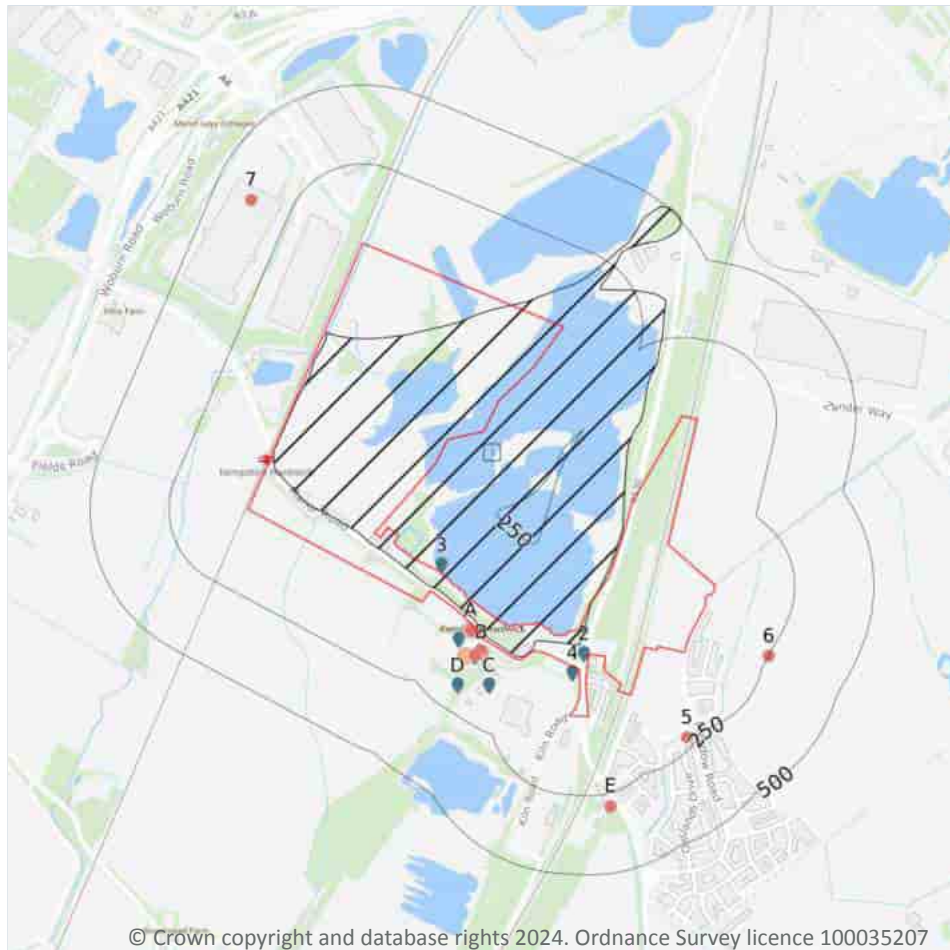
0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

*This data is sourced from Ordnance Survey / Groundsure.*



## 3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Historical landfill (EA/NRW)
- Historical waste sites
- Licensed waste sites
- Waste exemptions

### 3.1 Active or recent landfill

Records within 500m

0

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.2 Historical landfill (BGS records)

Records within 500m

0

Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

*This data is sourced from the British Geological Survey.*



### 3.3 Historical landfill (LA/mapping records)

**Records within 500m****0**

Landfill sites identified from Local Authority records and high detail historical mapping.

*This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.*

### 3.4 Historical landfill (EA/NRW records)

**Records within 500m****1**

Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on [page 29 >](#)

ID	Location	Details		
1	On site	Site Address: Clay Pit, Adjacent Kempston Hardwick Works, Kempston Hardwick, Bedfordshire Licence Holder Address: Property Department, Stewartby, Bedford	Waste Licence: Yes Site Reference: 18/1977, PIT 63 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 05/12/1977 Licence Surrender: 28/04/1994	Operator: - Licence Holder: London Brick Landfill Limited First Recorded 31/12/1977 Last Recorded: 31/12/1993

*This data is sourced from the Environment Agency and Natural Resources Wales.*

### 3.5 Historical waste sites

**Records within 500m****3**

Waste site records derived from Local Authority planning records and high detail historical mapping.

Features are displayed on the Waste and landfill map on [page 29 >](#)



ID	Location	Address	Further Details	Date
A	On site	Site Address: Manor Road, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9NT	<b>Type of Site: Waste Transfer Station</b> <b>Planning application reference: 96/0293</b> <b>Description: Erection of new building for use with Class C1 waste. An application (ref: 96/0293) for Detailed Planning permission was submitted to Bedford B.C. on 7th March 1996.</b> <b>Data source: Historic Planning Application</b> <b>Data Type: Point</b>	-
B	15m S	Site Address: Kempston Court (Land Off, Manor Road, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9PQ	<b>Type of Site: Waste Transfer Station</b> <b>Planning application reference: 96/0977</b> <b>Description: Formation of new waste transfer station for Categories A, B and C(1) waste involving the erection of a new building with associated car parking and landscaping works. Construction - roller shutter x 2 doors. An application (ref: 96/0977) for Detailed Pnn ing permission was submitted to Bedford B.C. on 12th August 1996.</b> <b>Data source: Historic Planning Application</b> <b>Data Type: Point</b>	-
B	53m S	Site Address: Kempston Court, Kempston Hardwick, BEDFORD, Bedfordshire, MK43 9PQ	<b>Type of Site: Waste Transfer Station (Extension)</b> <b>Planning application reference: 97/00999</b> <b>Description: Project comprises the erection of an extension of 146 sqm. An application (ref: 97/00999) for Detailed Planning permission was submitted to Bedford B.C. on 3rd July 1997.</b> <b>Data source: Historic Planning Application</b> <b>Data Type: Point</b>	-

*This data is sourced from Ordnance Survey/Groundsure and Local Authority records.*

### 3.6 Licensed waste sites

<b>Records within 500m</b>	<b>10</b>
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Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on [page 29 >](#)



ID	Location	Details		
2	On site	<b>Site Name:</b> Japanese Car Breakers <b>Site Address:</b> Opp Chimney Corner Pub, Kempston Hardwick, Bedford, MK45 3JE <b>Correspondence Address:</b> Opp Chimney Corner Pub, Kempston Hardwick, Bedford, MK45 3JE	<b>Type of Site:</b> Metal Recycling Site (Vehicle Dismantler) <b>Size:</b> 25000 tonnes <b>Environmental Permitting Regulations (Waste) Licence Number:</b> JAP001 <b>EPR reference:</b> - <b>Operator:</b> Mr Ghulam Mustafa & Mr Saraj Ahmed <b>Waste Management licence No:</b> 75140 <b>Annual Tonnage:</b> 2500	<b>Issue Date:</b> 24/09/2004 <b>Effective Date:</b> - <b>Modified:</b> - <b>Surrendered Date:</b> - <b>Expiry Date:</b> - <b>Cancelled Date:</b> - <b>Status:</b> Issued
3	18m S	<b>Site Name:</b> Kempston Court <b>Site Address:</b> Kempston Court, Manor Road, Kempston, Bedford, Bedfordshire, MK43 9NT <b>Correspondence Address:</b> -	<b>Type of Site:</b> Household, Commercial & Industrial Waste T Stn <b>Size:</b> >= 25000 tonnes 75000 tonnes <b>Environmental Permitting Regulations (Waste) Licence Number:</b> PAU001 <b>EPR reference:</b> EA/EPR/LP3796NV/A001 <b>Operator:</b> Paul Riches Skips Limited <b>Waste Management licence No:</b> 75120 <b>Annual Tonnage:</b> 75000	<b>Issue Date:</b> 25/10/2004 <b>Effective Date:</b> - <b>Modified:</b> - <b>Surrendered Date:</b> - <b>Expiry Date:</b> - <b>Cancelled Date:</b> - <b>Status:</b> Issued
4	20m SE	<b>Site Name:</b> Japanese Car Breakers <b>Site Address:</b> Opp Chimney Corner Pub, Kempston Hardwick, Bedford, Bedfordshire, MK45 3JE <b>Correspondence Address:</b> -	<b>Type of Site:</b> Metal Recycling Site (Vehicle Dismantler) <b>Size:</b> 25000 tonnes <b>Environmental Permitting Regulations (Waste) Licence Number:</b> 643655 <b>EPR reference:</b> EA/EPR/UP3896NL <b>Operator:</b> Mr Ghulam Mustafa & Mr Saraj Ahmed <b>Waste Management licence No:</b> 75140 <b>Annual Tonnage:</b> 2500	<b>Issue Date:</b> 24/09/2004 <b>Effective Date:</b> 24/09/2004 <b>Modified:</b> - <b>Surrendered Date:</b> - <b>Expiry Date:</b> - <b>Cancelled Date:</b> - <b>Status:</b> Issued



ID	Location	Details		
A	64m S	Site Name: G Moore ( Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 648024 EPR reference: EA/EPR/FP3598NH Operator: G Moore Haulage Limited Waste Management licence No: 71053 Annual Tonnage: 15000	Issue Date: 20/10/1997 Effective Date: 20/10/1997 Modified: 20/10/1997 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
B	65m S	Site Name: Kempston Court Site Address: Kempston Court, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 645650 EPR reference: EA/EPR/LP3796NV Operator: Paul Riches Skips Limited Waste Management licence No: 75120 Annual Tonnage: 75000	Issue Date: 25/10/2004 Effective Date: 25/10/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
C	116m S	Site Name: G Moore ( Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMO001 EPR reference: EA/EPR/FP3598NH/A001 Operator: G Moore Haulage Ltd Waste Management licence No: 71053 Annual Tonnage: 75000	Issue Date: 20/10/1997 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued





ID	Location	Details		
C	116m S	Site Name: G Moore ( Haulage) Ltd - Kempston Hardwick Site Address: Coronation Bungalow, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: GMO001 EPR reference: EA/EPR/FP3598NH/V002 Operator: G Moore Haulage Ltd Waste Management licence No: 71053 Annual Tonnage: 15000	Issue Date: 20/10/1997 Effective Date: - Modified: 01/06/2015 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
D	170m S	Site Name: Paul Riches Skips Site Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: Kempston Court, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: - Operator: Paul Riches Skips Waste Management licence No: 70069 Annual Tonnage: 0	Issue Date: 26/07/1995 Effective Date: - Modified: 02/08/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
D	170m S	Site Name: Paul Riches Skips Site Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: PAU001 EPR reference: EA/EPR/GP3290NZ/V002 Operator: Riches Paul Waste Management licence No: 70069 Annual Tonnage: 25000	Issue Date: 26/07/1995 Effective Date: - Modified: 02/08/2000 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
D	170m S	Site Name: Paul Riches Skips Site Address: Manor Road, Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NT Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 635114 EPR reference: EA/EPR/GP3290NZ Operator: Paul Riches Waste Management licence No: 70069 Annual Tonnage: 25000	Issue Date: 26/07/1995 Effective Date: 26/07/1995 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired



This data is sourced from the Environment Agency and Natural Resources Wales.

### 3.7 Waste exemptions

#### Records within 500m

**11**

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on [page 29 >](#)

ID	Location	Site	Reference	Category	Sub-Category	Description
A	15m S	Kempston Court, Manor Road, Kempston Hardwick, Bedford, MK43 9NT	WEX012998	Storing waste exemption	Not on a farm	Storage of waste in a secure place
A	15m S	MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, MK43 9NT	WEX254567	Using waste exemption	Not on a farm	Use of waste in construction
B	38m S	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, MK43 9PQ	WEX309205	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	38m S	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, MK43 9PQ	WEX172222	Storing waste exemption	Not on a farm	Storage of waste in a secure place
B	63m S	Kempston Court Manor Road Bedford Bedfordshire MK43 9NT	EPR/JH0879BZ /A001	Storing waste exemption	Non-Agricultural Waste Only	Storage of waste in a secure place
5	222m SE	-	WEX289589	Using waste exemption	Not on a farm	Use of waste in construction
6	251m SE	-	WEX300503	Treating waste exemption	Not on a Farm	Recovery of scrap metal
E	290m SE	Tilia Homes Development Wixams 4.3, Wixams Village, Harrowden Green, BEDFORD, MK45 3JJ	WEX288684	Using waste exemption	Not on a farm	Use of waste in construction
E	293m SE	Parcel 4.1, Harrowden Green, Amphil Road, Bedfordshire, Bedford, MK45 3JJ	WEX147609	Using waste exemption	Not on a farm	Use of waste in construction
E	293m SE	Kier Living Development Wixams 4.3, Wixams Village, Harrowden Green, Bedford, MK45 3JJ	WEX149851	Using waste exemption	Not on a farm	Use of waste in construction

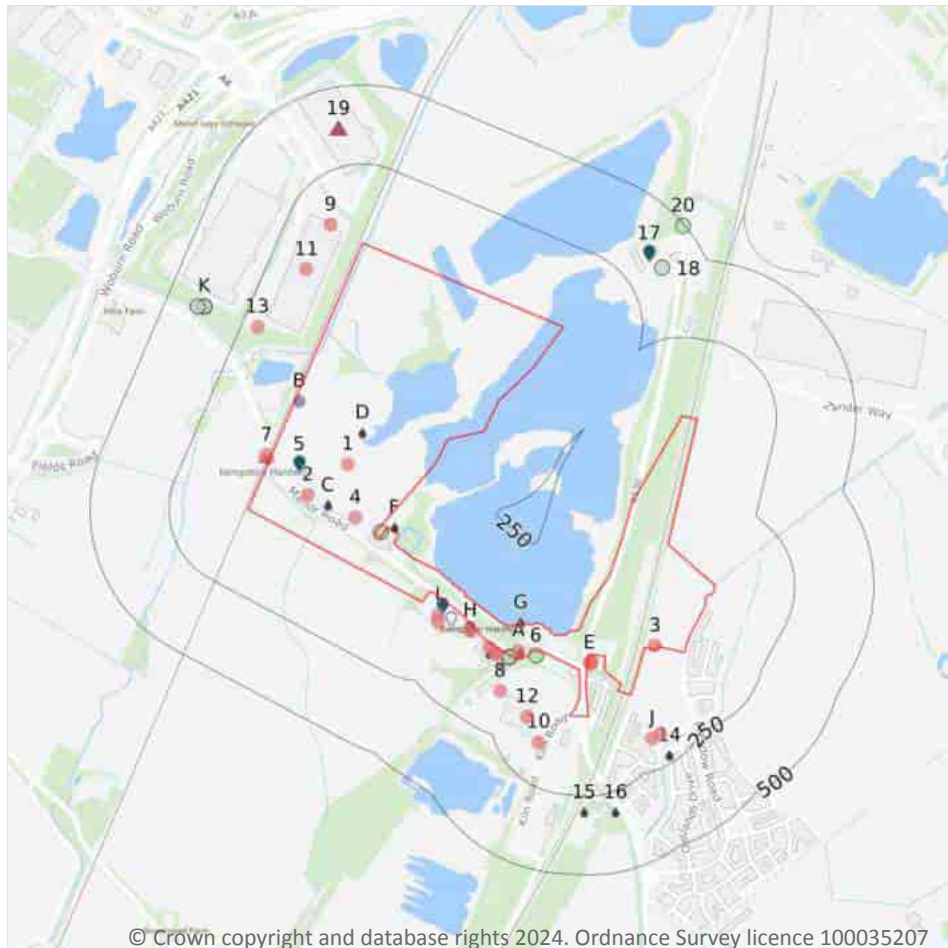


ID	Location	Site	Reference	Category	Sub-Category	Description
7	378m NW	Sainsburys Marsh Leys Industrial Estate Bedford Beds MK43 9AA	EPR/JF0606ST/ A001	Treating waste exemption	Non-Agricultural Waste Only	Crushing waste fluorescent tubes

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- ▲ Hazardous substance storage/usage
- Historical licensed industrial activities
- ⬮ Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollution Incidents (EA/NRW)

### 4.1 Recent industrial land uses

Records within 250m

25

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on [page 37](#) >

ID	Location	Company	Address	Activity	Category
1	On site	Tanks	Bedfordshire, MK43	Tanks (Generic)	Industrial Features
2	On site	Cemex UK	Hanson Brick, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Concrete Products	Industrial Products
3	On site	Electricity Sub Station	Bedfordshire, MK45	Electrical Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
4	On site	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
A	On site	Paul Riches Skips Ltd	1 Vine Cottage, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Waste Storage, Processing and Disposal	Infrastructure and Facilities
E	5m SE	Electricity Sub Station	Bedfordshire, MK45	Electrical Features	Infrastructure and Facilities
E	10m SE	Works	Bedfordshire, MK45	Unspecified Works Or Factories	Industrial Features
E	11m SE	Japanese Car Breakers	-, Ampthill Road, Kempston Hardwick, Bedfordshire, MK45 3JE	Scrap Metal Merchants	Recycling Services
E	11m SE	Supreme Concrete Ltd	-, Ampthill Road, Kempston Hardwick, Bedfordshire, MK45 3JE	Concrete Products	Industrial Products
A	14m S	Specialist Power Systems	3-4, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Electrical Production and Manipulation Equipment	Industrial Products
H	15m S	G Moore Haulage	-, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Distribution and Haulage	Transport, Storage and Delivery
H	15m S	Cemex Bedford Concrete Plant & Dry Silo Mortar Concrete Sales	-, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Concrete Products	Industrial Products
7	16m W	Kempston Hardwick Rail Station	Bedfordshire, MK43	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
A	20m S	Gapp Automation	6, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Measurement and Inspection Equipment	Industrial Products
A	20m S	Advanced Vehicle Glazing	7, Kempston Court, Kempston Hardwick, Bedfordshire, MK43 9PQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
I	49m S	Works	Bedfordshire, MK43	Unspecified Works Or Factories	Industrial Features
I	67m S	Mast	Bedfordshire, MK43	Telecommunications Features	Infrastructure and Facilities



ID	Location	Company	Address	Activity	Category
8	113m S	Coronation Business Park	Bedfordshire, MK43	Business Parks and Industrial Estates	Industrial Features
9	118m NW	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
10	129m S	Electricity Sub Station	Bedfordshire, MK43	Electrical Features	Infrastructure and Facilities
11	131m NW	Sainsburys D H L	Unit 3 Marsh Leys Farm, Woburn Road, Kempston, Bedfordshire, MK43 9AA	Distribution and Haulage	Transport, Storage and Delivery
12	134m S	British Car Auctions Ltd	-, Kiln Road, Kempston Hardwick, Bedfordshire, MK43 9PR	Vehicle Auctions	Motoring
J	151m SE	Pumping Station	Bedfordshire, MK45	Water Pumping Stations	Industrial Features
J	154m SE	Electricity Sub Station	Bedfordshire, MK45	Electrical Features	Infrastructure and Facilities
13	202m NW	Sludge Tanks	Bedfordshire, MK43	Waste Storage, Processing and Disposal	Infrastructure and Facilities

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

**Records within 500m**

**0**

Open, closed, under development and obsolete petrol stations.

*This data is sourced from Experian.*

## 4.3 Electricity cables

**Records within 500m**

**0**

High voltage underground electricity transmission cables.

*This data is sourced from National Grid.*





## 4.4 Gas pipelines

Records within 500m	0
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High pressure underground gas transmission pipelines.

*This data is sourced from National Grid.*

## 4.5 Sites determined as Contaminated Land

Records within 500m	0
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Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

*This data is sourced from Local Authority records.*

## 4.6 Control of Major Accident Hazards (COMAH)

Records within 500m	0
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Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

*This data is sourced from the Health and Safety Executive.*

## 4.7 Regulated explosive sites

Records within 500m	0
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Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

*This data is sourced from the Health and Safety Executive.*

## 4.8 Hazardous substance storage/usage

Records within 500m	1
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Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

Features are displayed on the Current industrial land use map on [page 37](#) >

ID	Location	Details	
19	370m N	Application reference number: No Details Application status: Approved Application date: No Details Address: Asda Stores Ltd/Distribution Centre, Marsh Leys Farm, Woburn Road, Kempston, Bedford, Bedford Borough Council, England, MK43 9AB	Details: No Details Enforcement: No Details Date of enforcement: No Details Comment: No Details

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

<b>Records within 500m</b>	<b>4</b>
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Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

Features are displayed on the Current industrial land use map on [page 37 >](#)

ID	Location	Details	
B	On site	<b>Operator: Hanson Building Products Ltd</b> <b>Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR</b> <b>Process: Ceramic Production</b> <b>Permit Number: AI0012</b>	<b>Original Permit Number: IPCAIRAPP</b> <b>Date Approved: 30-6-1993</b> <b>Effective Date: 30-6-1993</b> <b>Status: Superseded By Variation</b>
B	On site	<b>Operator: Hanson Building Products Ltd</b> <b>Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR</b> <b>Process: Ceramic Production</b> <b>Permit Number: AJ3476</b>	<b>Original Permit Number: IPCMINVAR</b> <b>Date Approved: 12-7-1993</b> <b>Effective Date: 12-7-1993</b> <b>Status: Superseded By Variation</b>
B	On site	<b>Operator: Hanson Building Products Ltd</b> <b>Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR</b> <b>Process: Ceramic Production</b> <b>Permit Number: AL9513</b>	<b>Original Permit Number: IPCMINVAR</b> <b>Date Approved: 1-2-1994</b> <b>Effective Date: 1-2-1994</b> <b>Status: Superseded By Variation</b>
B	On site	<b>Operator: Hanson Building Products Ltd</b> <b>Address: Manor Road, Kempston Hardwick, Bedford, Bedfordshire, MK43 9NR</b> <b>Process: Ceramic Production</b> <b>Permit Number: BC8031</b>	<b>Original Permit Number: IPCMINVAR</b> <b>Date Approved: 24-11-1998</b> <b>Effective Date: 30-11-1998</b> <b>Status: Revoked</b>

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4.10 Licensed industrial activities (Part A(1))

### Records within 500m

4

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 37](#) >

ID	Location	Details	
I	34m S	Operator: C JACKSON & SONS BEDFORD LIMITED Installation Name: Manor Road Hazardous Waste Transfer Station EPR/SP3932KH Process: TEMPORARY STORAGE OF HAZ WASTE NOT UNDER S 5.2 PENDING ACTIVITIES LISTED IN S 5.1, 5.2, 5.3 AND PARAGRAPH (B) OF THIS SECTION WITH A TOTAL CAPACITY > 50 TONNES, EXCL TEMP STORAGE WHERE GENERATED Permit Number: SP3932KH Original Permit Number: SP3932KH	EPR Reference: EPR/SP3932KH Issue Date: 10/01/2014 Effective Date: 10/01/2014 Last date noted as effective: 23/11/2023 Status: Effective
I	34m S	Operator: C Jackson & Sons (Bedford) Ltd Installation Name: Manor Road Hazardous Waste Transfer Station EPR/SP3932KH Process: TEMPORARY STORAGE OF HAZ WASTE NOT UNDER S 5.2 PENDING ACTIVITIES LISTED IN S 5.1, 5.2, 5.3 AND PARAGRAPH (B) OF THIS SECTION WITH A TOTAL CAPACITY > 50 TONNES, EXCL TEMP STORAGE WHERE GENERATED Permit Number: NP3034ET Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 10/01/2014 Effective Date: 10/01/2014 Last date noted as effective: 21/03/2023 Status: Effective
I	34m S	Operator: C Jackson & Sons (Bedford) Ltd Installation Name: Manor Road Hazardous Waste Transfer Station Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: YP3331TF Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 28/06/2010 Effective Date: 28/06/2010 Last date noted as effective: 21/03/2023 Status: Superseded
I	34m S	Operator: C Jackson & Sons (Bedford) Ltd Installation Name: Manor Road Hazardous Waste Transfer Station Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: SP3932KH Original Permit Number: SP3932KH	EPR Reference: - Issue Date: 10/06/2010 Effective Date: 10/06/2010 Last date noted as effective: 21/03/2023 Status: Superseded

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4.11 Licensed pollutant release (Part A(2)/B)

<b>Records within 500m</b>	<b>4</b>
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Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on [page 37](#) >

ID	Location	Address	Details	
5	On site	Hanson Bricks	<b>Process: Manufacture of Clay</b> <b>Status: Historical Permit</b> <b>Permit Type: Part B</b>	<b>Enforcement: No enforcements notified</b> <b>Date of enforcement: No enforcements notified</b> <b>Comment: No enforcements notified</b>
H	15m S	G Moore Haulage Ltd, Manor Road, Kempston Hardwick, Bedfordshire, MK43 9NT	Process: Waste Oil Burner 0.4 MW Status: Surrendered Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
I	17m S	Cemex Bedford Concrete Plant (RMC), Manor Road, Kempston Hardwick, Bedford, MK43 9NT	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified
17	356m NE	Supreme Concrete Ltd, Hardwick Hill Works, Ampthill Road, Kempston Hardwick, Bedford, MK45 3JE	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No enforcements notified Date of enforcement: No enforcements notified Comment: No enforcements notified

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

<b>Records within 500m</b>	<b>0</b>
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Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.13 Licensed Discharges to controlled waters

<b>Records within 500m</b>	<b>38</b>
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Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on [page 37](#) >



ID	Location	Address	Details	
A	On site	THE COTTAGE, MANOR ROAD, KEMPSTONE HARDWICKE, BEDFORD, BEDS, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2047 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 26/04/1985 Effective Date: 26/04/1985 Revocation Date: 24/03/1992
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012



ID	Location	Address	Details	
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 1 Receiving Water: Land	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 05/10/1981 Effective Date: 05/10/1981 Revocation Date: 01/11/2012
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -





ID	Location	Address	Details	
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -



ID	Location	Address	Details	
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
C	On site	EASTWOOD COTTAGES 1-12, MANOR ROAD, KEMPSTON HARDWICK, BEDS., MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1LFU111 Permit Version: 2 Receiving Water: Land	Status: VARIED UNDER EPR 2010 Issue date: 02/11/2012 Effective Date: 02/11/2012 Revocation Date: -
D	On site	LONDON BRICK COMPANT LTD, MANOR ROAD, KEMPSTON, HARDWICK, BEDS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2614 Permit Version: 1 Receiving Water: trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 06/04/1987 Effective Date: 06/04/1987 Revocation Date: 17/02/1992
D	On site	LONDON BRICK COMPANT LTD, MANOR ROAD, KEMPSTON, HARDWICK, BEDS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2614 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 18/02/1992 Effective Date: 18/02/1992 Revocation Date: 20/10/2005
G	10m S	2 MANOR ROAD, KEMPSTON HARDWICKE, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2047 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 25/03/1992 Effective Date: 25/03/1992 Revocation Date: 30/10/1996
G	10m S	2 MANOR ROAD, KEMPSTON HARDWICKE, BEDS, MK43 9NS	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF2173 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 02/11/1985 Effective Date: 02/11/1985 Revocation Date: 09/03/1992



ID	Location	Address	Details	
F	10m SW	ASKERN HOUSE, MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, BEDFORDSHIRE, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1780 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 30/01/1985 Effective Date: 30/01/1985 Revocation Date: 25/02/1992
F	10m SW	ASKERN HOUSE, MANOR ROAD, KEMPSTON HARDWICK, BEDFORD, BEDFORDSHIRE, MK43 9NT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1780 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 26/02/1992 Effective Date: 26/02/1992 Revocation Date: 30/10/1996
A	32m S	LOWE BROS PREMISES AT MANOR ROAD, KEMPSTON HARDWICK, BEDFORDSHIRE	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: PR1NF1425 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 22/12/1983 Effective Date: 22/12/1983 Revocation Date: 18/02/1992
A	44m S	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF00800 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/05/1989 Effective Date: 19/05/1989 Revocation Date: 16/01/1992
A	44m S	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF04495 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 09/09/1991 Effective Date: 09/09/1991 Revocation Date: 23/01/1992
A	44m S	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: PRCNF00799 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 19/05/1989 Effective Date: 19/05/1989 Revocation Date: -
A	44m S	KEMPSTON COURT, KEMPSTON HARDWICK, BEDFORD, BEDS, MK43 9PQ	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PRCNF00800 Permit Version: 2 Receiving Water: Trib Elstow Brook	Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: 17/01/1992 Effective Date: 17/01/1992 Revocation Date: -



ID	Location	Address	Details	
14	225m SE	ELSTOW STORAGE DEPOT, KEMPSTON, HARDWICK, BEDFORD.	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: PR1NF2639 Permit Version: 1 Receiving Water: Trib Elstow Brook	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 24/02/1987 Effective Date: 24/02/1987 Revocation Date: 18/02/1992
15	302m S	KEMPSTON(HARDWICK) STW, KEMPSTON HARDWICK, BEDFORD, MK45	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AW1NF1585 Permit Version: 1 Receiving Water: Elstow Brook River Great Ouse	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 15/06/1985 Effective Date: 15/06/1985 Revocation Date: -
16	313m SE	4 MIDLAND COTTAGES, HOUGHTON CONQUEST, BEDFORD, MK45 3JG	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: PR1NF1113 Permit Version: 1 Receiving Water: trib of the Kempston Hardwick	Status: PRE NRA LEGISLATION WHERE ISSUE DATE 01-SEP-89 (HISTORIC ONLY) Issue date: 26/06/1974 Effective Date: 26/06/1974 Revocation Date: 25/02/1992

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.14 Pollutant release to surface waters (Red List)

<b>Records within 500m</b>	<b>0</b>
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Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

#### 4.15 Pollutant release to public sewer

<b>Records within 500m</b>	<b>0</b>
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Discharges of Special Category Effluents to the public sewer.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 4.16 List 1 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.17 List 2 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.18 Pollution Incidents (EA/NRW)

Records within 500m

10

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on [page 37 >](#)

ID	Location	Details	
A	7m S	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
A	7m S	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
A	7m S	Incident Date: 08/08/2001 Incident Identification: 22803 Pollutant: Atmospheric Pollutants and Effects:Specific Waste Materials Pollutant Description: Smoke:Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
F	9m SW	Incident Date: 19/08/2003 Incident Identification: 183354 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)



ID	Location	Details	
6	15m S	Incident Date: 29/06/2001 Incident Identification: 12280 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
18	363m NE	Incident Date: 09/06/2002 Incident Identification: 83760 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
K	382m NW	Incident Date: 04/10/2001 Incident Identification: 34551 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	382m NW	Incident Date: 04/10/2001 Incident Identification: 34551 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
K	400m NW	Incident Date: 13/06/2003 Incident Identification: 165545 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
20	494m NE	Incident Date: 07/02/2002 Incident Identification: 56978 Pollutant: Oils and Fuel Pollutant Description: Kerosene and Aviation Fuel	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 4.19 Pollution inventory substances

**Records within 500m**

**0**

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*





## 4.20 Pollution inventory waste transfers

Records within 500m	0
---------------------	---

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*

## 4.21 Pollution inventory radioactive waste

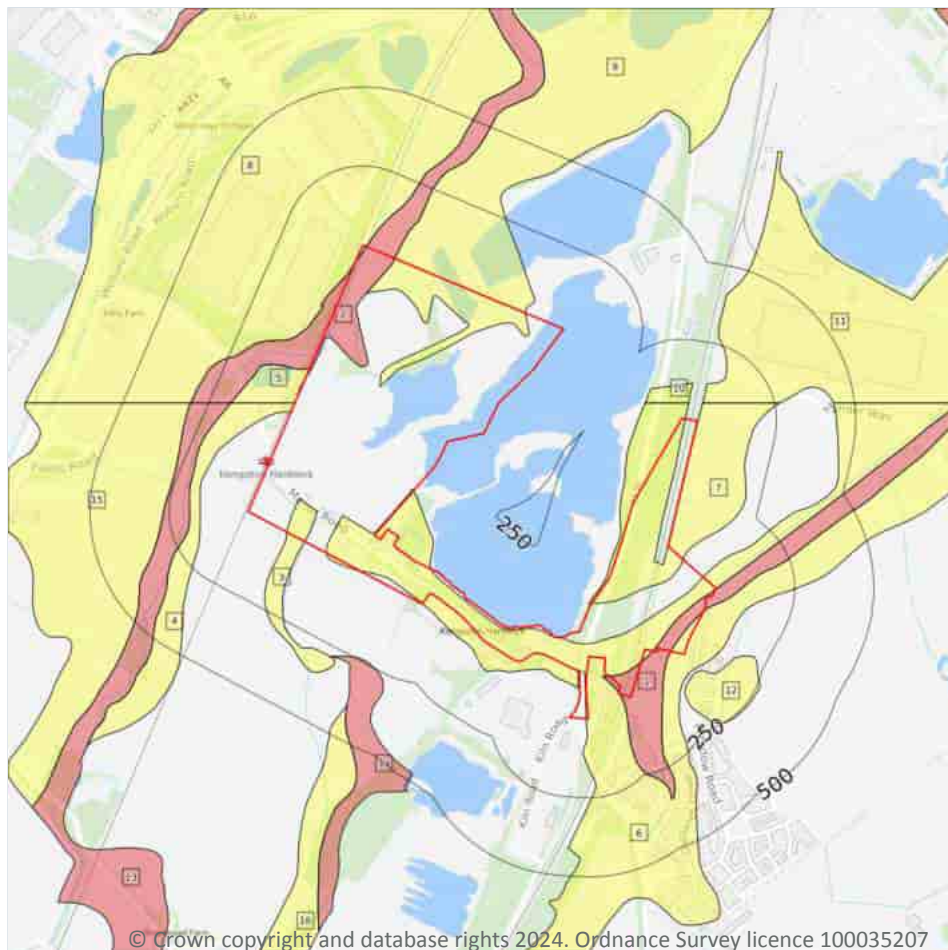
Records within 500m	0
---------------------	---

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

*This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.*



## 5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
  - Secondary A
  - Secondary B
  - Secondary Undifferentiated
  - Unproductive
  - Unknown

### 5.1 Superficial aquifer

Records within 500m

16

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on [page 53 >](#)

ID	Location	Designation	Description
1	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	On site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers



ID	Location	Designation	Description
3	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
8	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
9	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
10	48m E	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
11	59m E	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
12	68m SE	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
13	185m W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
14	243m SW	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
15	257m W	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type



ID	Location	Designation	Description
16	398m SW	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*



## Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
  - Secondary A
  - Secondary B
  - Secondary Undifferentiated
  - Unproductive

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### 5.2 Bedrock aquifer

Records within 500m

2

Aquifer status of groundwater held within bedrock geology.

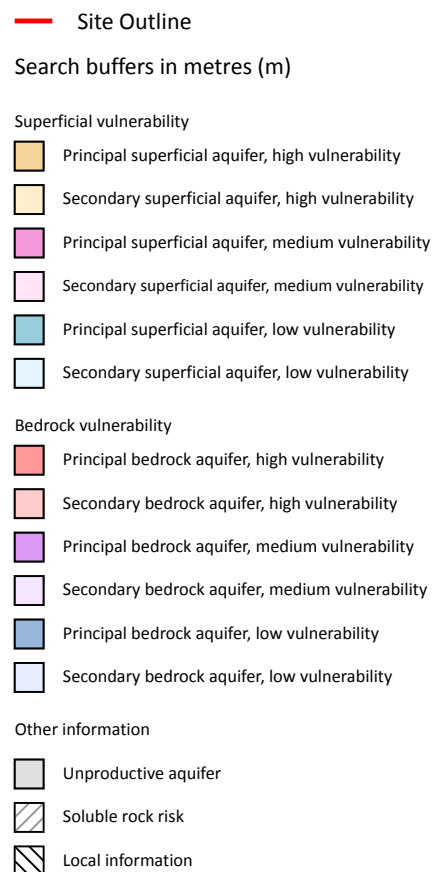
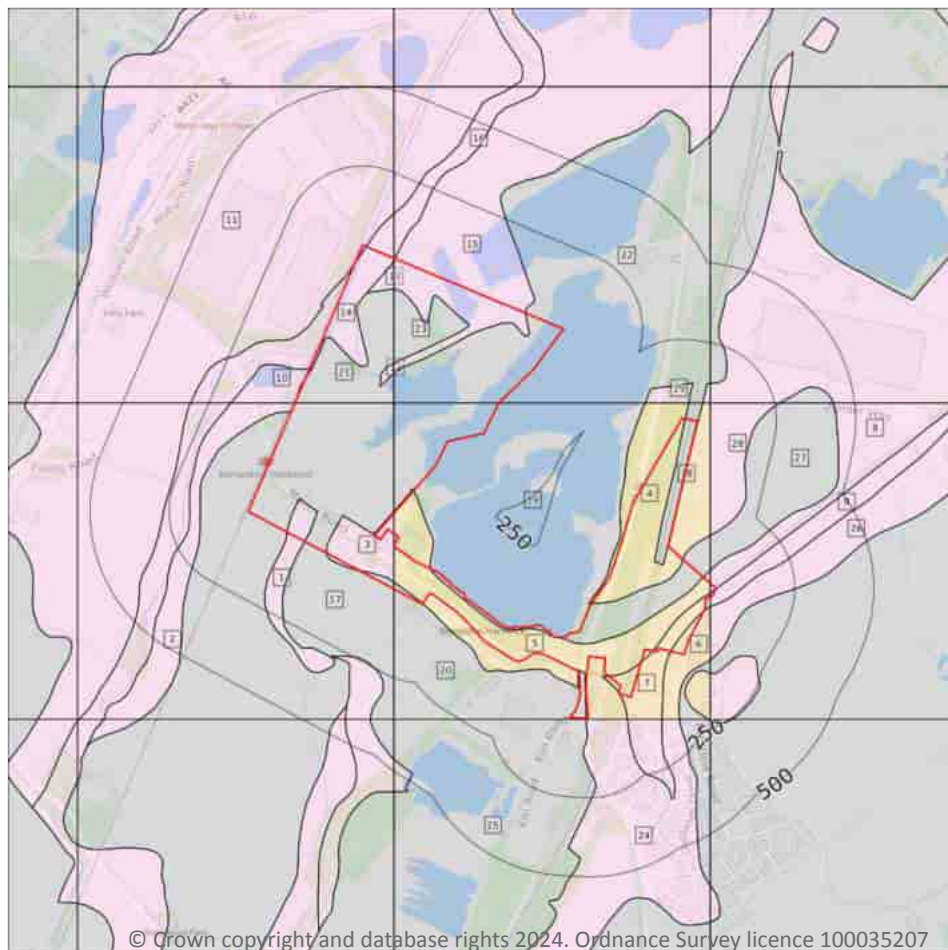
Features are displayed on the Bedrock aquifer map on [page 56](#) >

ID	Location	Designation	Description
1	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	On site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*



## Groundwater vulnerability



### 5.3 Groundwater vulnerability

Records within 50m

29

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on [page 57 >](#)





ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
5	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
6	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
7	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
8	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
9	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
10	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
11	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
12	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
13	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
14	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
15	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
16	On site	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
17	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
18	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
19	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
20	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
21	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
22	On site	Summary Classification: Unproductive aquifer (may have productive aquifer beneath) Combined classification: Unproductive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40-70% Dilution value: <300mm/year	Vulnerability: - Aquifer type: - Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
23	On site	<b>Summary Classification:</b> <b>Unproductive aquifer (may have productive aquifer beneath)</b> <b>Combined classification:</b> <b>Unproductive Bedrock Aquifer, No Superficial Aquifer</b>	<b>Leaching class:</b> <b>Intermediate</b> <b>Infiltration value: 40-70%</b> <b>Dilution value:</b> <b>&lt;300mm/year</b>	<b>Vulnerability: -</b> <b>Aquifer type: -</b> <b>Thickness: &lt;3m</b> <b>Patchiness value: &gt;90%</b> <b>Recharge potential: No Data</b>	<b>Vulnerability:</b> <b>Unproductive</b> <b>Aquifer type:</b> <b>Unproductive</b> <b>Flow mechanism: Well connected fractures</b>
24	1m SE	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	<b>Leaching class:</b> <b>Intermediate</b> <b>Infiltration value: 40-70%</b> <b>Dilution value:</b> <b>&lt;300mm/year</b>	<b>Vulnerability: Medium</b> <b>Aquifer type: Secondary</b> <b>Thickness: &lt;3m</b> <b>Patchiness value: &lt;90%</b> <b>Recharge potential: No Data</b>	<b>Vulnerability:</b> <b>Unproductive</b> <b>Aquifer type:</b> <b>Unproductive</b> <b>Flow mechanism: Well connected fractures</b>
25	2m SE	<b>Summary Classification:</b> <b>Unproductive aquifer (may have productive aquifer beneath)</b> <b>Combined classification:</b> <b>Unproductive Bedrock Aquifer, No Superficial Aquifer</b>	<b>Leaching class:</b> <b>Intermediate</b> <b>Infiltration value: 40-70%</b> <b>Dilution value:</b> <b>&lt;300mm/year</b>	<b>Vulnerability: -</b> <b>Aquifer type: -</b> <b>Thickness: &lt;3m</b> <b>Patchiness value: &lt;90%</b> <b>Recharge potential: No Data</b>	<b>Vulnerability:</b> <b>Unproductive</b> <b>Aquifer type:</b> <b>Unproductive</b> <b>Flow mechanism: Well connected fractures</b>
26	15m SE	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	<b>Leaching class:</b> <b>Intermediate</b> <b>Infiltration value: 40-70%</b> <b>Dilution value:</b> <b>&lt;300mm/year</b>	<b>Vulnerability: Medium</b> <b>Aquifer type: Secondary</b> <b>Thickness: &lt;3m</b> <b>Patchiness value: &lt;90%</b> <b>Recharge potential: No Data</b>	<b>Vulnerability:</b> <b>Unproductive</b> <b>Aquifer type:</b> <b>Unproductive</b> <b>Flow mechanism: Well connected fractures</b>
27	31m SE	<b>Summary Classification:</b> <b>Unproductive aquifer (may have productive aquifer beneath)</b> <b>Combined classification:</b> <b>Unproductive Bedrock Aquifer, No Superficial Aquifer</b>	<b>Leaching class:</b> <b>Intermediate</b> <b>Infiltration value: 40-70%</b> <b>Dilution value:</b> <b>&lt;300mm/year</b>	<b>Vulnerability: -</b> <b>Aquifer type: -</b> <b>Thickness: &lt;3m</b> <b>Patchiness value: &lt;90%</b> <b>Recharge potential: No Data</b>	<b>Vulnerability:</b> <b>Unproductive</b> <b>Aquifer type:</b> <b>Unproductive</b> <b>Flow mechanism: Well connected fractures</b>



ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
28	40m E	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures
29	48m E	Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Unproductive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Intermediate Infiltration value: 40- 70% Dilution value: <300mm/year	Vulnerability: Medium Aquifer type: Secondary Thickness: <3m Patchiness value: >90% Recharge potential: No Data	Vulnerability: Unproductive Aquifer type: Unproductive Flow mechanism: Well connected fractures

*This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.*

## 5.4 Groundwater vulnerability- soluble rock risk

<b>Records on site</b>	<b>0</b>
------------------------	----------

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

*This data is sourced from the British Geological Survey and the Environment Agency.*

## 5.5 Groundwater vulnerability- local information

<b>Records on site</b>	<b>0</b>
------------------------	----------

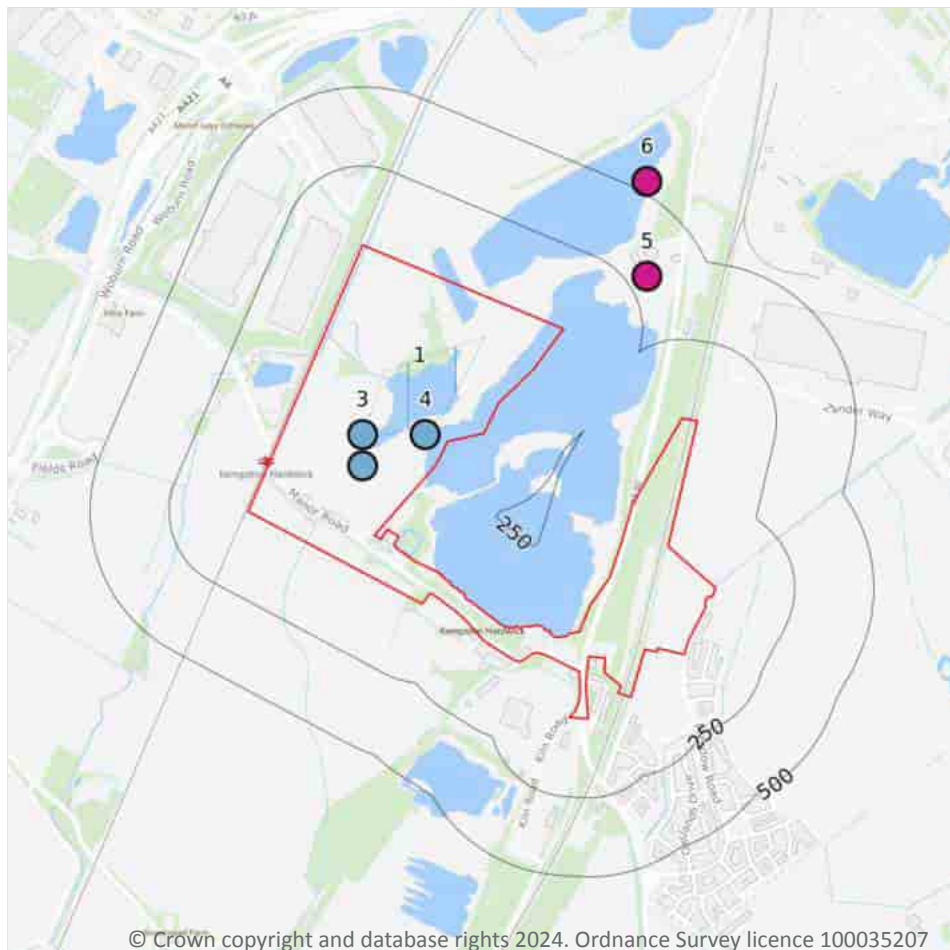
This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk) ↗.

*This data is sourced from the British Geological Survey and the Environment Agency.*





## Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1  
Inner catchment
- Source Protection Zone 2  
Outer catchment
- Source Protection Zone 3  
Total catchment
- Source Protection Zone 4  
Zone of Special Interest
- Source Protection Zone 1c  
Inner catchment - confined aquifer
- Source Protection Zone 2c  
Outer catchment - confined aquifer
- Source Protection Zone 3c  
Total catchment - confined aquifer
- Drinking water abstraction licences  
Polygon features
- Drinking water abstraction licences  
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

### 5.6 Groundwater abstractions

Records within 2000m

2

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 64](#) >

ID	Location	Details	
5	312m NE	Status: Historical Licence No: 6/33/12/*G/0139 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUND WATER SOURCE OF SUPPLY Point: BOREHOLE AT KEMPSTON HARDWICK Data Type: Point Name: SUPREME CONCRETE LTD Easting: 503800 Northing: 245400	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 30/11/1996 Expiry Date: - Issue No: 102 Version Start Date: 13/07/2004 Version End Date: -
6	535m NE	Status: Historical Licence No: 6/33/12/*G/0031 Details: General Farming & Domestic Direct Source: GROUND WATER SOURCE OF SUPPLY Point: WELL-RACEMEADOW FARM Data Type: Point Name: LONDON BRICK CO LTD Easting: 503800 Northing: 245700	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/06/1967 Expiry Date: - Issue No: 100 Version Start Date: 01/06/1967 Version End Date: -

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.7 Surface water abstractions

<b>Records within 2000m</b>	<b>8</b>
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Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on [page 64 >](#)

ID	Location	Details	
1	On site	Status: Historical Licence No: 6/33/12/*S/0027 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: FLOODED KNOTHOLE-KEMPSTON HARD Data Type: Poly4 Name: HANSON BRICK LTD Easting: 503290 Northing: 245210	Annual Volume (m <sup>3</sup> ): 30000 Max Daily Volume (m <sup>3</sup> ): 150 Original Application No: - Original Start Date: 01/04/1968 Expiry Date: - Issue No: 101 Version Start Date: 20/10/2003 Version End Date: -



ID	Location	Details	
2	On site	<b>Status:</b> Historical <b>Licence No:</b> 6/33/12/*S/0027 <b>Details:</b> General Use Relating To Secondary Category (Medium Loss) <b>Direct Source:</b> SURFACE WATER SOURCE OF SUPPLY <b>Point:</b> KEMPSTON HARD KNOTHOLE <b>Data Type:</b> Point <b>Name:</b> HANSON BRICK LTD <b>Easting:</b> 502900 <b>Northing:</b> 244800	<b>Annual Volume (m³):</b> 5164 <b>Max Daily Volume (m³):</b> 16.55 <b>Original Application No:</b> - <b>Original Start Date:</b> 01/04/1968 <b>Expiry Date:</b> - <b>Issue No:</b> 101 <b>Version Start Date:</b> 01/04/2008 <b>Version End Date:</b> -
3	On site	<b>Status:</b> Historical <b>Licence No:</b> 6/33/12/*S/0027 <b>Details:</b> General Use Relating To Secondary Category (Medium Loss) <b>Direct Source:</b> SURFACE WATER SOURCE OF SUPPLY <b>Point:</b> KEMPSTON HARD KNOTHOLE <b>Data Type:</b> Point <b>Name:</b> HANSON BRICK LTD <b>Easting:</b> 502900 <b>Northing:</b> 244900	<b>Annual Volume (m³):</b> 5164 <b>Max Daily Volume (m³):</b> 16.55 <b>Original Application No:</b> - <b>Original Start Date:</b> 01/04/1968 <b>Expiry Date:</b> - <b>Issue No:</b> 101 <b>Version Start Date:</b> 01/04/2008 <b>Version End Date:</b> -
4	On site	<b>Status:</b> Historical <b>Licence No:</b> 6/33/12/*S/0027 <b>Details:</b> General Use Relating To Secondary Category (Medium Loss) <b>Direct Source:</b> SURFACE WATER SOURCE OF SUPPLY <b>Point:</b> KEMPSTON HARD KNOTHOLE <b>Data Type:</b> Point <b>Name:</b> HANSON BRICK LTD <b>Easting:</b> 503100 <b>Northing:</b> 244900	<b>Annual Volume (m³):</b> 5164 <b>Max Daily Volume (m³):</b> 16.55 <b>Original Application No:</b> - <b>Original Start Date:</b> 01/04/1968 <b>Expiry Date:</b> - <b>Issue No:</b> 101 <b>Version Start Date:</b> 01/04/2008 <b>Version End Date:</b> -
-	1353m E	<b>Status:</b> Active <b>Licence No:</b> AN/033/0012/009 <b>Details:</b> Spray Irrigation - Direct <b>Direct Source:</b> SURFACE WATER SOURCE OF SUPPLY <b>Point:</b> WATERCOURSE AT ELSTOW <b>Data Type:</b> Line <b>Name:</b> M K H Farming <b>Easting:</b> 506018 <b>Northing:</b> 246926	<b>Annual Volume (m³):</b> 7863 <b>Max Daily Volume (m³):</b> 491 <b>Original Application No:</b> NPS/WR/034975 <b>Original Start Date:</b> 04/09/2017 <b>Expiry Date:</b> 31/03/2024 <b>Issue No:</b> 3 <b>Version Start Date:</b> 11/03/2021 <b>Version End Date:</b> -
-	1359m E	<b>Status:</b> Historical <b>Licence No:</b> 6/33/12/*S/0062 <b>Details:</b> Spray Irrigation - Direct <b>Direct Source:</b> SURFACE WATER SOURCE OF SUPPLY <b>Point:</b> WATERCOURSE AT ELSTOW <b>Data Type:</b> Line <b>Name:</b> CLARK <b>Easting:</b> 505200 <b>Northing:</b> 245500	<b>Annual Volume (m³):</b> 7864.6 <b>Max Daily Volume (m³):</b> 490.9 <b>Original Application No:</b> - <b>Original Start Date:</b> 01/10/1967 <b>Expiry Date:</b> - <b>Issue No:</b> 100 <b>Version Start Date:</b> 01/10/1967 <b>Version End Date:</b> -



ID	Location	Details	
-	1430m E	Status: Historical Licence No: 6/33/12/*S/0012 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT WILSTEAD Data Type: Point Name: H MASKELL & SON Easting: 505430 Northing: 244640	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 01/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1970 Version End Date: -
-	1430m E	Status: Historical Licence No: 6/33/12/*S/0012 Details: Spray Irrigation - Storage Direct Source: SURFACE WATER SOURCE OF SUPPLY Point: STREAM AT WILSTEAD Data Type: Point Name: H MASKELL & SON Easting: 505430 Northing: 244640	Annual Volume (m <sup>3</sup> ): 4545 Max Daily Volume (m <sup>3</sup> ): 654.54 Original Application No: - Original Start Date: 01/06/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1970 Version End Date: -

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.8 Potable abstractions

<b>Records within 2000m</b>	<b>0</b>
-----------------------------	----------

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.9 Source Protection Zones

<b>Records within 500m</b>	<b>0</b>
----------------------------	----------

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 5.10 Source Protection Zones (confined aquifer)

<b>Records within 500m</b>	<b>0</b>
----------------------------	----------

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

### 6.1 Water Network (OS MasterMap)

Records within 250m

38

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on [page 68 >](#)

ID	Location	Type of water feature	Ground level	Permanence	Name
1	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
2	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
3	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	On site	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
5	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
7	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
8	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-





ID	Location	Type of water feature	Ground level	Permanence	Name
D	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	On site	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	On site	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
15	On site	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
16	1m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
F	3m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	4m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
J	29m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
19	44m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
K	46m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
21	80m S	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
L	82m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-



ID	Location	Type of water feature	Ground level	Permanence	Name
M	122m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
23	124m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
O	128m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
N	129m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
24	173m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
25	175m NW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
P	189m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	196m E	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
Q	204m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
R	210m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
28	226m SE	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-

*This data is sourced from the Ordnance Survey.*



## 6.2 Surface water features

### Records within 250m

18

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on [page 68 >](#)

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

### Records on site

2

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on [page 68 >](#)

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
13	On site	River	Harrowden Brook	GB105033038010	Great Ouse Bedford	Ouse Upper and Bedford
G	On site	River	Elstow Brook (US Shortstown)	GB105033038050	Great Ouse Bedford	Ouse Upper and Bedford

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 6.4 WFD Surface water bodies

### Records identified

2

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each water body listed.

Features are displayed on the Hydrology map on [page 68 >](#)



ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
14	On site	River	Harrowden Brook	<a href="#">GB105033038010</a> ↗	Bad	Fail	Bad	2019
G	On site	River	Elstow Brook (US Shortstown)	<a href="#">GB105033038050</a> ↗	Moderate	Fail	Moderate	2019

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 6.5 WFD Groundwater bodies










Records on site	0
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Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place. Click on the water body ID in the table to visit the EA Catchment Explorer to find out more about each groundwater body listed.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7 River and coastal flooding



-  Site Outline
- Search buffers in metres (m)
- River and coastal flooding:
-  High
-  Medium
-  Low
-  Very Low
-  Historical Flood Events
-  Areas Used for Flood Storage
-  Areas Benefiting from Flood Defences
-  Flood Defences

## 7.1 Risk of flooding from rivers and the sea

## Records within 50m

21

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

Features are displayed on the River and coastal flooding map on [page 74 >](#)

Distance	Flood risk category
<b>On site</b>	<b>High</b>
0 - 50m	High

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.2 Historical Flood Events

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.3 Flood Defences

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.4 Areas Benefiting from Flood Defences

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.5 Flood Storage Areas

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

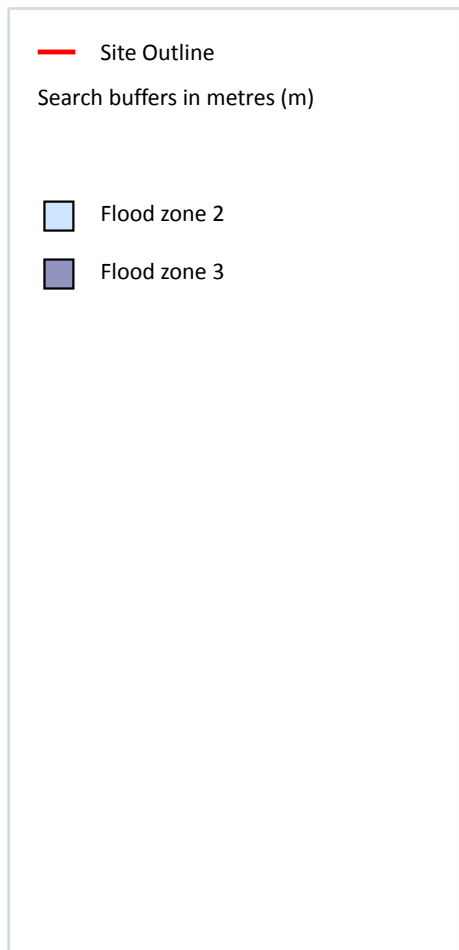
Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

*This data is sourced from the Environment Agency and Natural Resources Wales.*





## River and coastal flooding - Flood Zones



## 7.6 Flood Zone 2

1

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

Features are displayed on the River and coastal flooding map on [page 74 >](#)

Location	Type
On site	Zone 2 - (Fluvial /Tidal Models)

*This data is sourced from the Environment Agency and Natural Resources Wales.*

## 7.7 Flood Zone 3

### Records within 50m

**1**

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on [page 74 >](#)

Location	Type
On site	Zone 3 - (Fluvial Models)

*This data is sourced from the Environment Agency and Natural Resources Wales.*



## 8 Surface water flooding



— Site Outline

Search buffers in metres (m)

1 in 1000 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period

- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

### 8.1 Surface water flooding

**Highest risk on site**

**1 in 30 year, Greater than 1.0m**

**Highest risk within 50m**

**1 in 30 year, Greater than 1.0m**

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on [page 78 >](#)

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

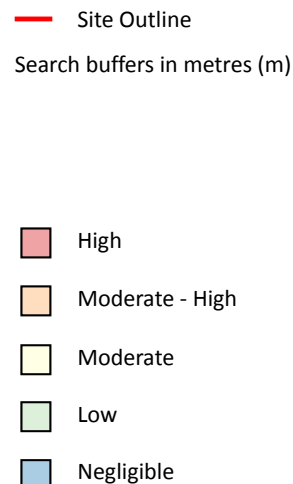
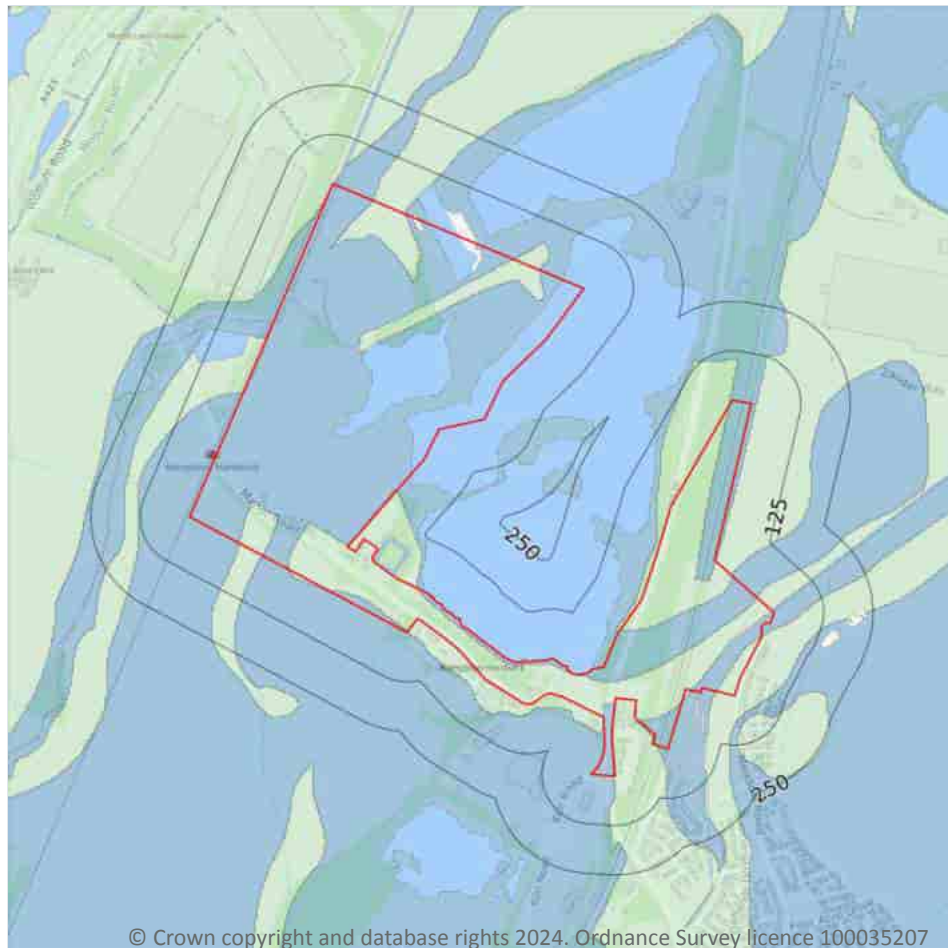
The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Greater than 1.0m
1 in 250 year	Greater than 1.0m
1 in 100 year	Greater than 1.0m
1 in 30 year	Greater than 1.0m

*This data is sourced from Ambiantal Risk Analytics.*



## 9 Groundwater flooding



### 9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

Low

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on [page 80](#) >

*This data is sourced from Ambiantal Risk Analytics.*



## 10 Environmental designations

### 10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

### 10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m

0

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

### 10.3 Special Areas of Conservation (SAC)

Records within 2000m

0

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

### 10.4 Special Protection Areas (SPA)

Records within 2000m

0

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*





## 10.5 National Nature Reserves (NNR)

Records within 2000m

0

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.6 Local Nature Reserves (LNR)

Records within 2000m

0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.7 Designated Ancient Woodland

Records within 2000m

0

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*



## 10.9 Forest Parks

Records within 2000m

0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

*This data is sourced from the Forestry Commission.*

## 10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 10.11 Green Belt

Records within 2000m

0

Areas designated to prevent urban sprawl by keeping land permanently open.

*This data is sourced from the Ministry of Housing, Communities and Local Government.*

## 10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m

0

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

*This data is sourced from Natural England and Natural Resources Wales.*



## 10.14 Potential Special Protection Areas (pSPA)

Records within 2000m

0

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

*This data is sourced from Natural England.*

## 10.15 Nitrate Sensitive Areas

Records within 2000m

0

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

*This data is sourced from Natural England.*

## 10.16 Nitrate Vulnerable Zones

Records within 2000m

10

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

Location	Name	Type	NVZ ID	Status
On site	Great Ouse NVZ	Surface Water	391	Existing
On site	Huntingdon River Gravels	Groundwater	144	Existing
75m SE	Great Ouse NVZ	Surface Water	391	Existing
75m SE	Huntingdon River Gravels	Groundwater	144	Existing
483m N	Great Ouse NVZ	Surface Water	391	Existing
483m N	Huntingdon River Gravels	Groundwater	144	Existing
932m NE	Great Ouse NVZ	Surface Water	391	Existing
932m NE	Huntingdon River Gravels	Groundwater	144	Existing

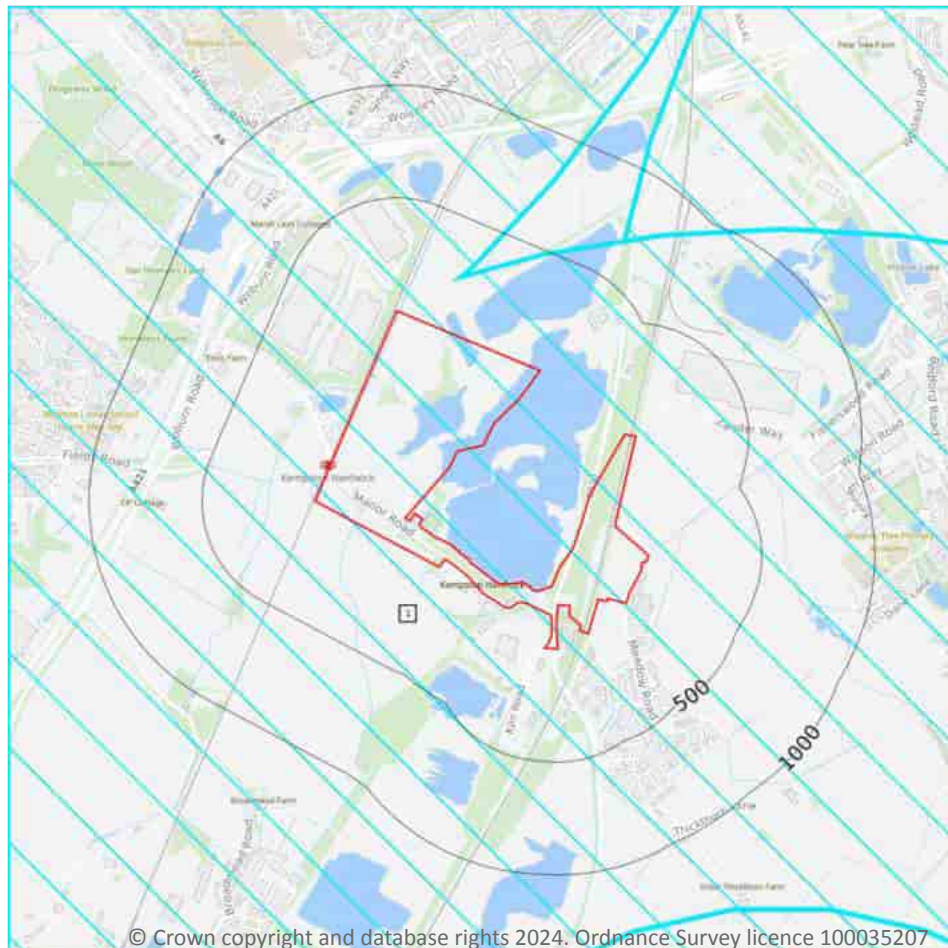


Location	Name	Type	NVZ ID	Status
1366m NW	Bedford Great Oolite	Groundwater	74	Existing
1849m NW	Bedford Great Oolite	Groundwater	74	Existing

*This data is sourced from Natural England and Natural Resources Wales.*



## SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

### 10.17 SSSI Impact Risk Zones

#### Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on [page 86 >](#)

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Livestock & poultry units with floorspace > 500m <sup>2</sup> , slurry lagoons & digestate stores > 750m <sup>2</sup> , manure stores > 3500t.

*This data is sourced from Natural England.*



## 10.18 SSSI Units

Records within 2000m

0

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

*This data is sourced from Natural England and Natural Resources Wales.*





## 11 Visual and cultural designations



- Site Outline
- Search buffers in metres (m)
- Listed buildings
- Conservation areas
- Conservation areas - no data
- National Parks
- Areas of Outstanding Natural Beauty
- Registered parks and gardens
- Scheduled Monuments
- World Heritage Sites

### 11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

*This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.*

## 11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

*This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.*

## 11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.



*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.6 Scheduled Ancient Monuments

### Records within 250m

**1**

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

Features are displayed on the Visual and cultural designations map on [page 88](#) >

ID	Location	Ancient monument name	Reference number
1	On site	Kempston Hardwick moated site	1012312

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*

## 11.7 Registered Parks and Gardens

### Records within 250m

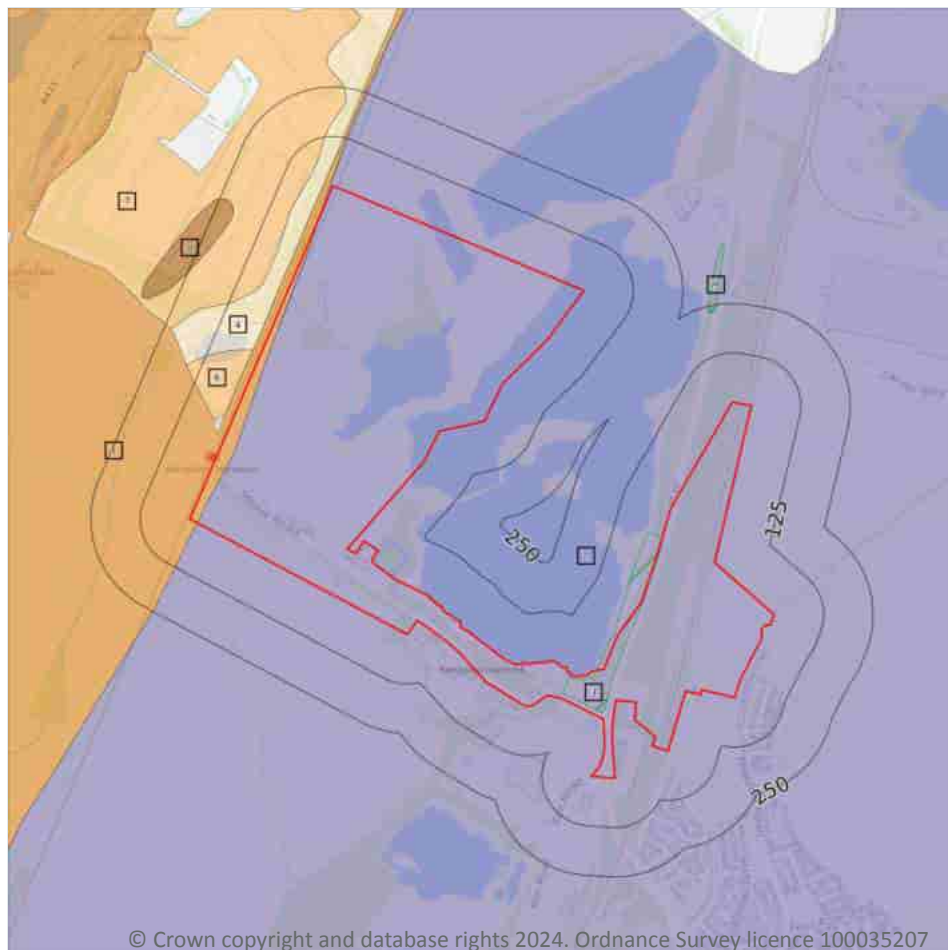
**0**

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

*This data is sourced from Historic England, Cadw and Historic Environment Scotland.*



## 12 Agricultural designations



- Site Outline
- Search buffers in metres (m)
- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3 - good to moderate quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Non-agricultural land
- Urban land
- Exclusion land
- Tree felling licences
- Open Access land

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### 12.1 Agricultural Land Classification

Records within 250m

6

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

Features are displayed on the Agricultural designations map on [page 91](#) >

ID	Location	Classification	Description
1	On site	Grade 3	Good to moderate quality agricultural land. Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.



ID	Location	Classification	Description
2	On site	Non Agricultural	-
4	22m NW	Grade 3b	Moderate quality agricultural land. Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.
6	22m W	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
7	61m NW	Grade 3a	Good quality agricultural land. Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.
8	203m NW	Grade 2	Very good quality agricultural land. Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

*This data is sourced from Natural England.*

## 12.2 Open Access Land

**Records within 250m**

**0**

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

*This data is sourced from Natural England and Natural Resources Wales.*

## 12.3 Tree Felling Licences

**Records within 250m**

**2**

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

Features are displayed on the Agricultural designations map on [page 91](#) >



ID	Location	Description	Reference	Application date
3	On site	Selective Fell/Thin (Conditional)	017/63/11-12	18/08/2011
9	232m NE	Selective Fell/Thin (Conditional)	017/63/11-12	18/08/2011

*This data is sourced from the Forestry Commission.*

## 12.4 Environmental Stewardship Schemes

**Records within 250m** **0**

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

*This data is sourced from Natural England.*

## 12.5 Countryside Stewardship Schemes

**Records within 250m** **1**

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

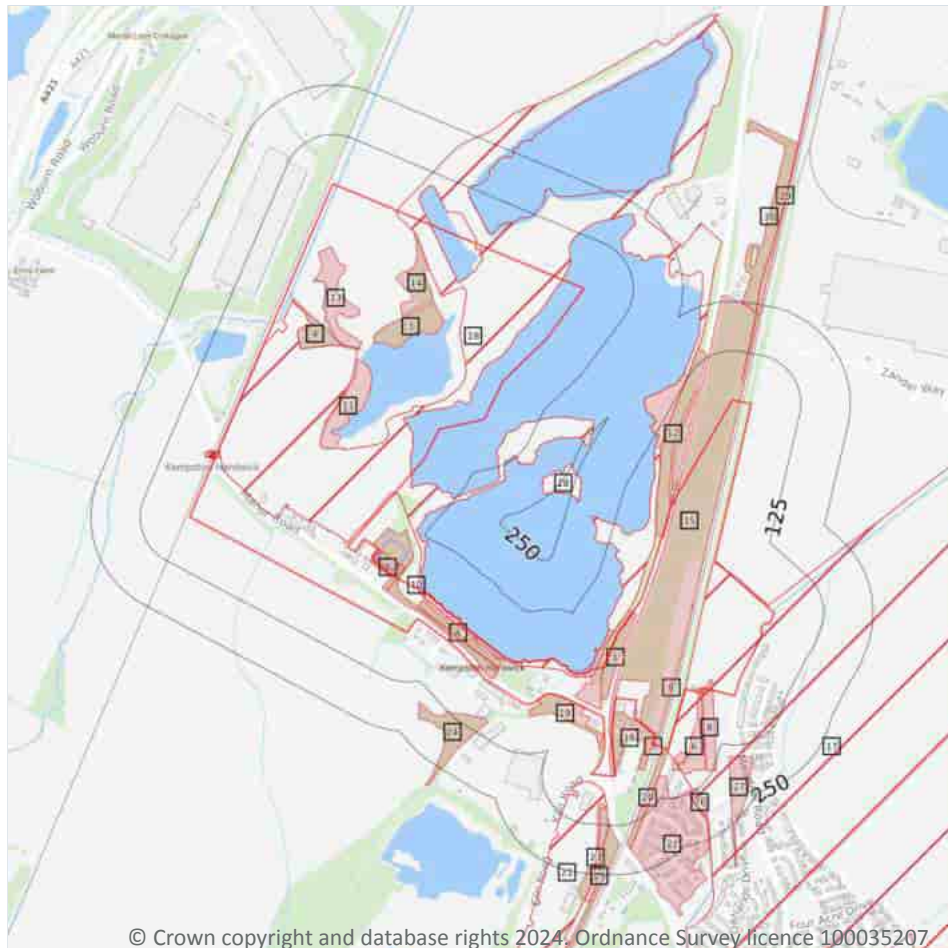
Location	Reference	Scheme	Start Date	End Date
On site	1271066	Countryside Stewardship (Middle Tier)	01/01/2022	31/12/2026

*This data is sourced from Natural England.*





## 13 Habitat designations



- Site Outline
- Search buffers in metres (m)
- Priority Habitat Inventory
- Open Mosaic Habitat
- Limestone Pavement Orders
- Habitat Networks
- Primary Habitat
- Restorable Habitat
- Associated Habitats
- Habitat Restoration-Creation
- Network Enhancement Zone 1
- Network Enhancement Zone 2

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### 13.1 Priority Habitat Inventory

Records within 250m

28

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

Features are displayed on the Habitat designations map on [page 94](#) >

ID	Location	Main Habitat	Other habitats
1	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
2	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
3	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
4	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)



ID	Location	Main Habitat	Other habitats
5	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
6	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
7	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
8	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
9	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
10	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
11	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
12	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
13	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
14	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
15	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
16	On site	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
A	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
A	On site	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
19	0m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
20	5m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
22	70m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
23	73m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
24	84m S	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
25	111m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
26	118m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
27	154m SE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)
29	226m NE	No main habitat but additional habitats present	Additional: DWOOD (INV 50%)
30	229m NE	Deciduous woodland	Main habitat: DWOOD (INV > 50%)

*This data is sourced from Natural England.*



## 13.2 Habitat Networks

Records within 250m

0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

*This data is sourced from Natural England.*

## 13.3 Open Mosaic Habitat

Records within 250m

4

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

Features are displayed on the Habitat designations map on [page 94 >](#)

ID	Location	Site reference	Identification confidence	Primary source	Secondary source	Tertiary source
17	On site	NLUD Ref: 20500247	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
18	On site	BRITPITS ref: 35270	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography
21	19m SE	NLUD Ref: 20500260	Low	National Land Use Database - Previously Developed Land	UK Perspectives Aerial Photography	-
28	211m E	BRITPITS ref: 35270	Low	British Geological Survey BRITPITS database	Environment Agency Historic Landfill Sites	UK Perspectives Aerial Photography

*This data is sourced from Natural England.*

## 13.4 Limestone Pavement Orders

Records within 250m

0

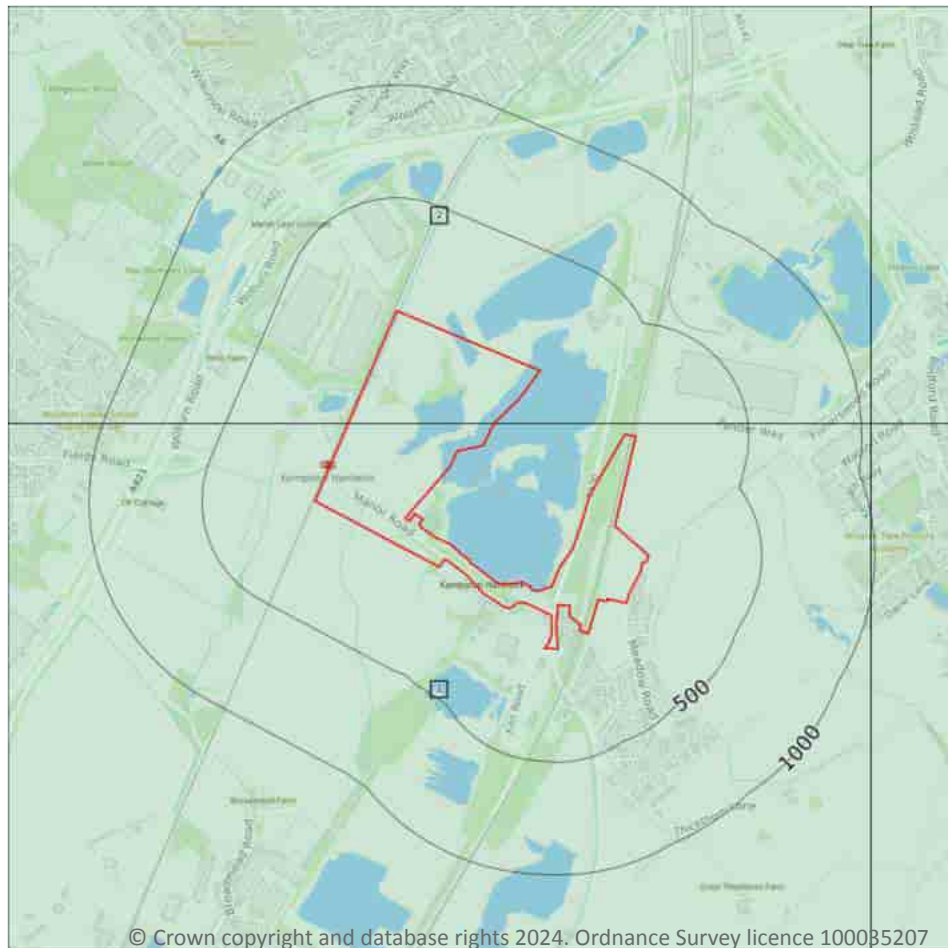
Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.



*This data is sourced from Natural England.*



## 14 Geology 1:10,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

### 14.1 10k Availability

#### Records within 500m

2

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

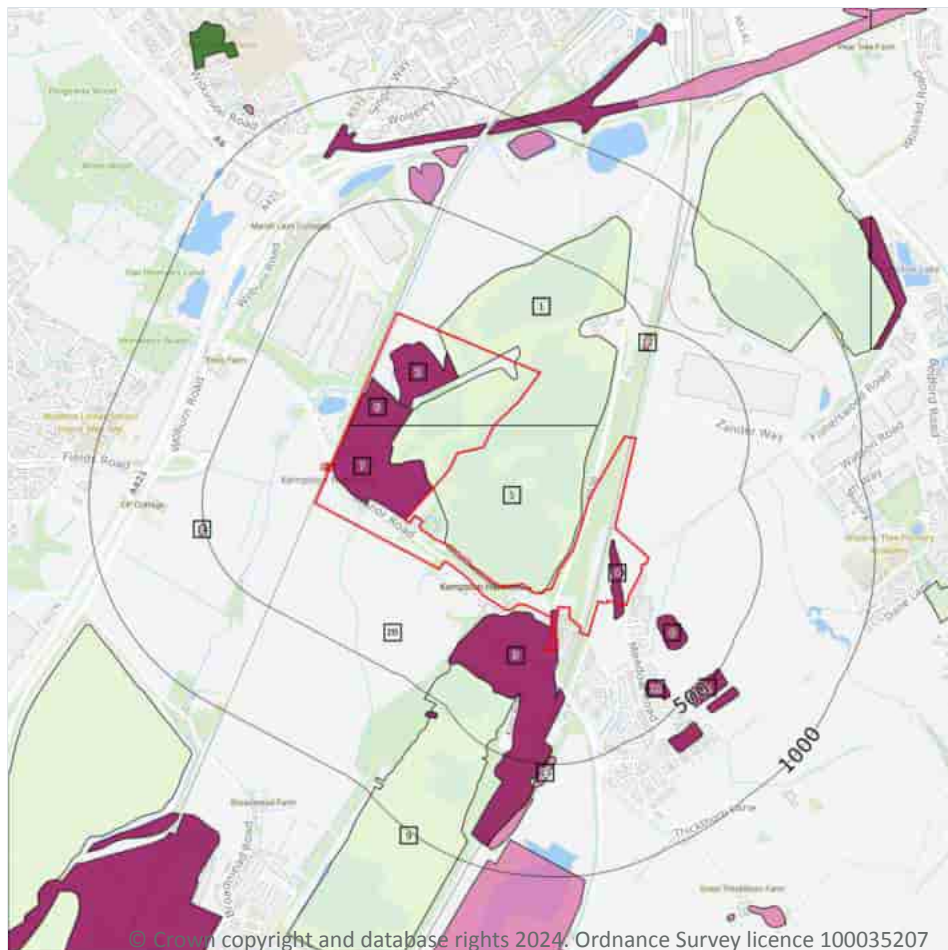
Features are displayed on the Geology 1:10,000 scale - Availability map on [page 98](#) >

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	TL04SW
2	On site	Full	Full	Full	No coverage	TL04NW

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Artificial and made ground



— Site Outline  
Search buffers in metres (m)

- Reclaimed ground
- Made ground
- Worked ground
- Infilled ground
- Disturbed ground
- Landscaped ground

### 14.2 Artificial and made ground (10k)

Records within 500m

15

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on [page 99](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	WMGR-ARTDP	Infilled Ground	Artificial Deposit
2	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
3	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
4	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit



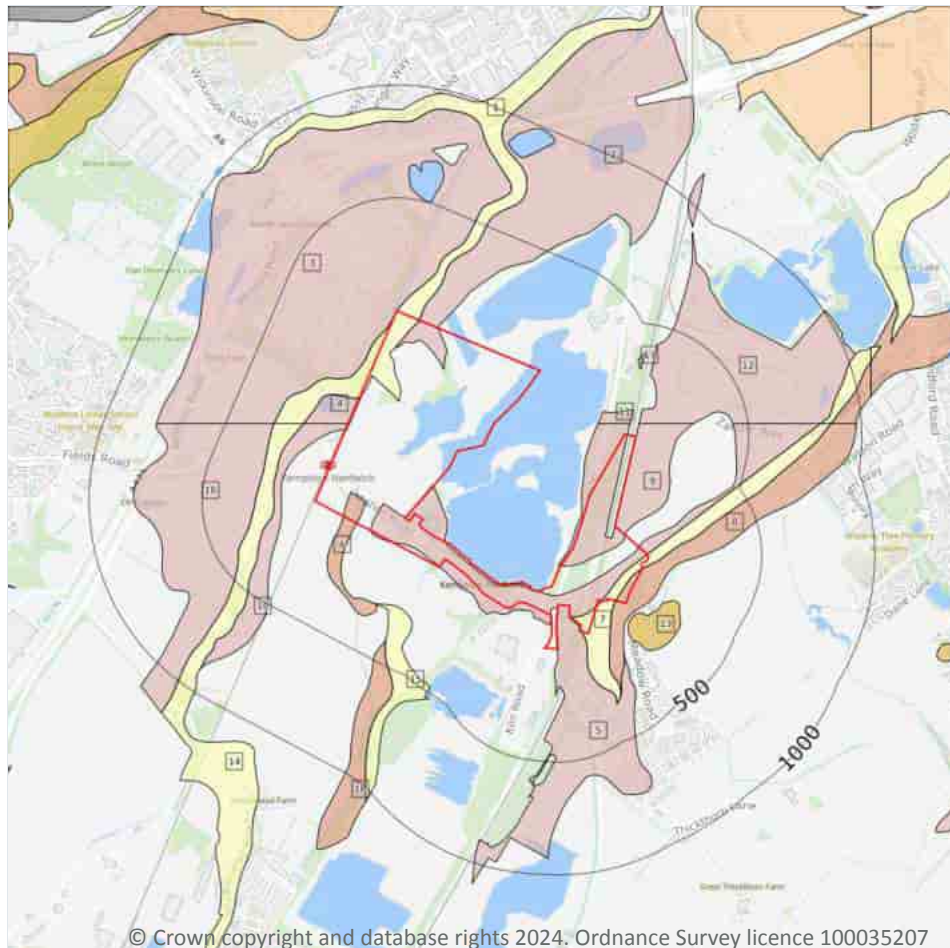


ID	Location	LEX Code	Description	Rock description
5	On site	WMGR-ARTDP	Infilled Ground	Artificial Deposit
6	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
7	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
8	151m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
9	226m S	WMGR-ARTDP	Infilled Ground	Artificial Deposit
10	326m SW	WGR-VOID	Worked Ground (Undivided)	Void
11	332m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
12	391m NE	WGR-VOID	Worked Ground (Undivided)	Void
13	467m S	WGR-VOID	Worked Ground (Undivided)	Void
A	467m SE	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
14	490m W	WGR-VOID	Worked Ground (Undivided)	Void

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (10k)
- Superficial geology (10k)  
Please see table for more details.

### 14.3 Superficial geology (10k)

#### Records within 500m

18

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on [page 101](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
2	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
3	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel



ID	Location	LEX Code	Description	Rock description
4	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
5	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
6	On site	HEAD1-XCZSV	Head, 1 - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
7	On site	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
8	On site	HEAD1-XCZSV	Head, 1 - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
9	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
10	On site	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
11	48m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
12	59m E	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
13	65m SE	HEAD2-XVSZC	Head, 2 - Gravel, Sand, Silt And Clay	Gravel, Sand, Silt And Clay
14	182m W	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
15	242m SW	ALV-XCZ	Alluvium - Clay And Silt	Clay And Silt
16	256m W	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
17	297m NE	HEAD-XCZSV	Head - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel
18	393m SW	HEAD1-XCZSV	Head, 1 - Clay, Silt, Sand And Gravel	Clay, Silt, Sand And Gravel

*This data is sourced from the British Geological Survey.*

## 14.4 Landslip (10k)

**Records within 500m**

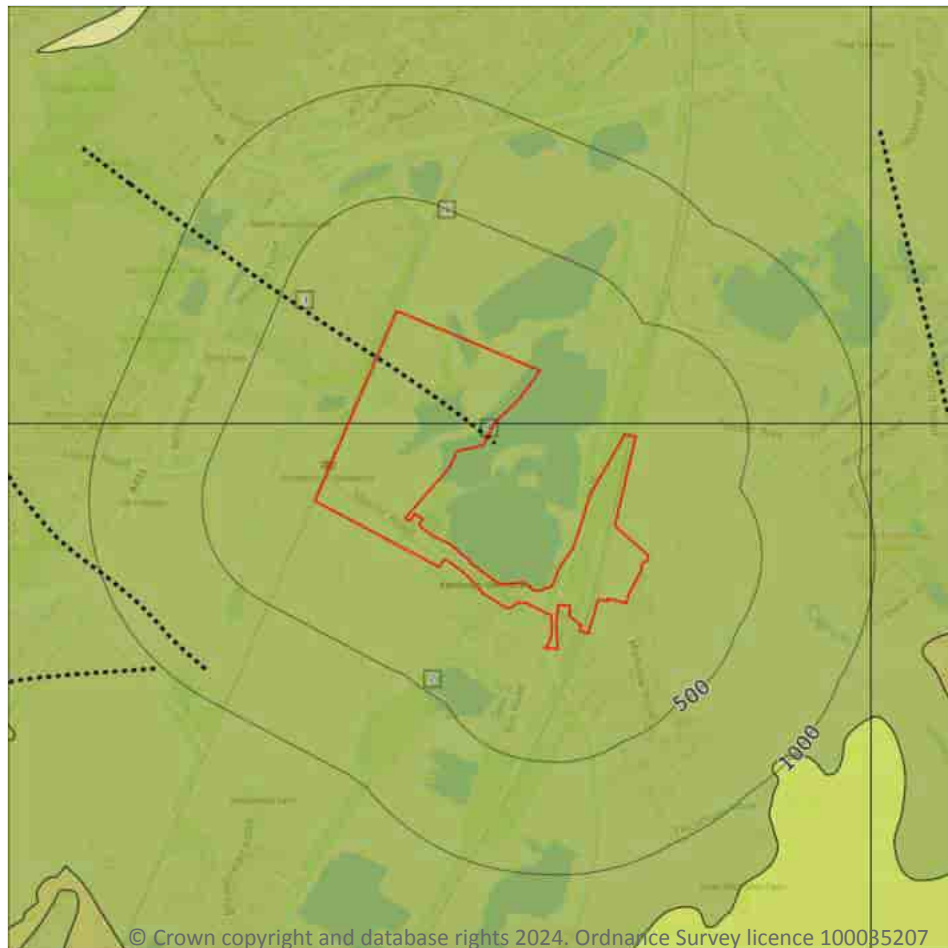
**0**

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*



## Geology 1:10,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (10k)
- Bedrock geology (10k)  
Please see table for more details.

### 14.5 Bedrock geology (10k)

#### Records within 500m

2

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 103](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	Peterborough Member - Mudstone	Callovian Age
2	On site	PET-MDST	Peterborough Member - Mudstone	Callovian Age

*This data is sourced from the British Geological Survey.*



## 14.6 Bedrock faults and other linear features (10k)

### Records within 500m

**2**

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on [page 103](#) >

ID	Location	Category	Description
3	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side
4	On site	FAULT	Normal fault, inferred; crossmarks on downthrow side

*This data is sourced from the British Geological Survey.*



## 15 Geology 1:50,000 scale - Availability



— Site Outline  
Search buffers in metres (m)

☐ Geological map tile

### 15.1 50k Availability

#### Records within 500m

1

An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme.

Features are displayed on the Geology 1:50,000 scale - Availability map on [page 105](#) >

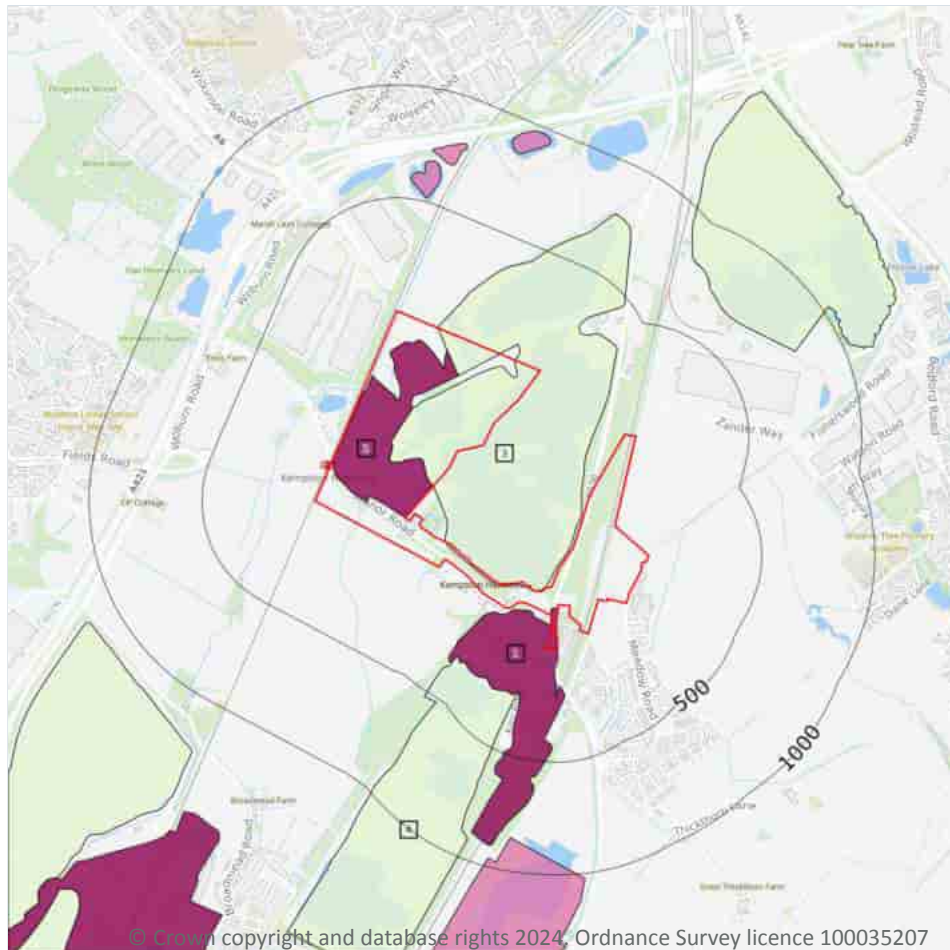
ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW203_bedford_v4

*This data is sourced from the British Geological Survey.*





## Geology 1:50,000 scale - Artificial and made ground



- Site Outline
- Search buffers in metres (m)
- Made ground
  - Worked ground
  - Infilled ground
  - Disturbed ground
  - Landscaped ground

### 15.2 Artificial and made ground (50k)

#### Records within 500m

4

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on [page 106](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	On site	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT
4	226m S	WMGR-ARTDP	INFILLED GROUND	ARTIFICIAL DEPOSIT



*This data is sourced from the British Geological Survey.*

### 15.3 Artificial ground permeability (50k)

Records within 50m

5

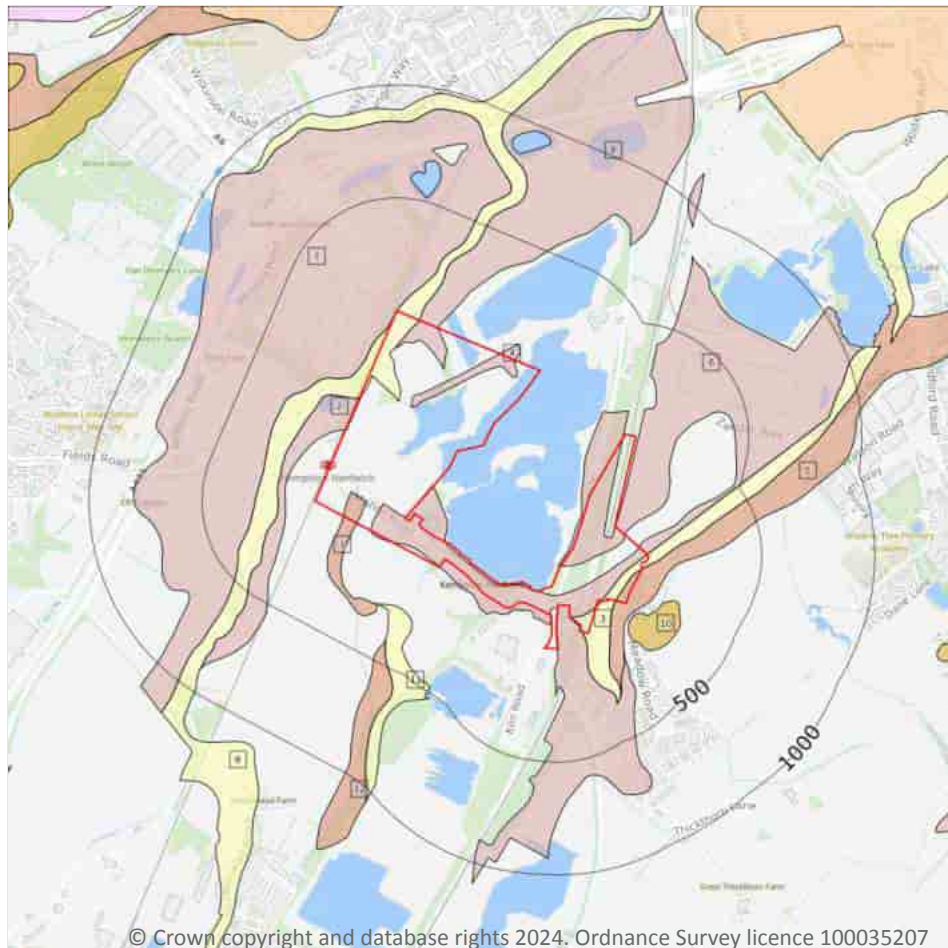
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low
On site	Mixed	Very High	Low
On site	Mixed	Very High	Low
On site	Mixed	Very High	Low
On site	Mixed	Very High	Low

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Superficial



**Site Outline**

Search buffers in metres (m)

Landslip (50k)

Superficial geology (50k)  
Please see table for more details.

### 15.4 Superficial geology (50k)

Records within 500m

12

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on [page 108](#) >

ID	Location	LEX Code	Description	Rock description
1	On site	HEAD1-XCZSV	HEAD, 1	CLAY, SILT, SAND AND GRAVEL
2	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
3	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT



ID	Location	LEX Code	Description	Rock description
4	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
5	On site	HEAD1-XCZSV	HEAD, 1	CLAY, SILT, SAND AND GRAVEL
6	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
7	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
8	On site	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL
9	On site	ALV-XCZ	ALLUVIUM	CLAY AND SILT
10	65m SE	HEAD2-XVSZC	HEAD, 2	GRAVEL, SAND, SILT AND CLAY
11	241m SW	ALV-XCZ	ALLUVIUM	CLAY AND SILT
12	393m SW	HEAD1-XCZSV	HEAD, 1	CLAY, SILT, SAND AND GRAVEL

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

<b>Records within 50m</b>	<b>12</b>
---------------------------	-----------

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low
On site	Intergranular	Low	Very Low
On site	Intergranular	Low	Very Low
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low



Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low
On site	Mixed	High	Very Low
48m E	Mixed	High	Very Low

*This data is sourced from the British Geological Survey.*

## 15.6 Landslip (50k)

Records within 500m	0
---------------------	---

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

*This data is sourced from the British Geological Survey.*

## 15.7 Landslip permeability (50k)

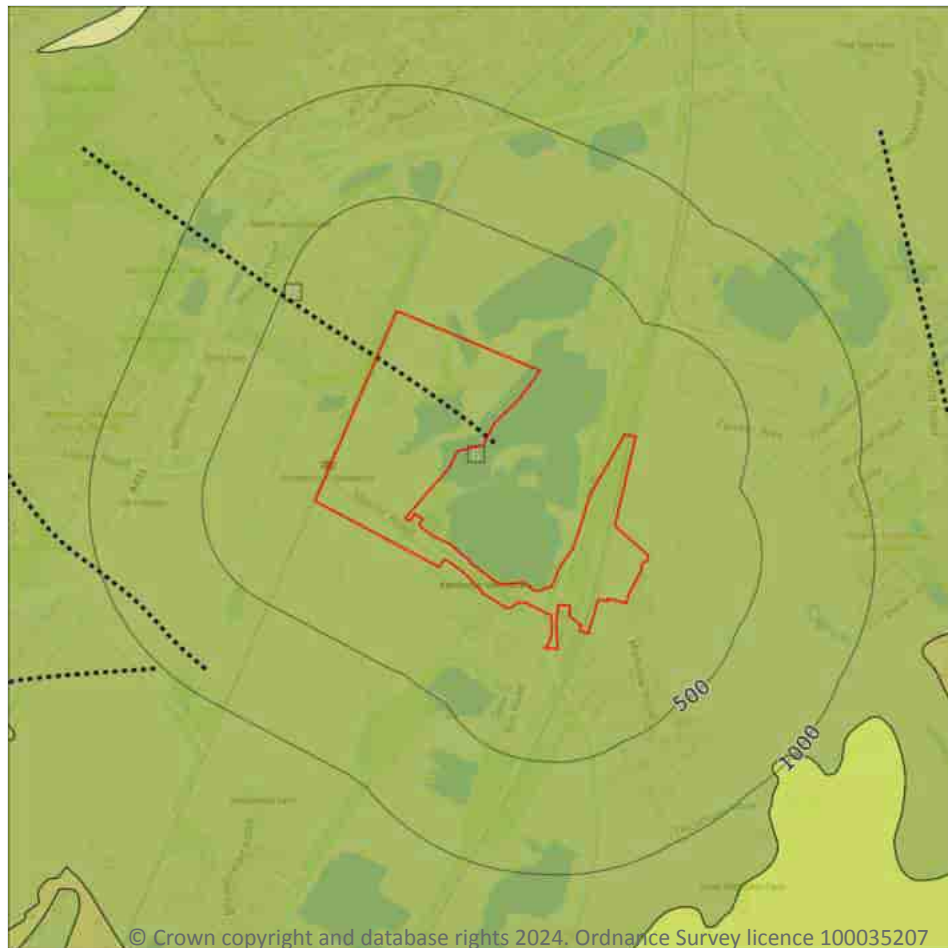
Records within 50m	0
--------------------	---

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

*This data is sourced from the British Geological Survey.*



## Geology 1:50,000 scale - Bedrock



- Site Outline
- Search buffers in metres (m)
- Bedrock faults and other linear features (50k)
- Bedrock geology (50k)  
Please see table for more details.

### 15.8 Bedrock geology (50k)

#### Records within 500m

1

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 111](#) >

ID	Location	LEX Code	Description	Rock age
1	On site	PET-MDST	PETERBOROUGH MEMBER - MUDSTONE	CALLOVIAN

*This data is sourced from the British Geological Survey.*





## 15.9 Bedrock permeability (50k)

### Records within 50m

**2**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Low	Very Low
On site	Fracture	Low	Very Low

*This data is sourced from the British Geological Survey.*

## 15.10 Bedrock faults and other linear features (50k)

### Records within 500m

**1**

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

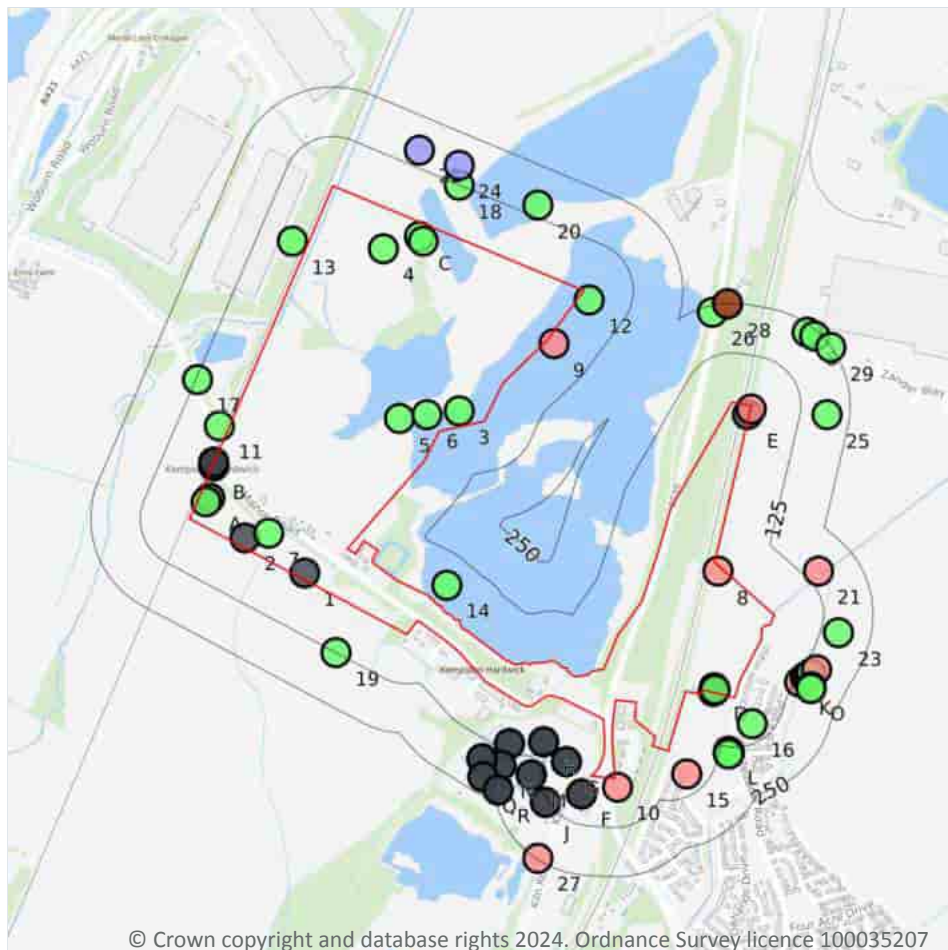
Features are displayed on the Geology 1:50,000 scale - Bedrock map on [page 111](#) >

ID	Location	Category	Description
2	On site	FAULT	Fault, inferred

*This data is sourced from the British Geological Survey.*



## 16 Boreholes



— Site Outline  
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

### 16.1 BGS Boreholes

Records within 250m

74

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on [page 113](#) >

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	502830 244520	CORONATION PIT AREA 26	-	Y	N/A
2	On site	502680 244610	CORONATION PIT AREA 25	-	Y	N/A
3	On site	503220 244930	LBC KEMPSTON HARDWICK 11/71	17.0	N	<a href="#">524365</a> ↗



ID	Location	Grid reference	Name	Length	Confidential	Web link
4	On site	503030 245340	L B C (REDLANDS) KEMPSTON HARDWICK 9	10.97	N	<a href="#">523747 ↗</a>
5	On site	503070 244910	LBC KEMPSTON HARDWICK 9/71	14.0	N	<a href="#">524363 ↗</a>
6	On site	503140 244920	LBC KEMPSTON HARDWICK 10/71	17.0	N	<a href="#">524364 ↗</a>
7	On site	502740 244620	ELSTOW 12	23.5	N	<a href="#">524614 ↗</a>
8	On site	503874 244524	ELSTOW E/BI9	37.6	N	<a href="#">524730 ↗</a>
A	On site	502590 244710	CORONATION PIT AREA 24	-	Y	N/A
A	On site	502580 244700	LBC STAVARTBY AND CORONATION 24	14.47	N	<a href="#">524408 ↗</a>
B	On site	502600 244790	KEMPSTON HARDWICK 1/83	-	Y	N/A
B	On site	502600 244790	KEMPSTON HARDWICK 3A	-	Y	N/A
C	On site	503120 245370	L B C KEMPSTON HARDWICK 1/71	10.97	N	<a href="#">523732 ↗</a>
C	On site	503130 245360	SUSSEX & DORKING UNITED BRICK CO K/D	18.29	N	<a href="#">523640 ↗</a>
D	On site	503866 244230	ELSTOW E/BD15	52.5	N	<a href="#">524691 ↗</a>
D	On site	503863 244222	ELSTOW E/TP10	-	Y	N/A
D	On site	503867 244226	ELSTOW E/BD15A	14.0	N	<a href="#">524692 ↗</a>
E	On site	503950 244920	ELSTOW E/TP6	-	Y	N/A
E	1m E	503958 244936	ELSTOW E/BD14	52.0	N	<a href="#">524690 ↗</a>
B	1m W	502600 244800	KEMPSTON HARDWICK 2/83	-	Y	N/A
9	19m NE	503460 245100	SUSSEX FACTORY UNITED BRICK CO K/A	36.57	N	<a href="#">523637 ↗</a>
10	23m SE	503620 243980	KEMPSTON HARDWICK	45.72	N	<a href="#">524360 ↗</a>
11	23m W	502615 244892	East West Rail Phase 2 CP2DKHOB_2D	19.86	N	<a href="#">20864544 ↗</a>
12	26m NE	503550 245210	L B C (REDLANDS) KEMPSTON HARDWICK 17	28.04	N	<a href="#">523755 ↗</a>
13	38m NW	502800 245360	SUSSEX & DORKING UNITED BRICK CO K/N	12.19	N	<a href="#">523647 ↗</a>
F	50m S	503530 243963	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH5	-	Y	N/A
F	50m S	503530 243963	CORONATION BRICKWORKS KEMPTON HARDWICK 5	-	Y	N/A
14	50m S	503190 244490	CORONATION PIT AREA 5	15.0	N	<a href="#">524762 ↗</a>
G	74m S	503491 244044	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH4	-	Y	N/A



ID	Location	Grid reference	Name	Length	Confidential	Web link
G	74m S	503491 244044	CORONATION BRICKWORKS KEMPTON HARDWICK 4	-	Y	N/A
15	74m SE	503796 244013	ELSTOW E/BE14	52.0	N	<a href="#">524716 ↗</a>
16	78m SE	503960 244140	ELSTOW SITE 3	24.38	N	<a href="#">524574 ↗</a>
H	97m S	503435 244093	CORONATION BRICKWORKS KEMPTON HARDWICK 3	-	Y	N/A
H	97m S	503435 244093	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH3	-	Y	N/A
I	103m S	503348 244090	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH8	-	Y	N/A
I	103m S	503348 244090	CORONATION BRICKWORKS KEMPTON HARDWICK 8	-	Y	N/A
17	121m W	502560 245010	SUSSEX & DORKING UNITED BRICK CO K/G	14.61	N	<a href="#">523650 ↗</a>
18	124m N	503220 245500	L B C KEMPSTON HARDWICK 2/71	14.02	N	<a href="#">523733 ↗</a>
19	124m SW	502910 244320	CORONATION PIT AREA 3	18.0	N	<a href="#">524760 ↗</a>
J	134m S	503438 243940	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH1	-	Y	N/A
J	134m S	503438 243940	CORONATION BRICKWORKS KEMPTON HARDWICK 1	-	Y	N/A
K	137m SE	504082 244244	ELSTOW E/BI11	58.0	N	<a href="#">524732 ↗</a>
L	137m SE	503901 244069	ELSTOW E/B54B	10.0	N	<a href="#">524667 ↗</a>
L	139m SE	503903 244067	ELSTOW E/B54C	15.0	N	<a href="#">524668 ↗</a>
L	140m SE	503901 244066	ELSTOW E/B54	22.0	N	<a href="#">524666 ↗</a>
K	143m SE	504095 244256	ELSTOW E/BI7	29.5	N	<a href="#">524728 ↗</a>
L	144m SE	503902 244062	ELSTOW E/B54D	17.65	N	<a href="#">524669 ↗</a>
K	147m SE	504103 244262	ELSTOW E/BI6	29.0	N	<a href="#">524727 ↗</a>
K	151m SE	504110 244267	ELSTOW E/BI5	29.0	N	<a href="#">524726 ↗</a>
M	152m S	503403 244009	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH2	-	Y	N/A
M	152m S	503403 244009	CORONATION BRICKWORKS KEMPTON HARDWICK 2	-	Y	N/A
20	155m N	503420 245450	L B C (REDLANDS) KEMPSTON HARDWICK 7	12.8	N	<a href="#">523746 ↗</a>

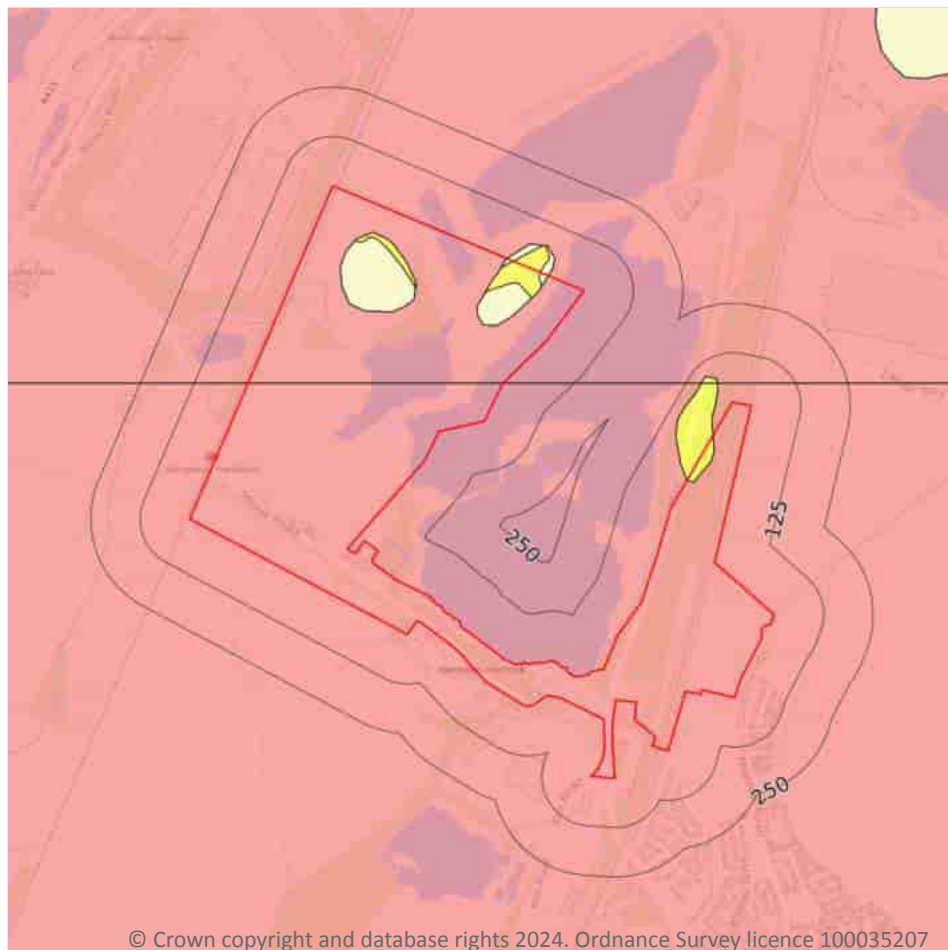


ID	Location	Grid reference	Name	Length	Confidential	Web link
21	156m E	504128 244525	ELSTOW E/BE8	60.0	N	<a href="#">524707 ↗</a>
K	158m SE	504123 244277	ELSTOW E/BI10	56.56	N	<a href="#">524731 ↗</a>
N	162m S	503327 244034	CORONATION BRICKWORKS KEMPTON HARDWICK 7	-	Y	N/A
N	162m S	503327 244034	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH7	-	Y	N/A
O	167m SE	504110 244232	ELSTOW E/BE12A	21.0	N	<a href="#">524714 ↗</a>
22	168m N	503120 245590	L B C (REDLANDS) KEMPSTON HARDWICK 6	8.38	N	<a href="#">523745 ↗</a>
O	169m SE	504110 244229	ELSTOW E/BE12	25.0	N	<a href="#">524713 ↗</a>
23	169m SE	504180 244370	ELSTOW SITE 6	21.49	N	<a href="#">524577 ↗</a>
24	170m N	503220 245550	L B C (REDLANDS) KEMPSTON HARDWICK 13	9.14	N	<a href="#">523751 ↗</a>
P	171m S	503278 244050	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH9	-	Y	N/A
P	171m S	503278 244050	CORONATION BRICKWORKS KEMPTON HARDWICK 9	-	Y	N/A
25	192m E	504150 244920	THICKTHORN/DANE LANE 1/68	18.0	N	<a href="#">524867 ↗</a>
Q	208m S	503281 244005	CORONATION BRICKWORKS KEMPTON HARDWICK 10	-	Y	N/A
Q	208m S	503281 244005	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH10	-	Y	N/A
R	224m S	503319 243972	CORONATION BRICKWORKS KEMPTON HARDWICK TPBH6	-	Y	N/A
R	224m S	503319 243972	CORONATION BRICKWORKS KEMPTON HARDWICK 6	-	Y	N/A
26	234m NE	503860 245180	SUSSEX & DORKING UNITED BRICK CO K/F	26.67	N	<a href="#">523642 ↗</a>
S	234m E	504100 245130	ELSTOW SOUTH LANDFILL	24.5	N	<a href="#">524265 ↗</a>
S	239m E	504120 245120	THICKTHORN/DANE LANE 1/79	17.37	N	<a href="#">524055 ↗</a>
27	246m S	503420 243800	ELSTOW 1	32.5	N	<a href="#">524603 ↗</a>
28	248m NE	503900 245200	HARDWICK HILL	-1.0	N	<a href="#">524257 ↗</a>
29	249m E	504160 245090	THICKTHORN/DANE LANE 2/68	19.05	N	<a href="#">524051 ↗</a>

*This data is sourced from the British Geological Survey.*



## 17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

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### 17.1 Shrink swell clays

#### Records within 50m

3

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

Features are displayed on the Natural ground subsidence - Shrink swell clays map on [page 117 >](#)

Location	Hazard rating	Details
On site	Negligible	Ground conditions predominantly non-plastic.
On site	Very low	Ground conditions predominantly low plasticity.
On site	Moderate	Ground conditions predominantly high plasticity.

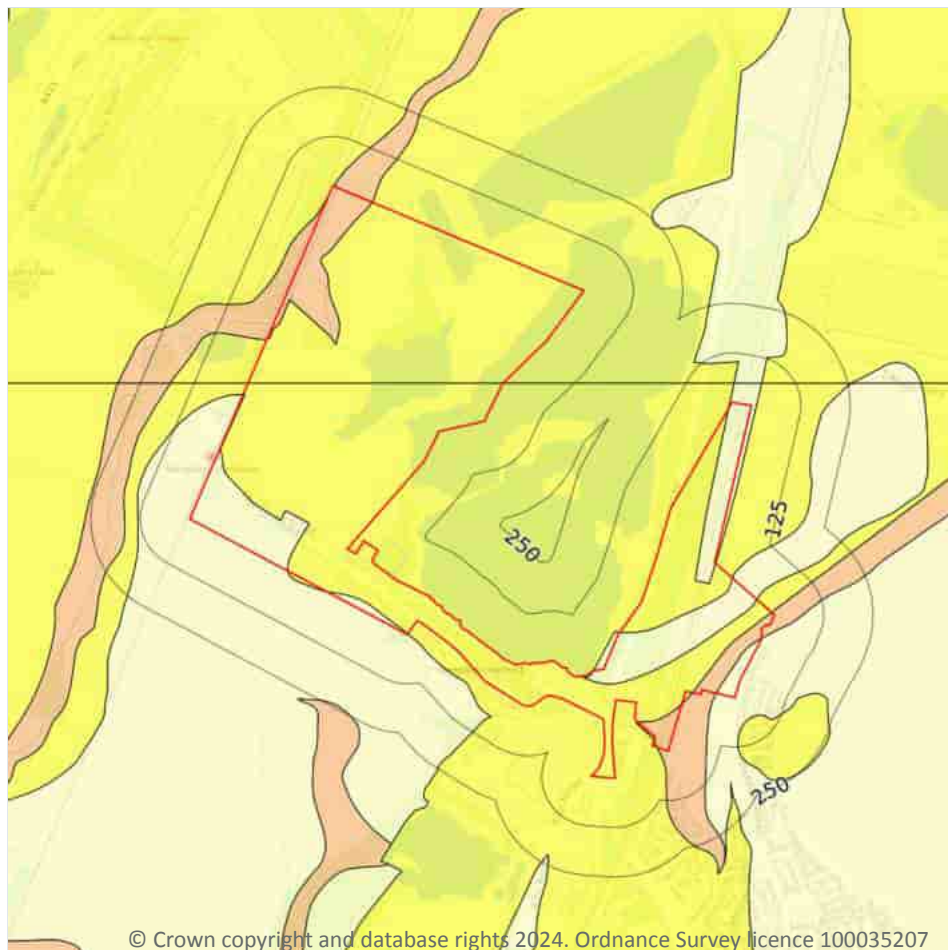




*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.2 Running sands

#### Records within 50m

4

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on [page 119 >](#)

Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

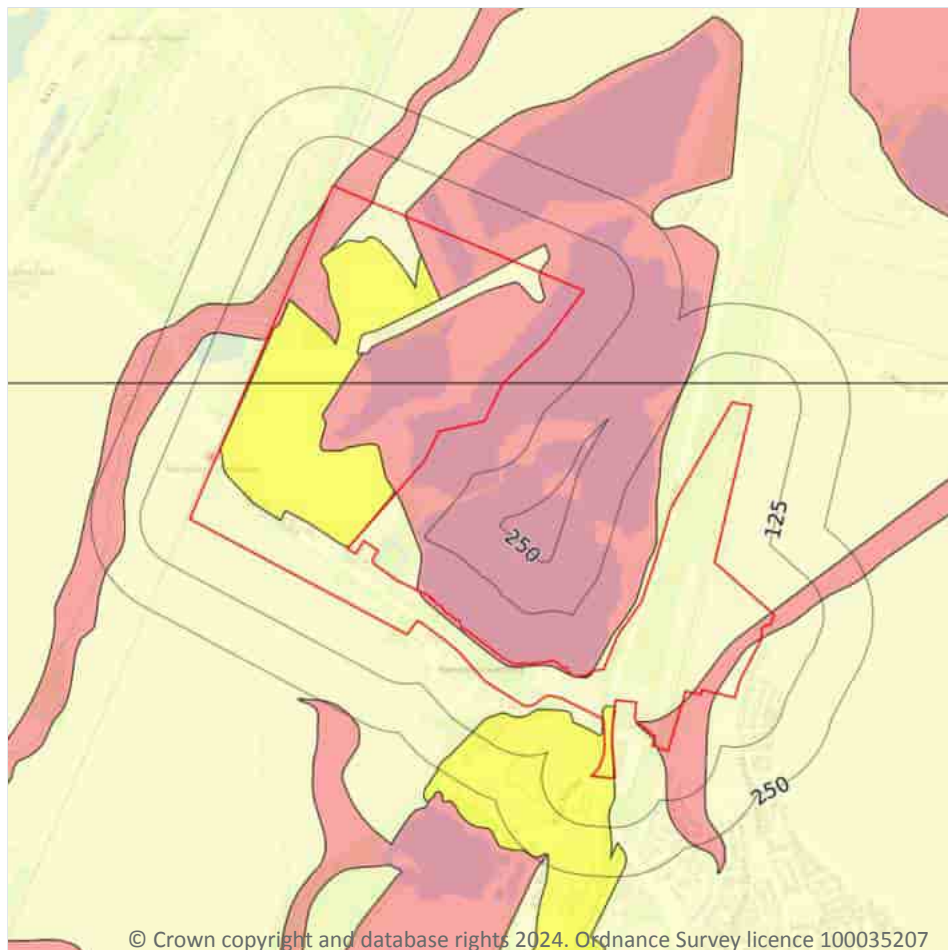


Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
On site	Low	Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.
48m E	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

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### 17.3 Compressible deposits

#### Records within 50m

3

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on [page 121](#) >

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.

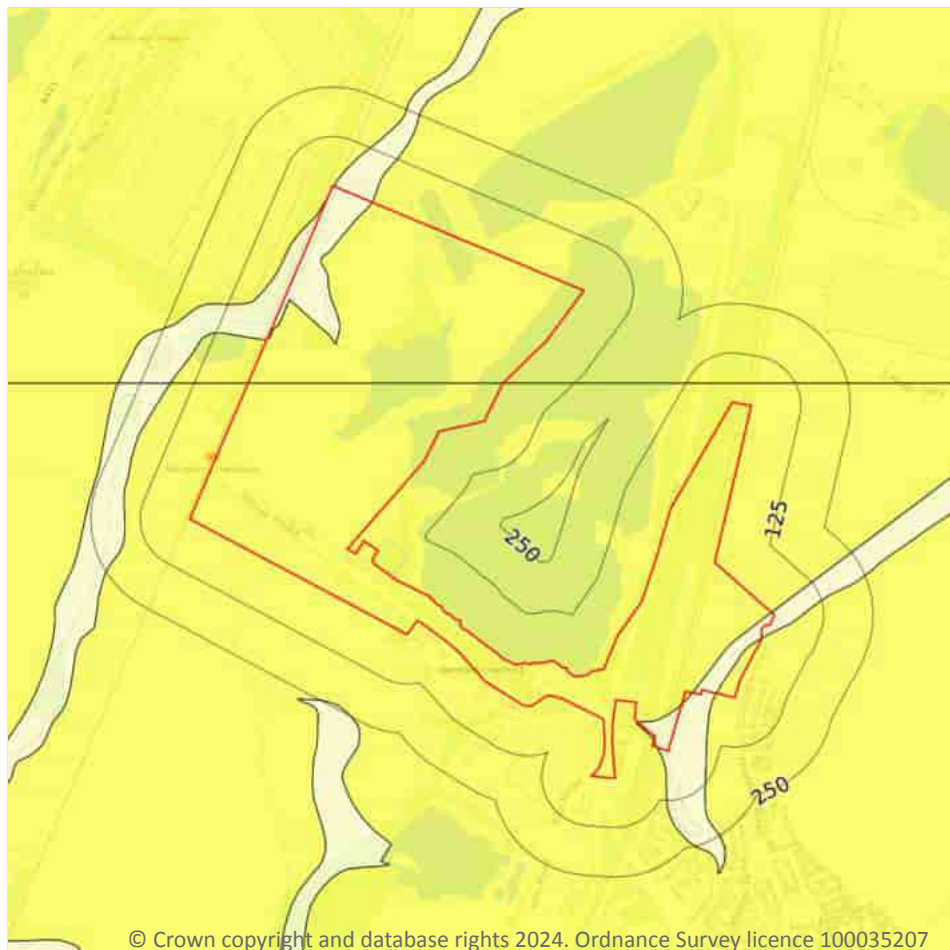


Location	Hazard rating	Details
On site	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.

*This data is sourced from the British Geological Survey.*



## Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.4 Collapsible deposits

#### Records within 50m

2

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on [page 123 >](#)

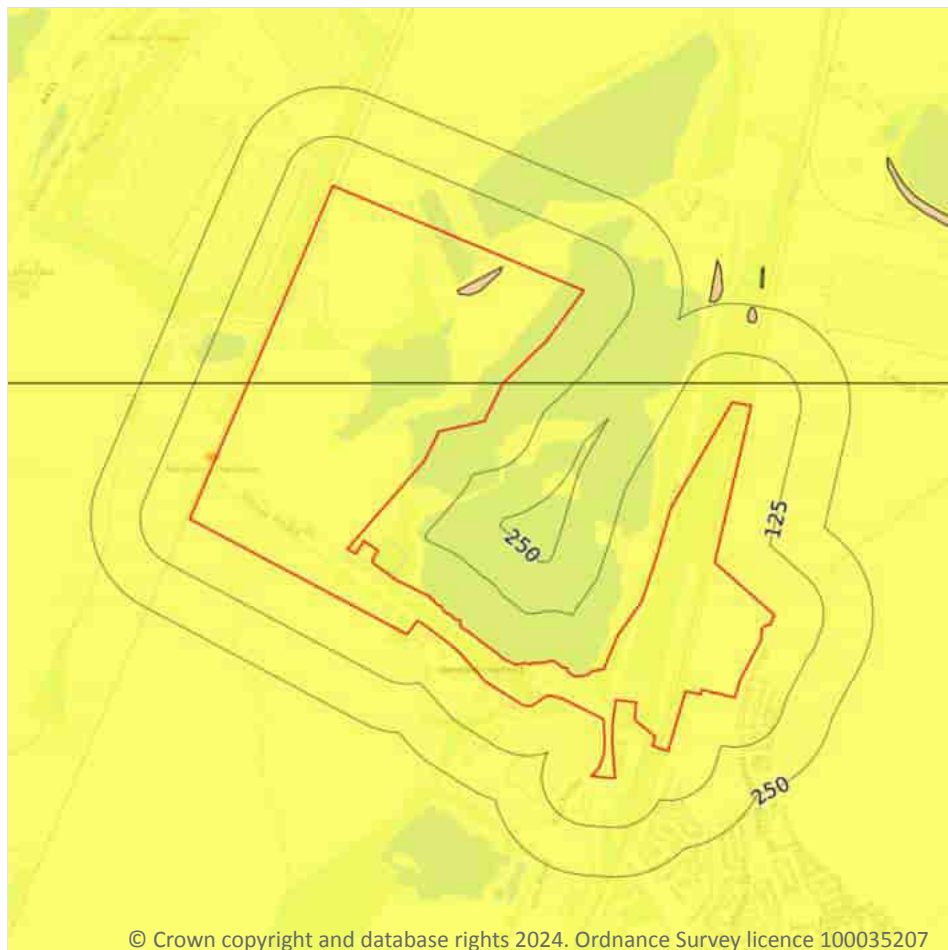
Location	Hazard rating	Details
On site	Negligible	Deposits with potential to collapse when loaded and saturated are believed not to be present.
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

*This data is sourced from the British Geological Survey.*





## Natural ground subsidence - Landslides



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☒ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

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### 17.5 Landslides

#### Records within 50m

2

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

Features are displayed on the Natural ground subsidence - Landslides map on [page 124 >](#)

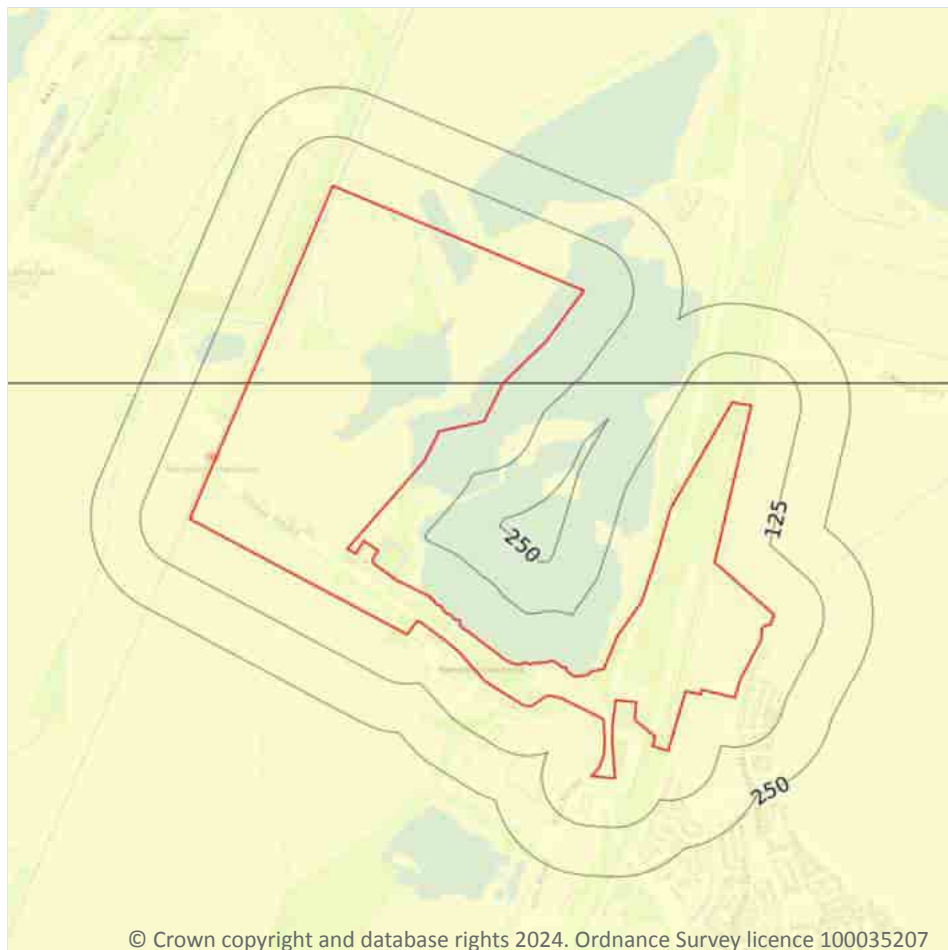
Location	Hazard rating	Details
On site	Very low	Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.



Location	Hazard rating	Details
On site	Low	Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.

*This data is sourced from the British Geological Survey.*

## Natural ground subsidence - Ground dissolution of soluble rocks



- Site Outline
- Search buffers in metres (m)
- ☐ No data
  - ☐ Negligible
  - ☐ Very low
  - ☐ Low
  - ☐ Moderate
  - ☐ High

### 17.6 Ground dissolution of soluble rocks

#### Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on [page 126 >](#)

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.



*This data is sourced from the British Geological Survey.*



## 18 Mining and ground workings



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- Site Outline
- Search buffers in metres (m)
- BritPits
- Surface ground workings
- Underground workings
- Underground mining extents
- Historical mineral planning areas
- TCA non-coal mining
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

### 18.1 BritPits

#### Records within 500m

7

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on [page 128](#) >



ID	Location	Details	Description
1	On site	<b>Name:</b> Kempston Hardwick (North) <b>Address:</b> Kempston Hardwick, BEDFORD, Bedfordshire <b>Commodity:</b> Clay & Shale <b>Status:</b> Ceased	<b>Type:</b> A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site <b>Status description:</b> Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
A	On site	<b>Name:</b> Kempston Hardwick Brick Works <b>Address:</b> Kempston Hardwick, KEMPSTON, Bedfordshire <b>Commodity:</b> Clay & Shale <b>Status:</b> Ceased	<b>Type:</b> A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site <b>Status description:</b> Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
J	152m NE	<b>Name:</b> Hardwick Hill <b>Address:</b> Kempston Hardwick, KEMPSTON, Bedfordshire <b>Commodity:</b> Clay & Shale <b>Status:</b> Ceased	<b>Type:</b> A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site <b>Status description:</b> Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
N	210m SE	<b>Name:</b> Hardwick Hill <b>Address:</b> Kempston Hardwick, KEMPSTON, Bedfordshire <b>Commodity:</b> Clay & Shale <b>Status:</b> Ceased	<b>Type:</b> A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site <b>Status description:</b> Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
T	283m NE	<b>Name:</b> Hardwick Hill Brick Works <b>Address:</b> Kempston Hardwick, KEMPSTON, Bedfordshire <b>Commodity:</b> Clay & Shale <b>Status:</b> Ceased	<b>Type:</b> A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site <b>Status description:</b> Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority
33	392m NE	<b>Name:</b> Hardwick Hill Brick Works <b>Address:</b> Kempston Hardwick, KEMPSTON, Bedfordshire <b>Commodity:</b> Clay & Shale <b>Status:</b> Ceased	<b>Type:</b> A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site <b>Status description:</b> Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority





ID	Location	Details	Description
Z	409m S	Name: Coronation Brick Works Address: Kempston Hardwick, KEMPSTON, Bedfordshire Commodity: Clay & Shale Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

*This data is sourced from the British Geological Survey.*

## 18.2 Surface ground workings

<b>Records within 250m</b>	<b>106</b>
----------------------------	------------

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining and ground workings map on [page 128 >](#)

ID	Location	Land Use	Year of mapping	Mapping scale
2	On site	Water Body	1959	1:10560
3	On site	Cuttings	1882	1:10560
4	On site	Ponds	1882	1:10560
5	On site	Clay Pit	1978	1:10000
6	On site	Unspecified Ground Workings	1948	1:10560
7	On site	Unspecified Heap	1948	1:10560
8	On site	Pond	1959	1:10560
9	On site	Brick Works	1980	1:10000
10	On site	Unspecified Ground Workings	1971	1:10000
11	On site	Unspecified Disused Pit	1987	1:10000
12	On site	Unspecified Ground Workings	1959	1:10560
B	On site	Unspecified Heap	1959	1:10560
B	On site	Unspecified Ground Workings	1948	1:10560
B	On site	Brick Works	1971	1:10000
B	On site	Brick Works	1987	1:10000
B	On site	Brick Works	1978	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
C	On site	Unspecified Heap	1959	1:10560
C	On site	Unspecified Ground Workings	1948	1:10560
D	On site	Cuttings	1900	1:10560
D	On site	Cuttings	1938	1:10560
D	On site	Cuttings	1948	1:10560
D	On site	Cuttings	1924	1:10560
E	On site	Pond	1900	1:10560
E	On site	Pond	1938	1:10560
E	On site	Pond	1989	1:10000
E	On site	Pond	1959	1:10560
E	On site	Pond	1980	1:10000
E	On site	Pond	1948	1:10560
E	On site	Pond	1924	1:10560
F	On site	Pond	1882	1:10560
F	On site	Pond	1959	1:10560
F	On site	Pond	1948	1:10560
G	On site	Bricks Works	1938	1:10560
G	On site	Bricks Works	1938	1:10560
H	On site	Bricks Works	1938	1:10560
H	On site	Bricks Works	1938	1:10560
I	On site	Water Body	1971	1:10000
I	On site	Water Body	1987	1:10000
I	On site	Water Body	1978	1:10000
I	On site	Clay Pit	1978	1:10000
I	On site	Pond	1948	1:10560
I	On site	Unspecified Disused Pit	1987	1:10000
J	On site	Clay Pit	1971	1:10000
K	On site	Brick Works	1948	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
K	On site	Brick Works	1989	1:10000
K	On site	Brick Works	1980	1:10000
L	On site	Unspecified Ground Workings	1948	1:10560
L	On site	Unspecified Heap	1971	1:10000
L	On site	Unspecified Heap	1987	1:10000
L	On site	Unspecified Heap	1978	1:10000
M	On site	Pond	1989	1:10000
M	On site	Pond	1959	1:10560
M	On site	Pond	1980	1:10000
N	On site	Water Body	1989	1:10000
N	On site	Water Body	1980	1:10000
O	On site	Cuttings	1989	1:10000
O	On site	Cuttings	1959	1:10560
O	On site	Cuttings	1980	1:10000
P	On site	Unspecified Disused Pit	1989	1:10000
P	On site	Unspecified Disused Pit	1980	1:10000
16	0m W	Cuttings	1882	1:10560
17	1m SE	Unspecified Old Quarry	1920	1:10560
18	21m SE	Clay Pit	1959	1:10560
Q	21m N	Water Body	1971	1:10000
R	22m S	Pond	1938	1:10560
R	24m S	Pond	1924	1:10560
R	24m S	Pond	1959	1:10560
R	28m S	Pond	1900	1:10560
R	28m S	Pond	1882	1:10560
R	28m S	Pond	1948	1:10560
19	40m NE	Unspecified Pit	1948	1:10560
20	44m NE	Clay Pit	1987	1:10000



ID	Location	Land Use	Year of mapping	Mapping scale
21	44m E	Unspecified Old Quarries	1920	1:10560
Q	48m N	Unspecified Heap	1971	1:10000
S	55m E	Cuttings	1959	1:10560
S	55m E	Cuttings	1971	1:10000
S	55m E	Cuttings	1987	1:10000
S	55m E	Cuttings	1978	1:10000
22	74m S	Pond	1938	1:10560
23	118m SE	Reservoirs	1948	1:10560
24	131m S	Unspecified Ground Workings	1948	1:10560
T	134m NE	Brick Works	1948	1:10560
U	154m SE	Unspecified Heap	1989	1:10000
U	154m SE	Unspecified Heap	1980	1:10000
25	156m E	Unspecified Old Quarries	1920	1:10560
U	157m SE	Unspecified Heap	1948	1:10560
26	179m SE	Unspecified Heap	1948	1:10560
T	184m NE	Pond	1948	1:10560
V	186m S	Brick Works	1948	1:10560
T	186m NE	Pond	1959	1:10560
T	193m NE	Brick Works	1924	1:10560
T	195m NE	Bricks Works	1938	1:10560
T	195m NE	Unspecified Pit	1938	1:10560
T	195m NE	Bricks Works	1938	1:10560
T	195m NE	Unspecified Pit	1938	1:10560
T	195m NE	Unspecified Ground Workings	1924	1:10560
P	198m SE	Unspecified Pit	1948	1:10560
W	201m S	Unspecified Disused Pit	1989	1:10000
W	201m S	Unspecified Disused Pit	1980	1:10000
T	205m NE	Brick Works	1900	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
T	209m NE	Water Body	1971	1:10000
27	231m S	Unspecified Ground Workings	1948	1:10560
V	233m S	Unspecified Pit	1948	1:10560
28	236m S	Clay Pit	1959	1:10560
X	241m NE	Pond	1948	1:10560
X	244m NE	Pond	1959	1:10560

*This is data is sourced from Ordnance Survey/Groundsure.*

### 18.3 Underground workings

Records within 1000m

0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

*This is data is sourced from Ordnance Survey/Groundsure.*

### 18.4 Underground mining extents

Records within 500m

0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

*This data is sourced from Groundsure.*

### 18.5 Historical Mineral Planning Areas

Records within 500m

6

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

Features are displayed on the Mining and ground workings map on [page 128](#) >

ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
13	On site	Hardwick Hill	Clay	Surface mineral working	Refused	Not available



ID	Location	Site Name	Mineral	Type	Planning Status	Planning Status Date
14	On site	Coronation	Clay	Surface mineral working	Valid	17/7/52
15	On site	Hardwick Hill	Clay	Surface mineral working	Valid	10/09/53
A	On site	Hardwick Hill	Clay	Surface mineral working	Valid	31/07/52
30	287m E	Elstow	Clay	Surface mineral working	Valid	26/5/49
31	352m SE	Coronation	Clay	Surface mineral working	Valid	17/7/52

*This data is sourced from the British Geological Survey.*

## 18.6 Non-coal mining

**Records within 1000m**

**0**

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

*This data is sourced from the British Geological Survey.*

## 18.7 JPB mining areas

**Records on site**

**0**

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

*This data is sourced from Johnson Poole and Bloomer.*

## 18.8 The Coal Authority non-coal mining

**Records within 500m**

**0**

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

*This data is sourced from The Coal Authority.*





## 18.9 Researched mining

### Records within 500m

**2**

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

Location	Mineral type
<b>On site</b>	<b>Stone</b>
226m S	Stone

*This data is sourced from Groundsure.*

## 18.10 Mining record office plans

### Records within 500m

**0**

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

## 18.11 BGS mine plans

### Records within 500m

**0**

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

*This data is sourced from Groundsure.*

## 18.12 Coal mining

### Records on site

**0**

Areas which could be affected by past, current or future coal mining.

*This data is sourced from the Coal Authority.*



### 18.13 Brine areas

Records on site	0
-----------------	---

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

*This data is sourced from the Cheshire Brine Subsidence Compensation Board.*

### 18.14 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

*This data is sourced from British Gypsum.*

### 18.15 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

*This data is sourced from Groundsure.*

### 18.16 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

*This data is sourced from the Kaolin and Ball Clay Association (UK).*



## 19 Ground cavities and sinkholes

### 19.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

*This data is sourced from Stantec UK Ltd.*

### 19.2 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

*This data is sourced from Stantec UK Ltd.*

### 19.3 Reported recent incidents

Records within 500m

0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

*This data is sourced from Groundsure.*

### 19.4 Historical incidents

Records within 500m

0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.



*This data is sourced from Groundsure.*

## 19.5 National karst database

Records within 500m

0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

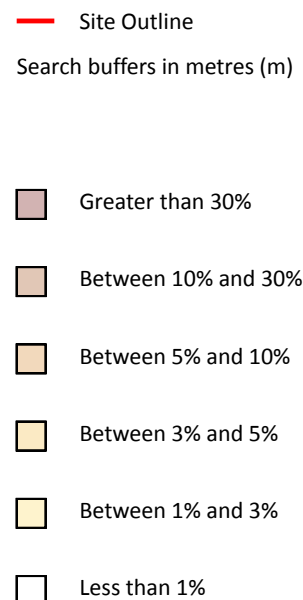
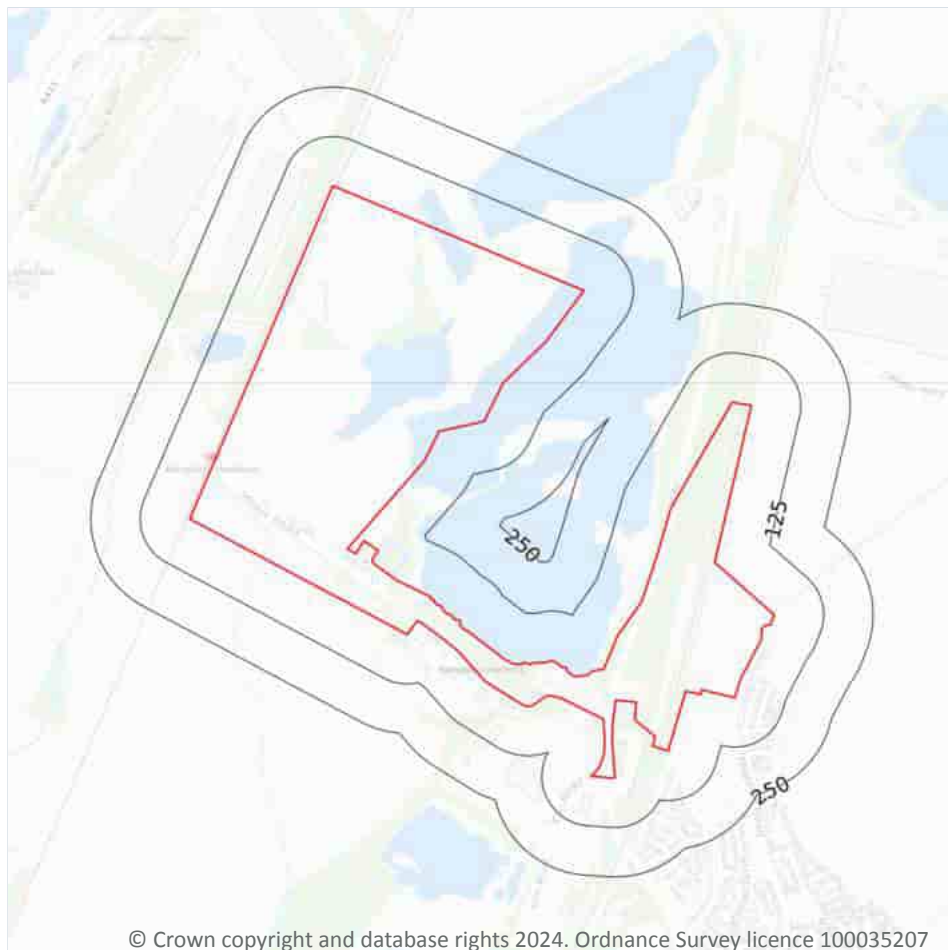
Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

*This data is sourced from the British Geological Survey.*



## 20 Radon



### 20.1 Radon

#### Records on site

1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on [page 140 >](#)

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None



*This data is sourced from the British Geological Survey and UK Health Security Agency.*





## 21 Soil chemistry

### 21.1 BGS Estimated Background Soil Chemistry

Records within 50m

53

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km<sup>2</sup>. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km<sup>2</sup>; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	2.2 - 3.0 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	2.2 - 3.0 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	2.2 - 3.0 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	3.0 - 6.0 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	2.2 - 3.0 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	3.0 - 6.0 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	2.2 - 3.0 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	3.0 - 6.0 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	2.2 - 3.0 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	2.2 - 3.0 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
On site	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
1m NW	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
2m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
2m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
2m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
2m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
7m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg
8m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
15m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
31m SE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	15 - 30 mg/kg
39m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	30 - 45 mg/kg



Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
40m W	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	90 - 120 mg/kg	30 - 45 mg/kg
41m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
48m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
48m E	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
48m N	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

*This data is sourced from the British Geological Survey.*

## 21.2 BGS Estimated Urban Soil Chemistry

<b>Records within 50m</b>	<b>0</b>
---------------------------	----------

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km<sup>2</sup>).

*This data is sourced from the British Geological Survey.*

## 21.3 BGS Measured Urban Soil Chemistry

<b>Records within 50m</b>	<b>0</b>
---------------------------	----------

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km<sup>2</sup>.

*This data is sourced from the British Geological Survey.*



## 22 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

### 22.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

*This data is sourced from publicly available information by Groundsure.*

### 22.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.



*This data is sourced from publicly available information by Groundsure.*

## 22.3 Railway tunnels

<b>Records within 250m</b>	<b>0</b>
----------------------------	----------

Railway tunnels taken from contemporary Ordnance Survey mapping.

*This data is sourced from the Ordnance Survey.*

## 22.4 Historical railway and tunnel features

<b>Records within 250m</b>	<b>15</b>
----------------------------	-----------

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on [page 146 >](#)

Location	Land Use	Year of mapping	Mapping scale
On site	Railway Sidings	1968	2500
On site	Disused Railway Sidings	1968	2500
On site	Railway Sidings	1948	10560
On site	Railway Sidings	1971	10000
On site	Railway Sidings	1959	10560
9m SE	Tramway Sidings	1959	10560
11m S	Railway Sidings	1980	10000
21m S	Railway Sidings	1979	2500
21m S	Railway Sidings	1968	2500
22m SE	Railway Sidings	1989	10000
40m S	Railway Sidings	1968	2500
50m S	Railway Sidings	1979	2500
104m SE	Railway Sidings	1968	2500
140m S	Disused Railway Sidings	1974	2500
141m E	Railway Sidings	1968	2500

*This data is sourced from Ordnance Survey/Groundsure.*





## 22.5 Royal Mail tunnels

**Records within 250m****0**

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

*This data is sourced from Groundsure/the Postal Museum.*

## 22.6 Historical railways

**Records within 250m****0**

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

*This data is sourced from OpenStreetMap.*

## 22.7 Railways

**Records within 250m****32**

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways. Features are displayed on the Railway infrastructure and projects map on [page 146 >](#)

Location	Name	Type
On site	Midland Main Line	rail
On site	Midland Main Line	rail
On site	Midland Main Line	rail
On site	Midland Main Line	rail
On site	Not given	Multi Track
On site	Not given	Multi Track
8m SE	Not given	Multi Track
9m W	Not given	Multi Track
9m W	Not given	Multi Track
9m W	Marston Vale Line	rail
9m W	Not given	Multi Track
9m W	Not given	Multi Track



Location	Name	Type
10m W	Not given	Multi Track
10m NW	Not given	Multi Track
11m NW	Marston Vale Line	rail
11m NW	Marston Vale Line	rail
12m W	Marston Vale Line	rail
14m NW	Marston Vale Line	rail
14m NW	Marston Vale Line	rail
54m E	Not given	Multi Track
71m E	Not given	Multi Track
150m SE	Midland Main Line	rail
153m SE	Midland Main Line	rail
155m SE	Midland Main Line	rail
157m SE	Midland Main Line	rail
170m SE	Not given	Multi Track
184m SE	Midland Main Line	rail
185m SE	Midland Main Line	rail
187m SE	Midland Main Line	rail
189m SE	Midland Main Line	rail
225m NE	Not given	Multi Track
230m SW	Not given	Multi Track

*This data is sourced from Ordnance Survey and OpenStreetMap.*

## 22.8 Crossrail 1

**Records within 500m**

**0**

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

*This data is sourced from publicly available information by Groundsure.*



## 22.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

*This data is sourced from publicly available information by Groundsure.*

## 22.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

*This data is sourced from HS2 Ltd.*



## Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference> ↗.

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**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_1\_1  
**Grid Ref:** 501056, 243657

**Map Name:** County Series

**Map date:** 1882

**Scale:** 1:10,560

**Printed at:** 1:10,560



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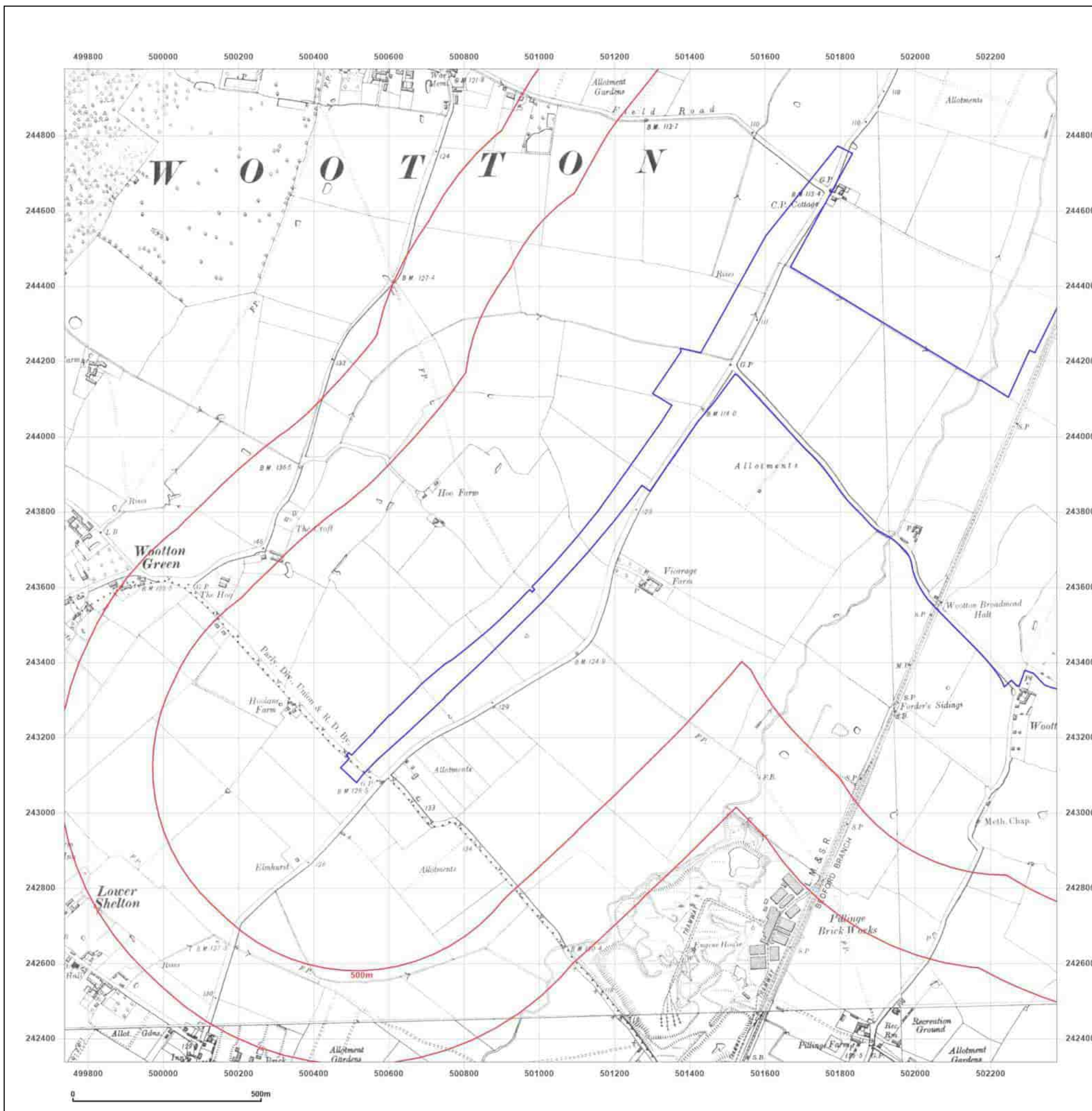


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**Grid Ref:** 501056, 243657

**Map Name:** County Series

**Map date:** 1924

**Scale:** 1:10,560

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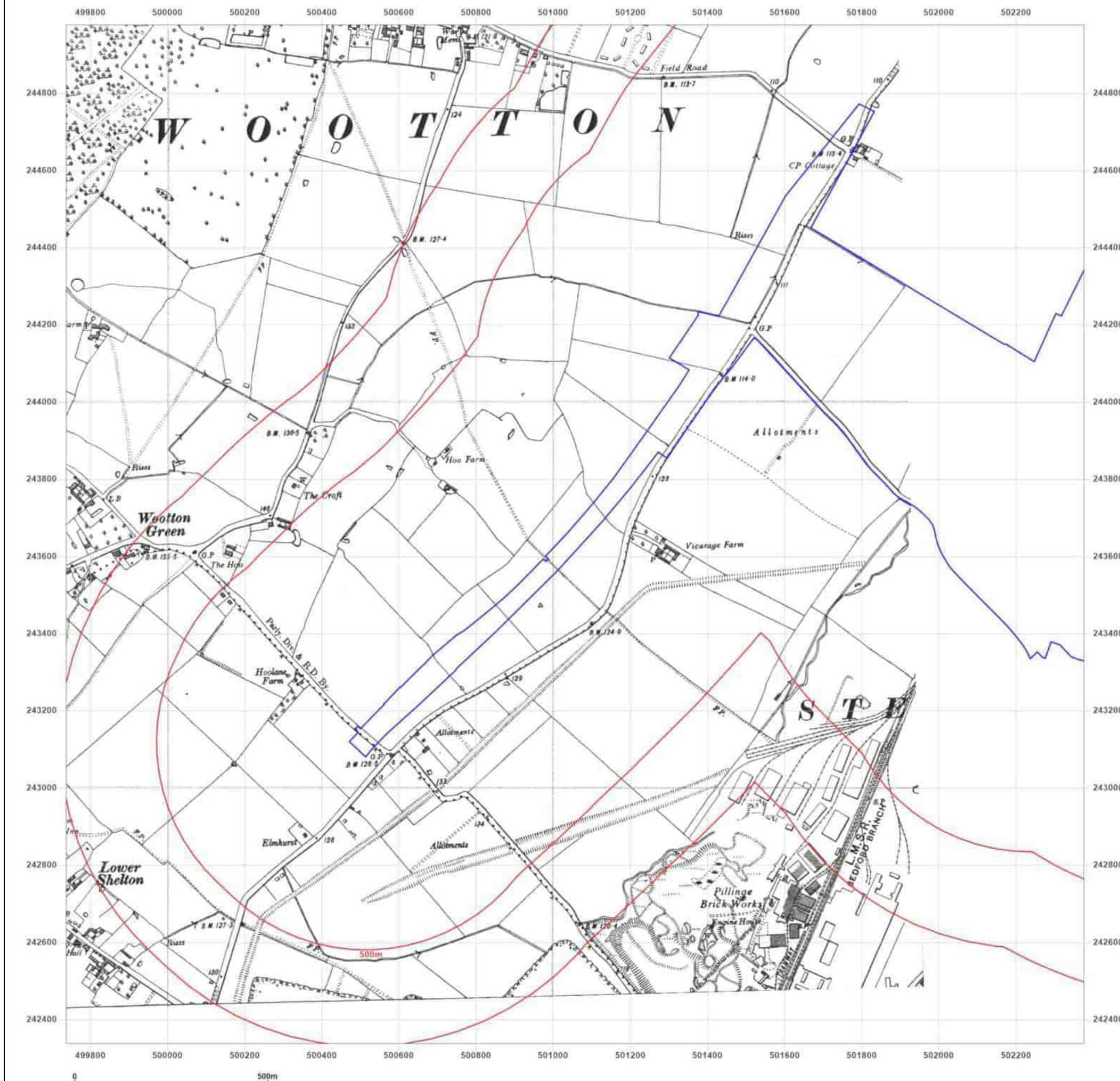


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**Map Name:** County Series

**Map date:** 1938

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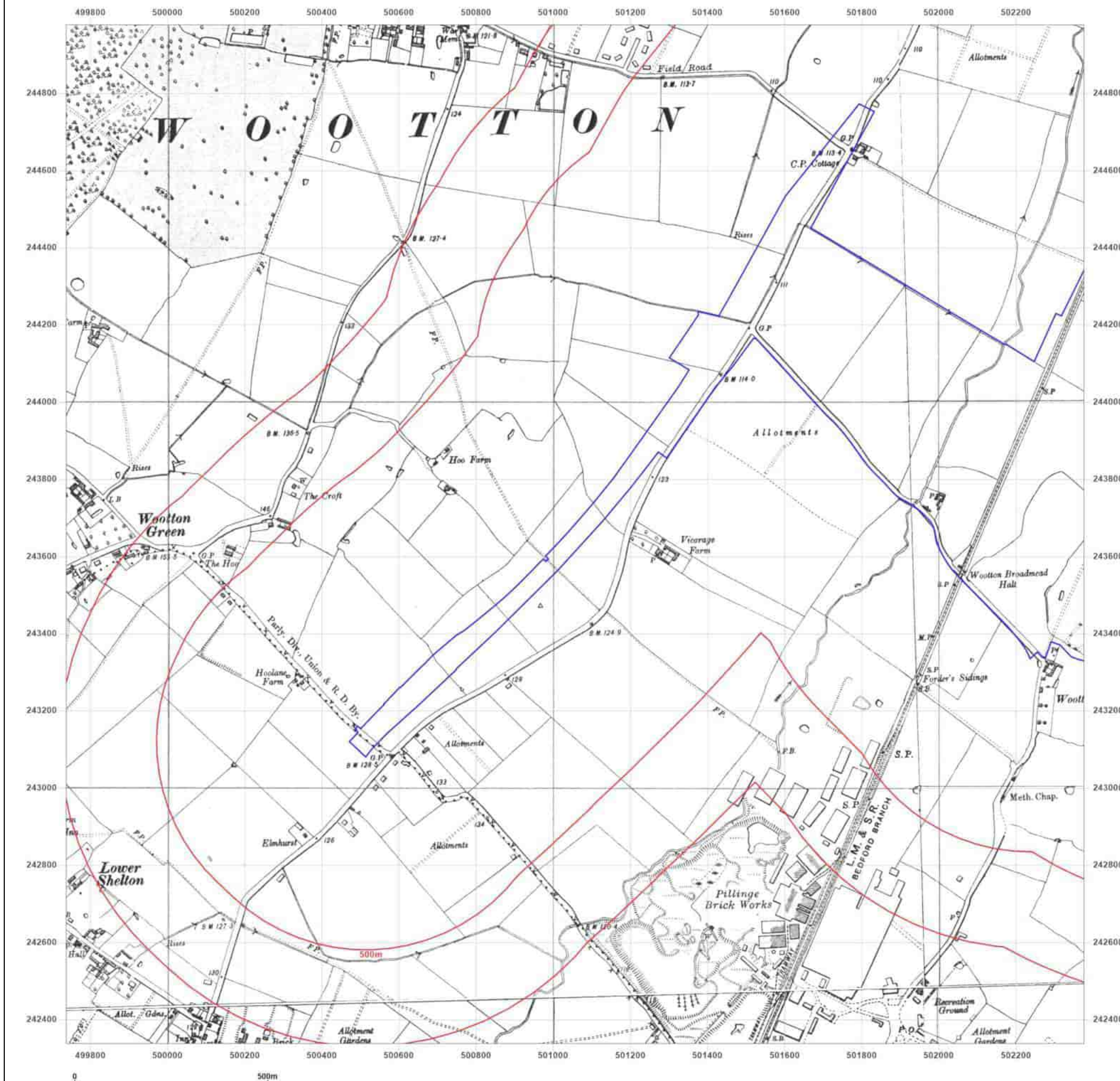


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Grid Ref: 501056, 243657

Map Name: Provisional

Map date: 1959-1960

Scale: 1:10,560

Printed at: 1:10,560



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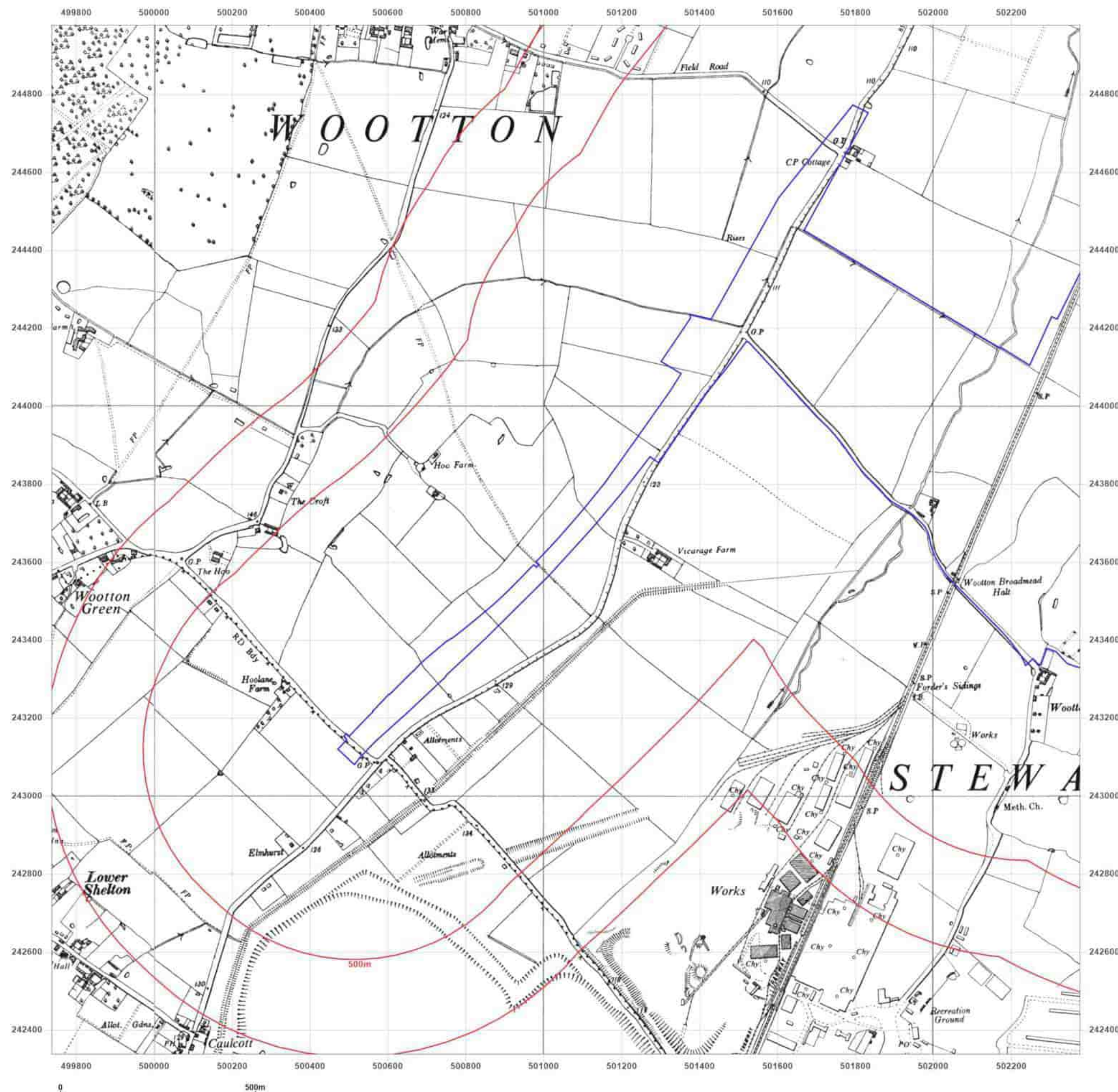


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**Map Name:** National Grid

**Map date:** 1988-1989

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**Printed at:** 1:10,000



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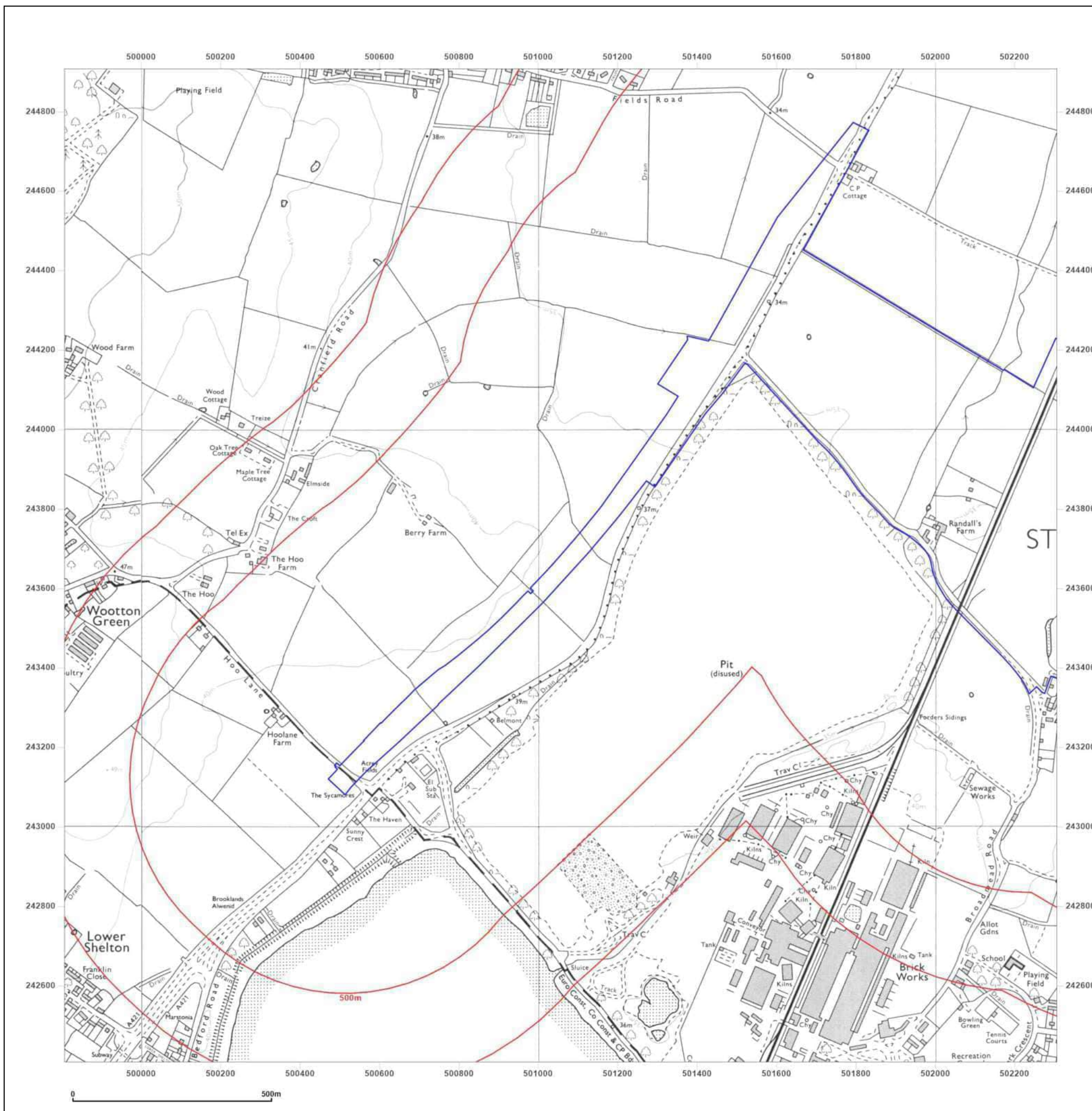


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**Map Name:** National Grid

**Map date:** 2001

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2001

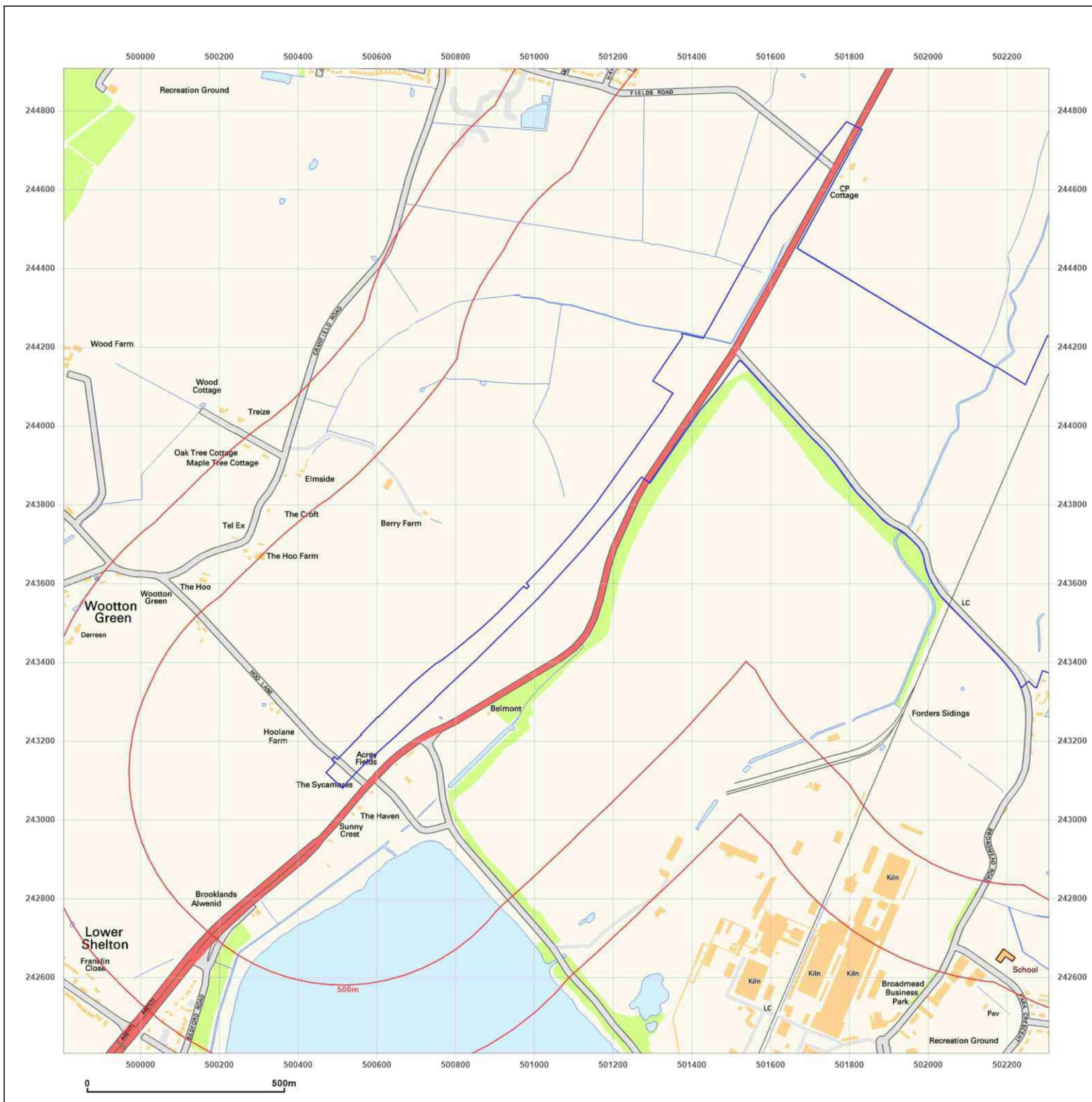


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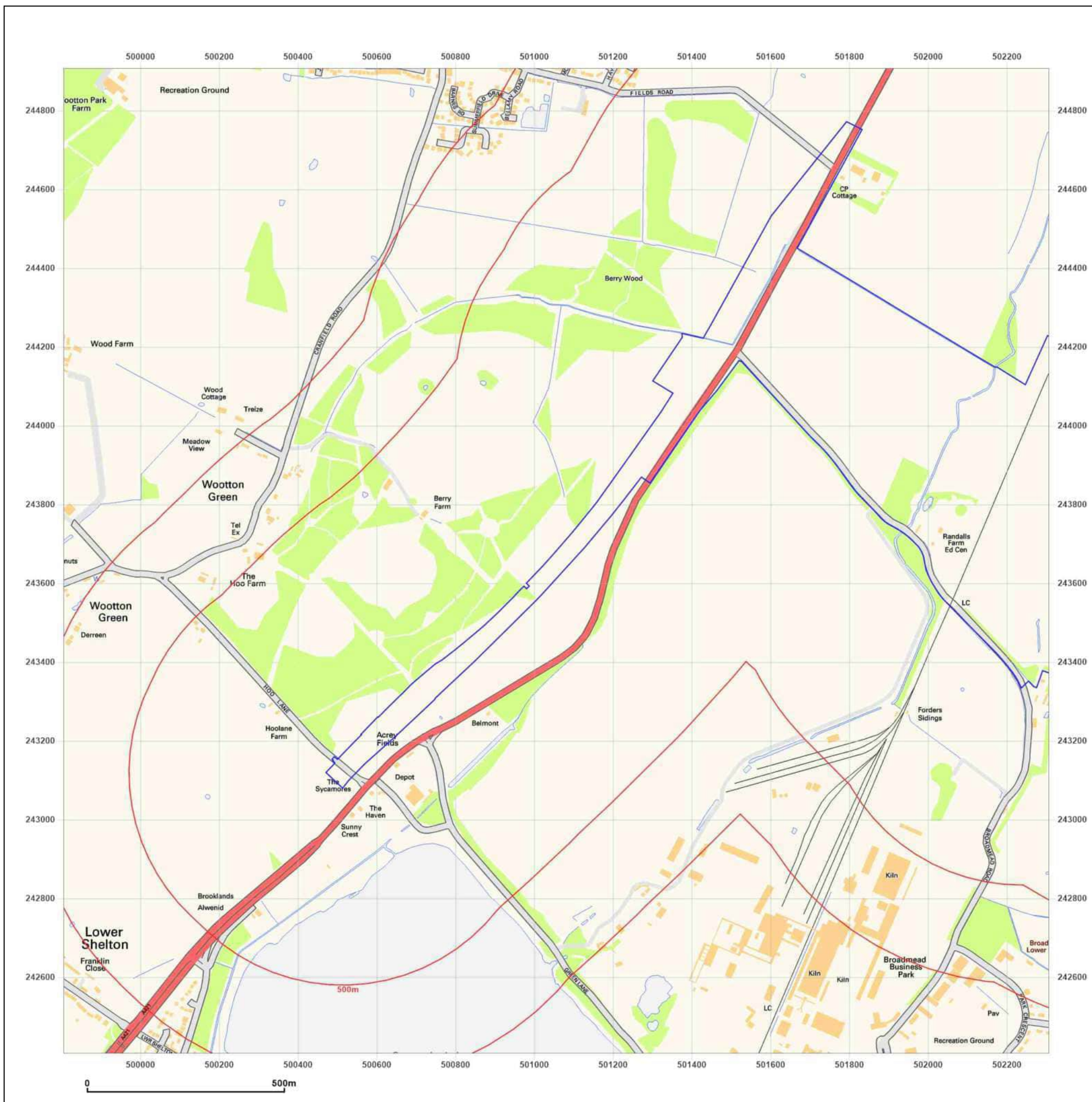


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2024

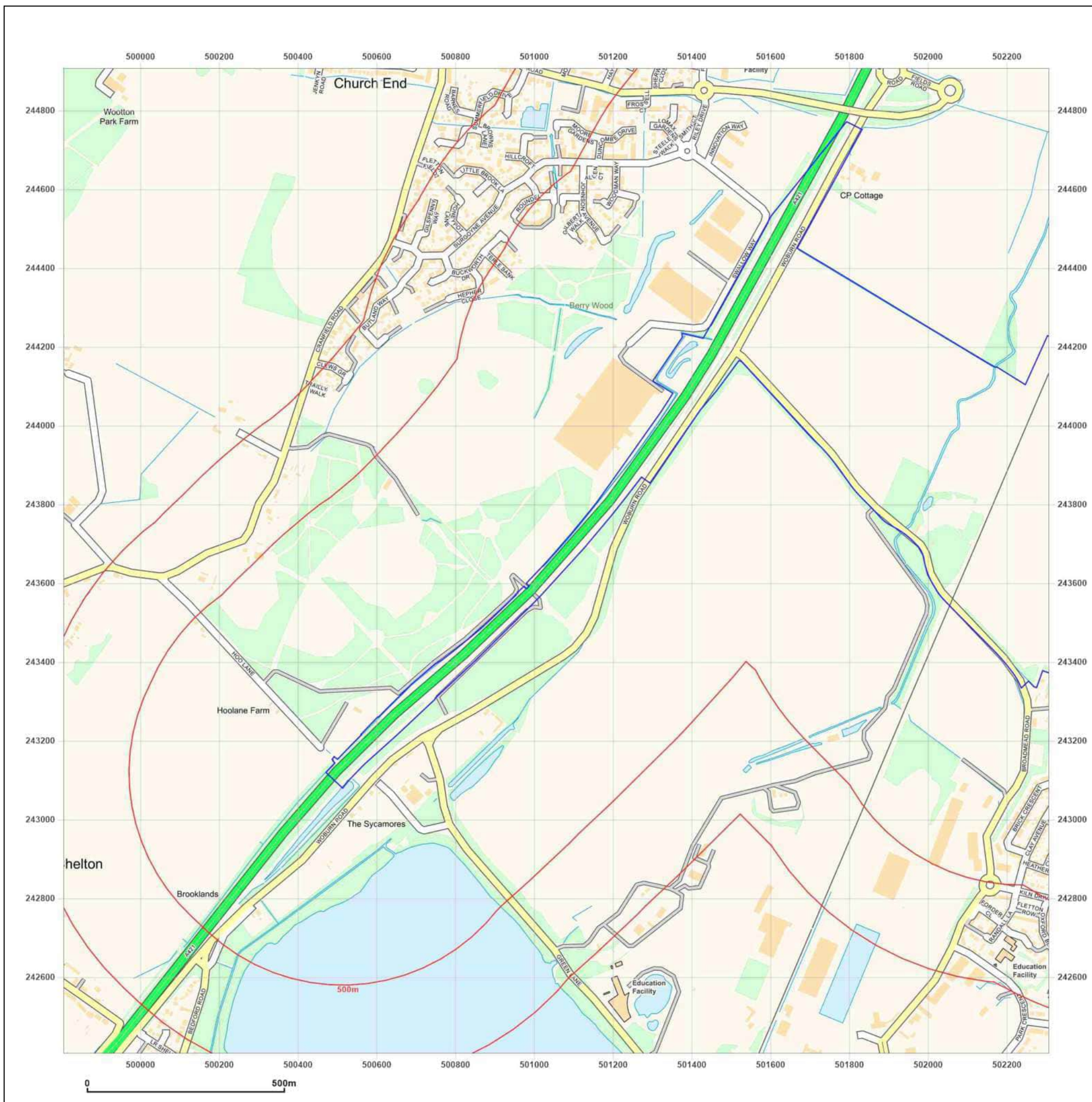


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**Grid Ref:** 501056, 246157

**Map Name:** County Series

**Map date:** 1882

**Scale:** 1:10,560

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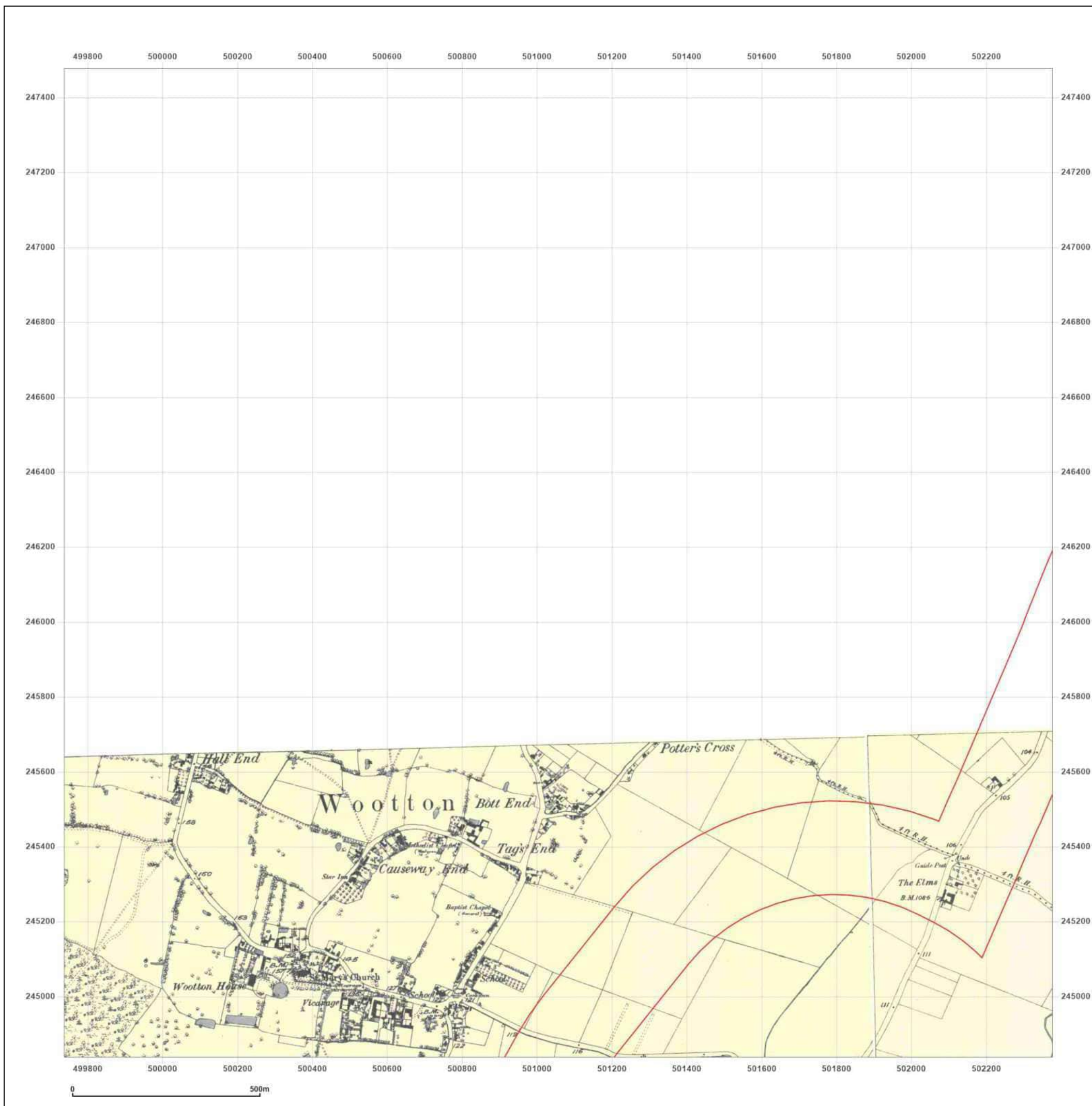


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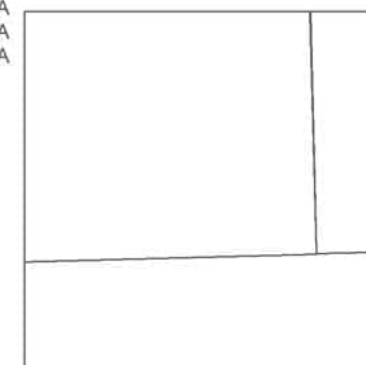
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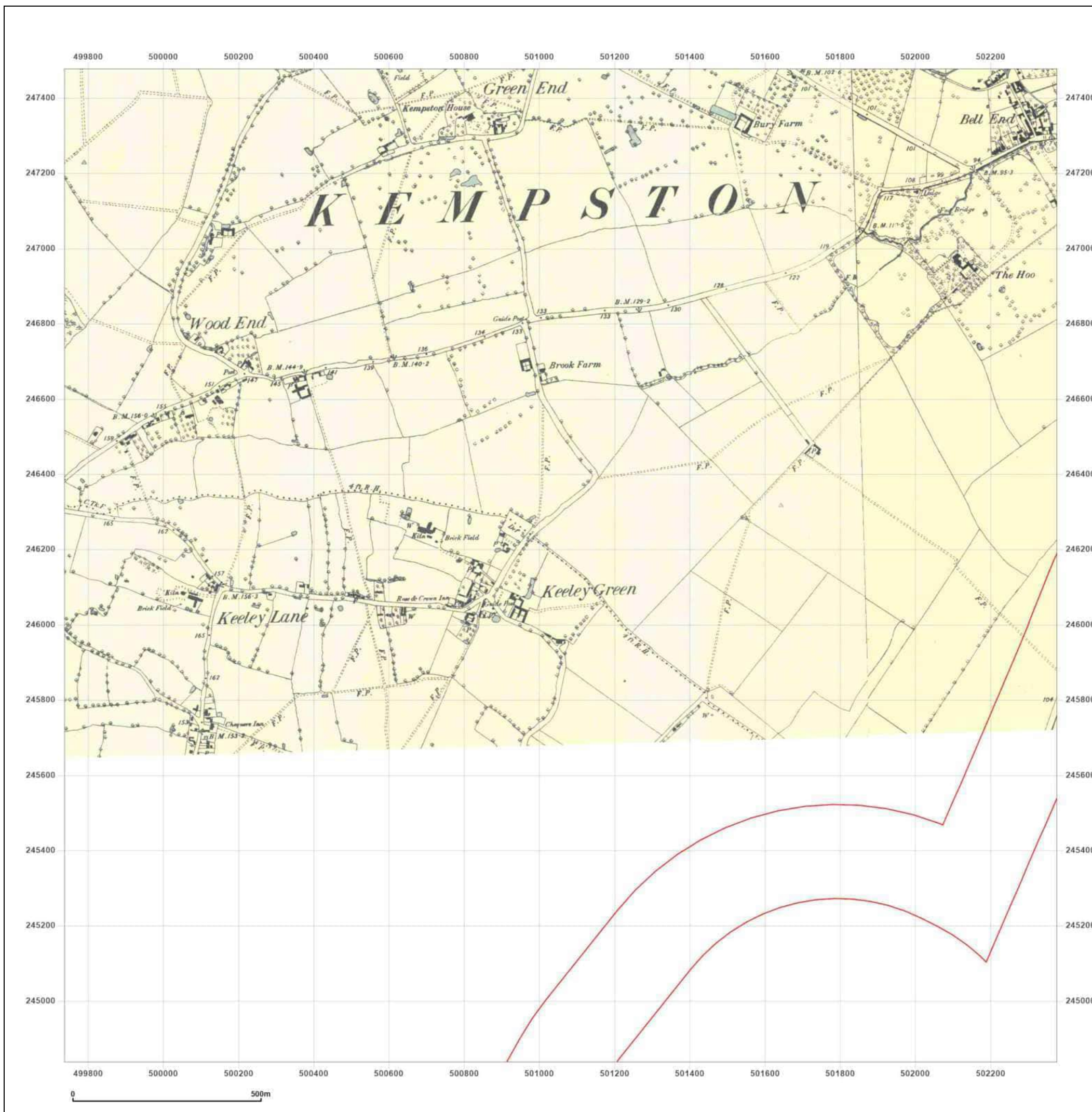


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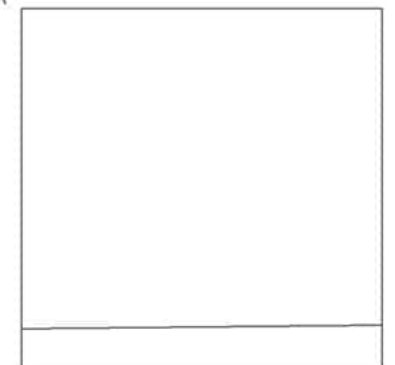
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Edition 1885  
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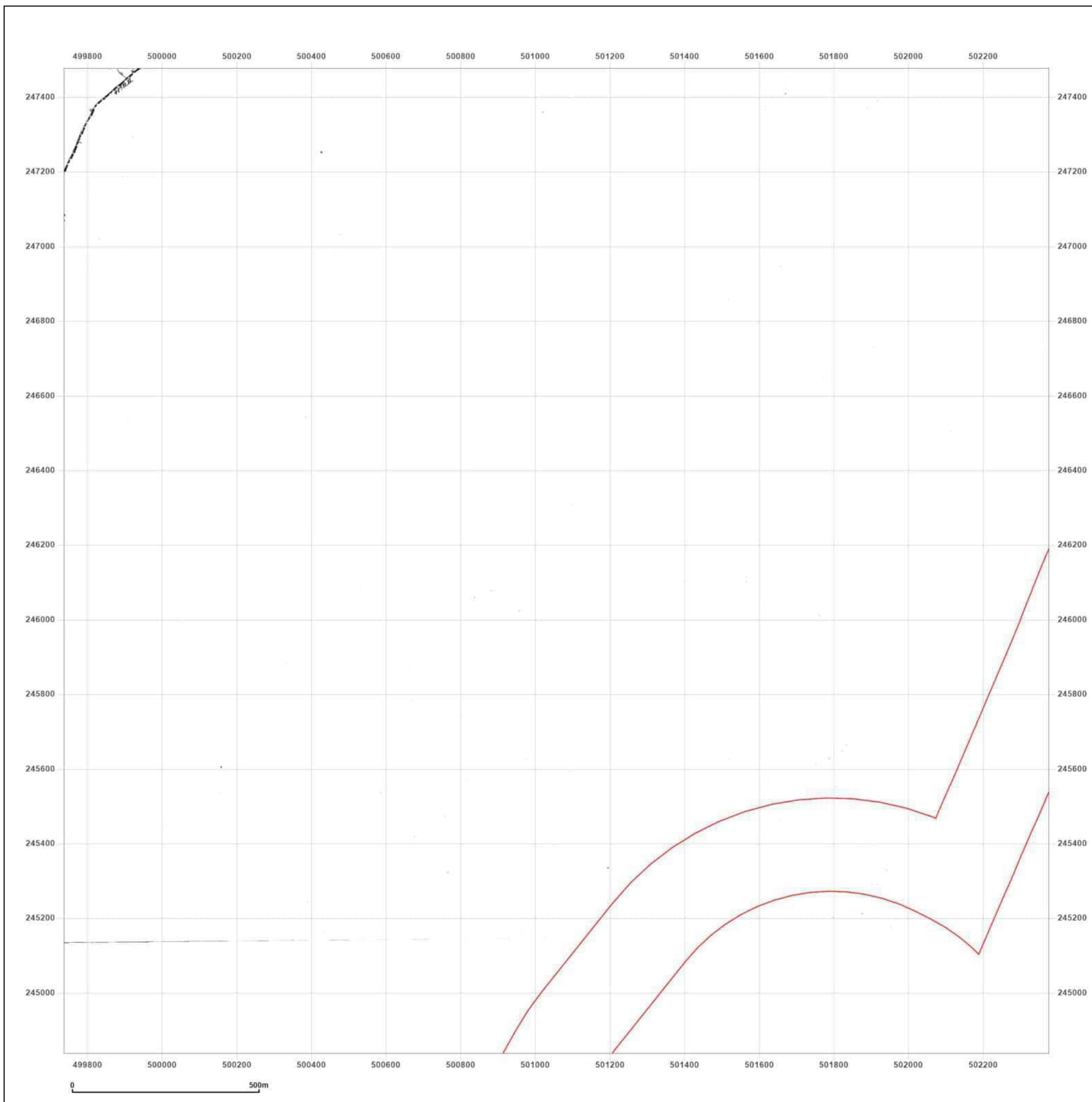


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**Map date:** 1900

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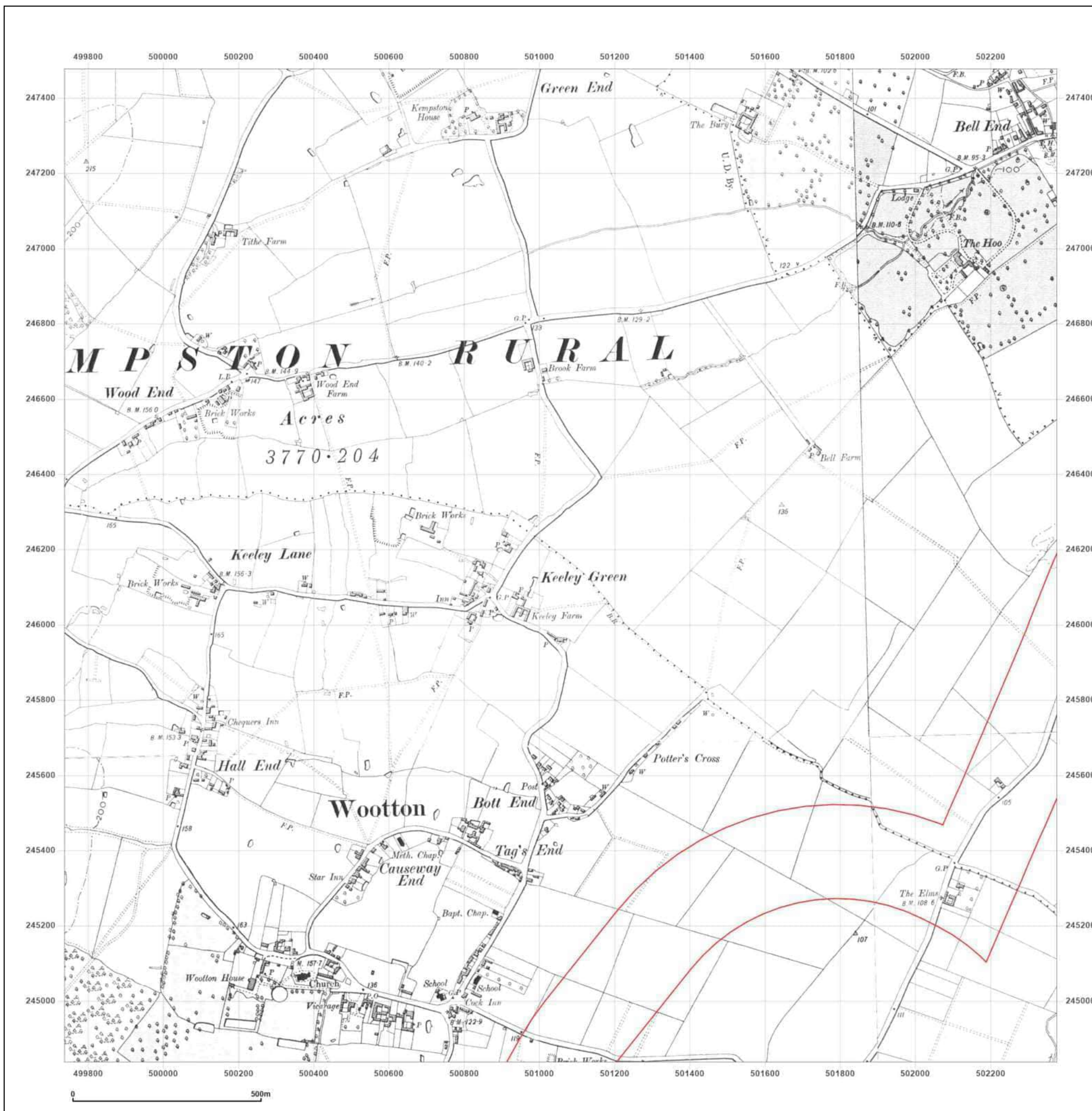


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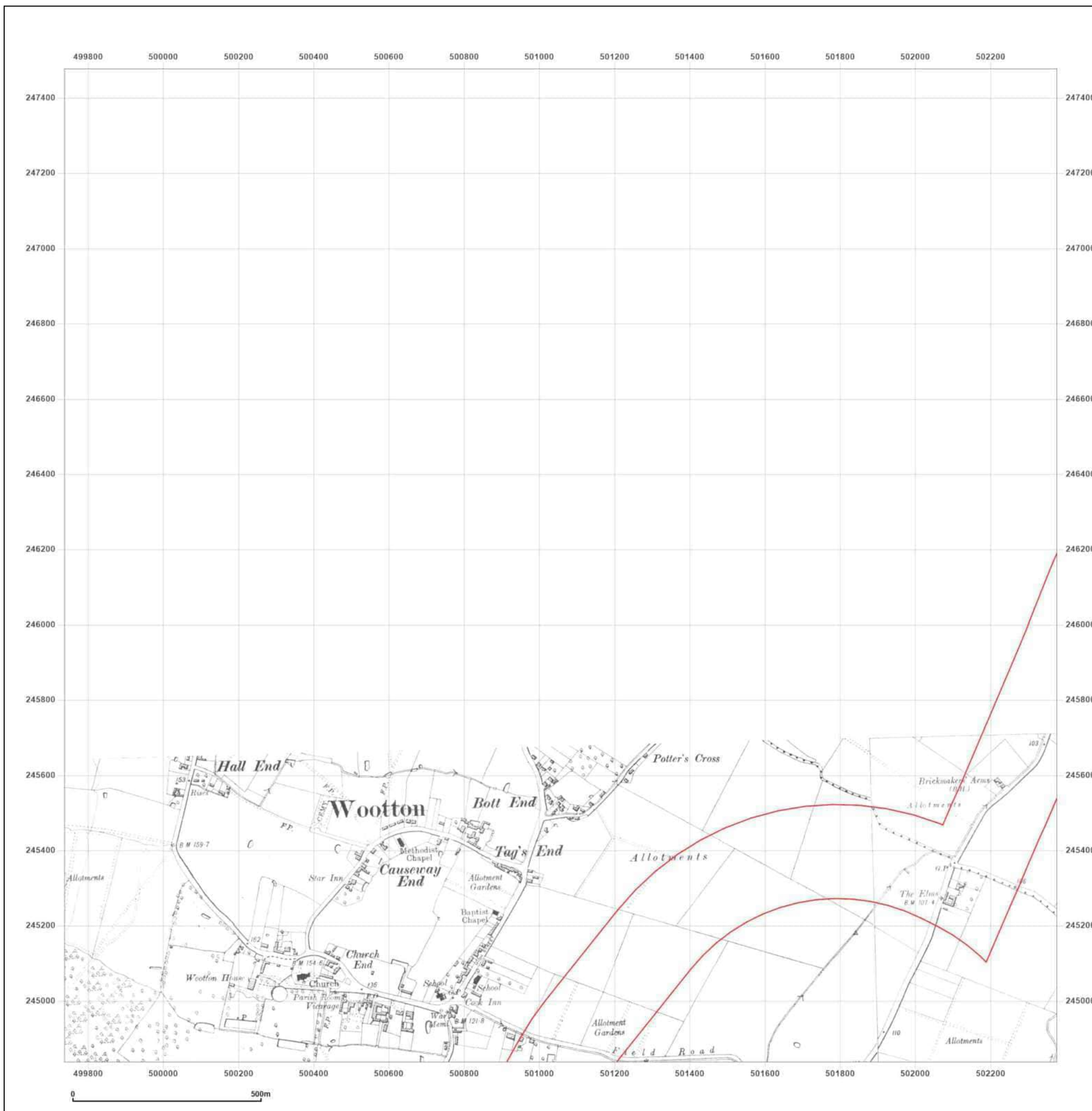


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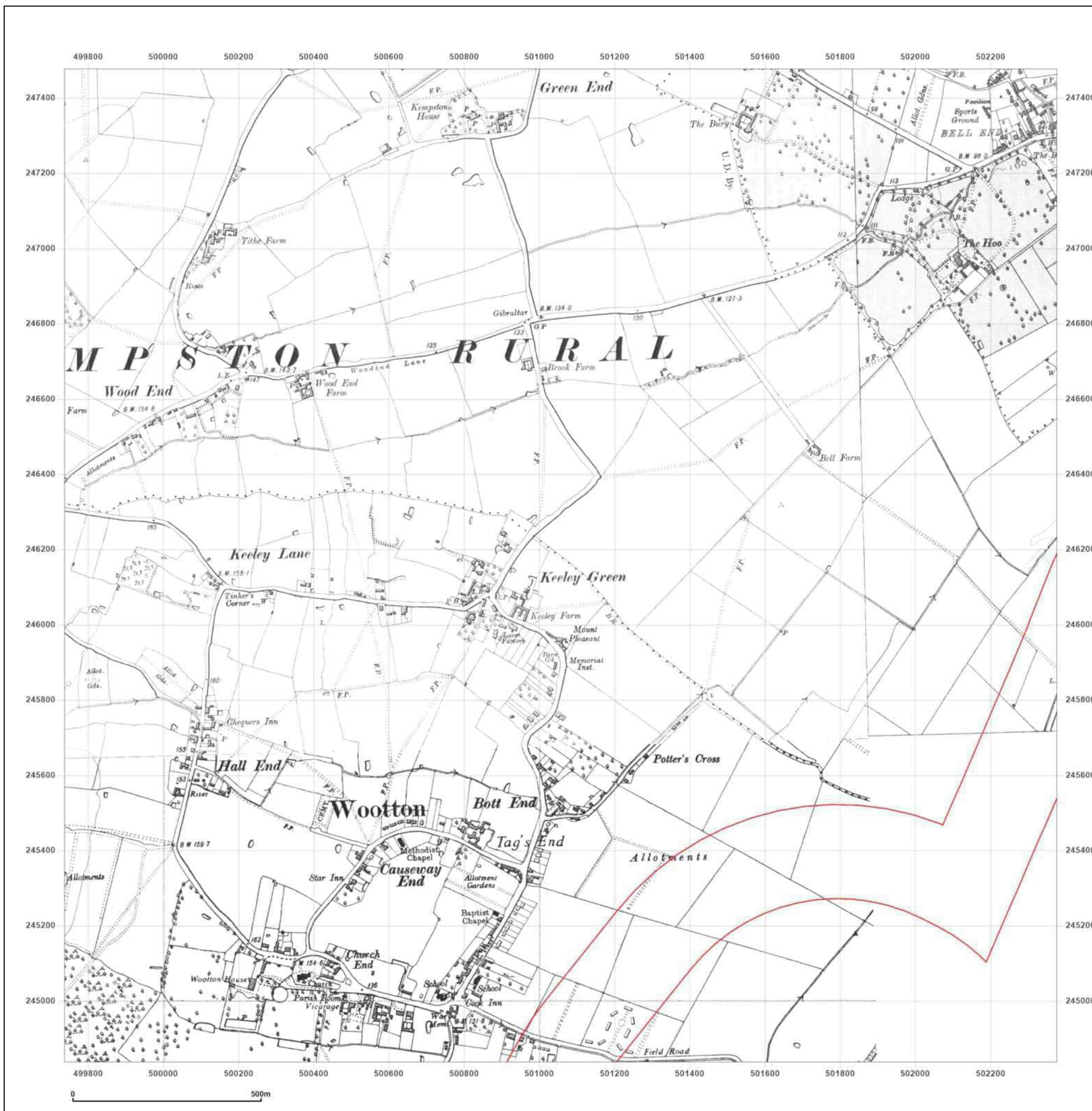


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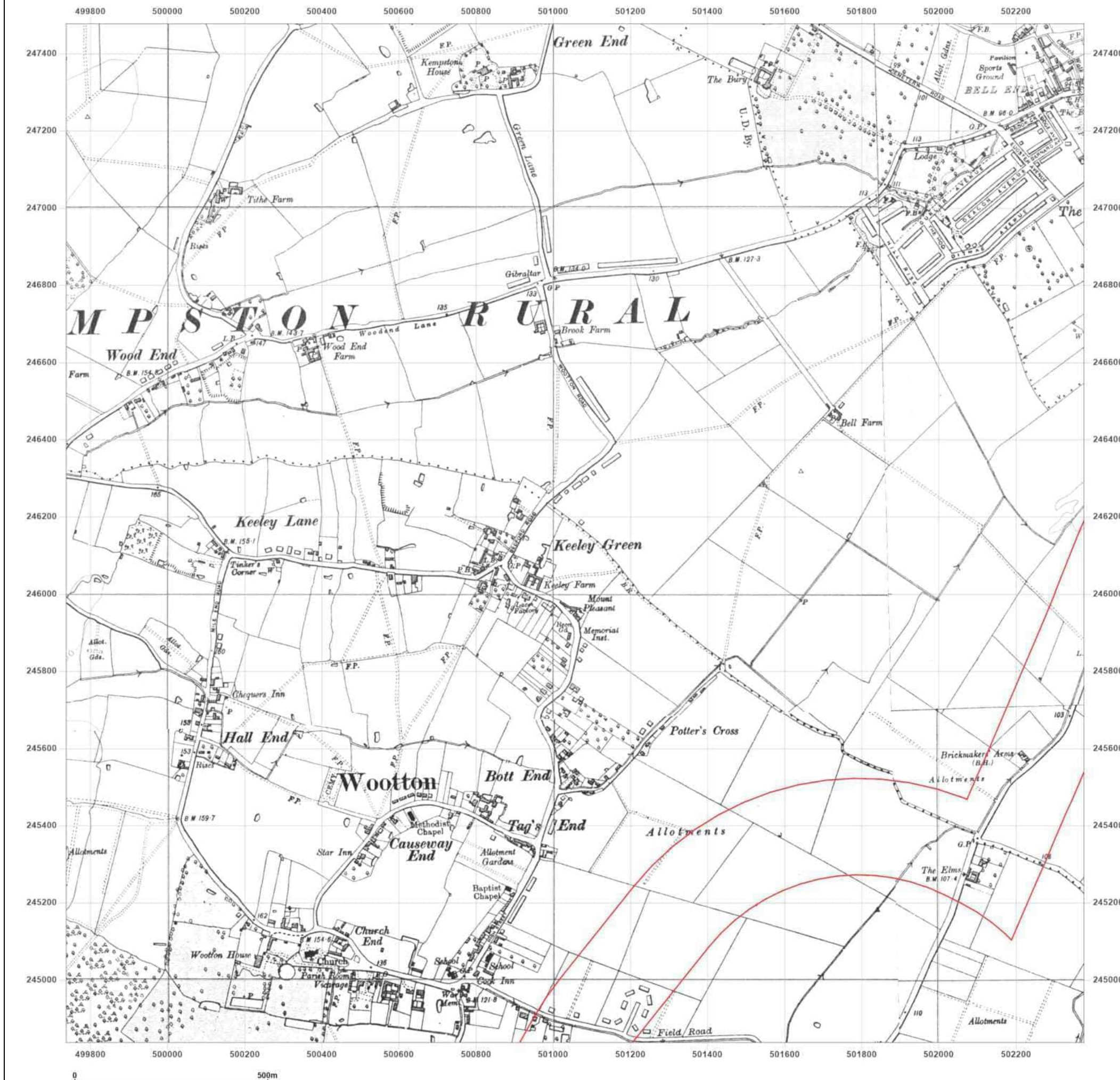


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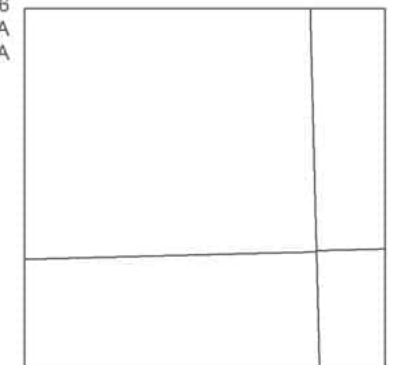
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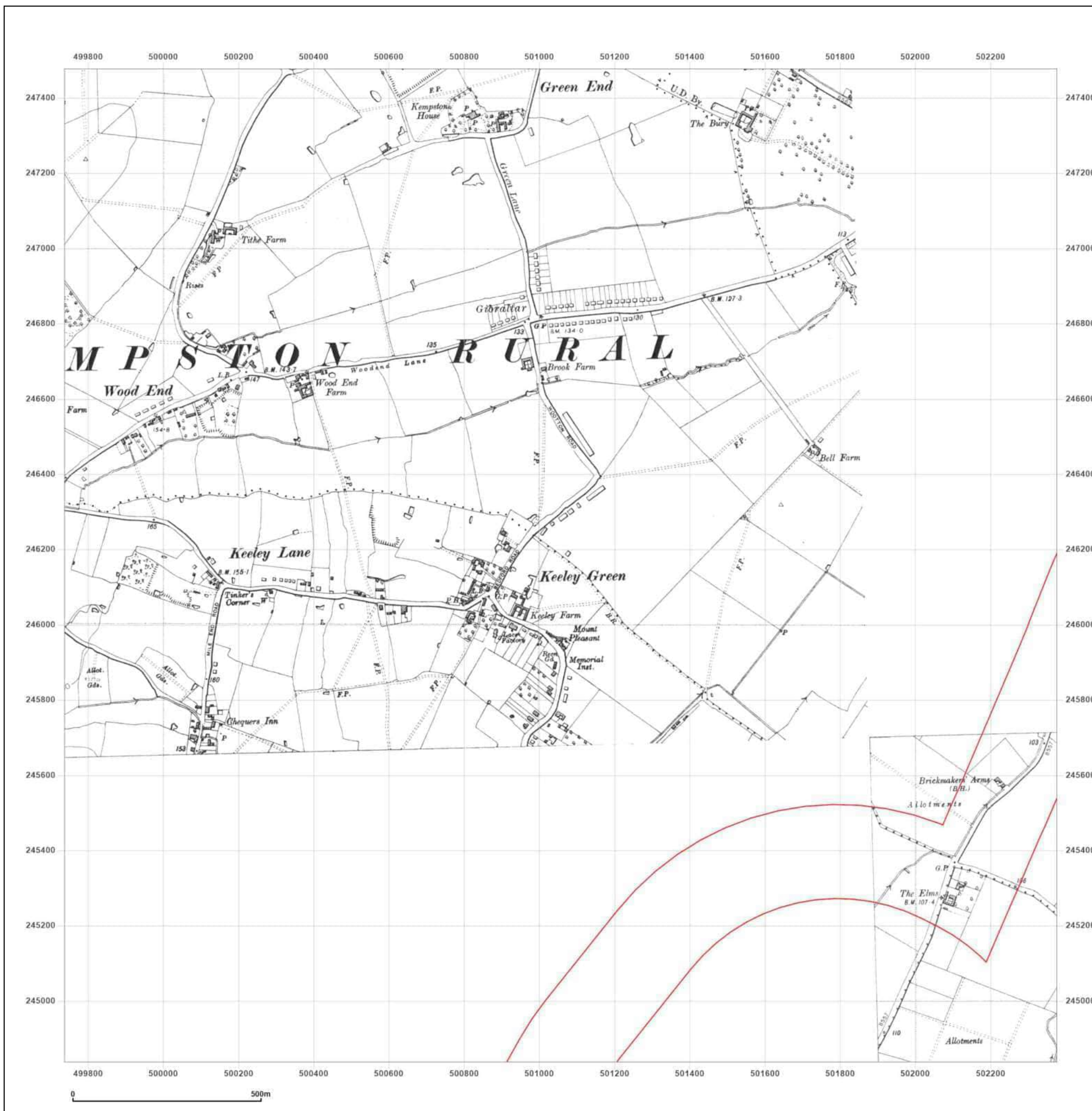


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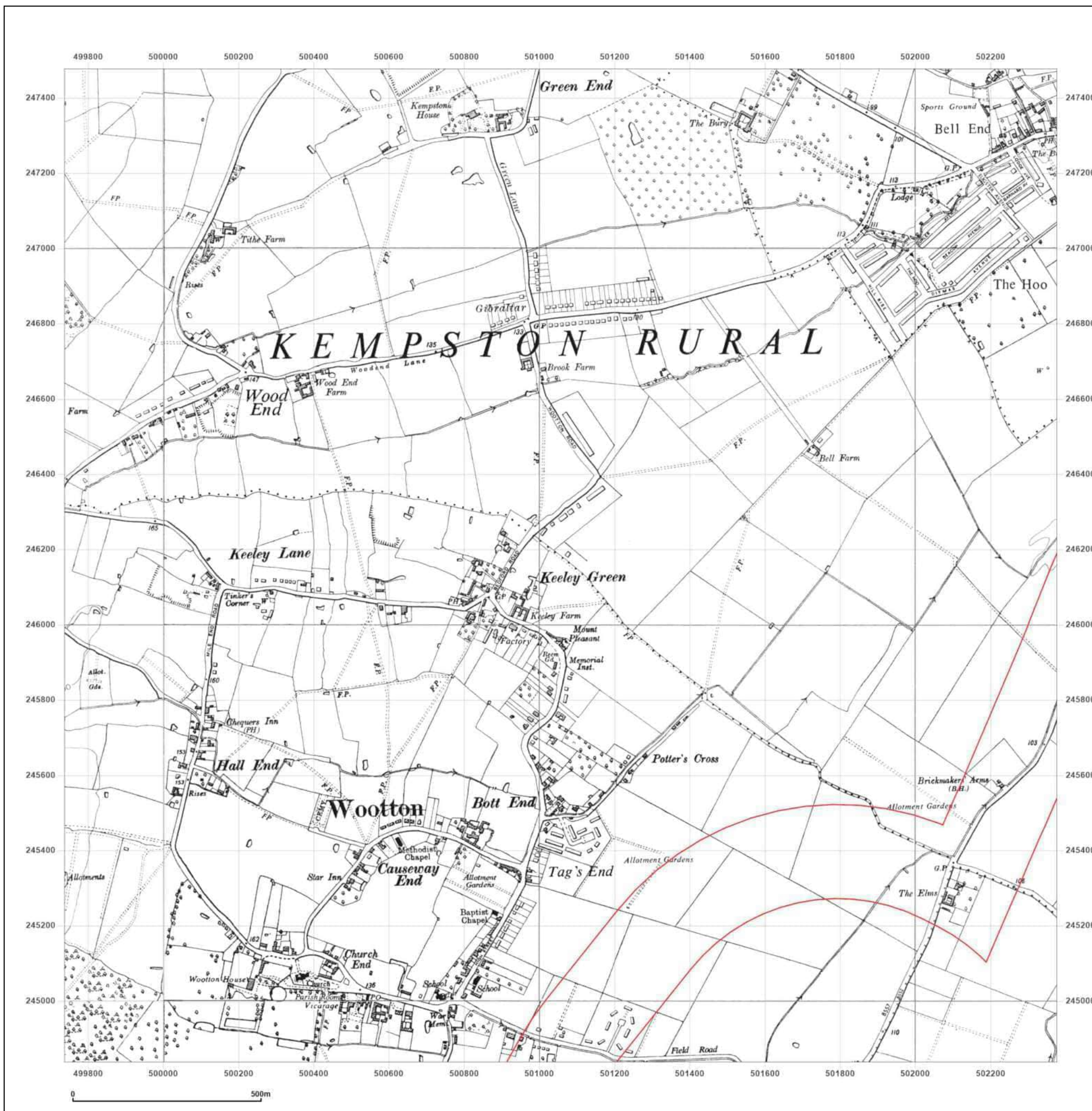


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**Site Details:**

70116516 Rev B

**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_1\_2  
**Grid Ref:** 501056, 246157

**Map Name:** National Grid

**Map date:** 1972

**Scale:** 1:10,000

**Printed at:** 1:10,000



Surveyed 1970  
Revised 1972  
Edition N/A  
Copyright 1972  
Levelled N/A

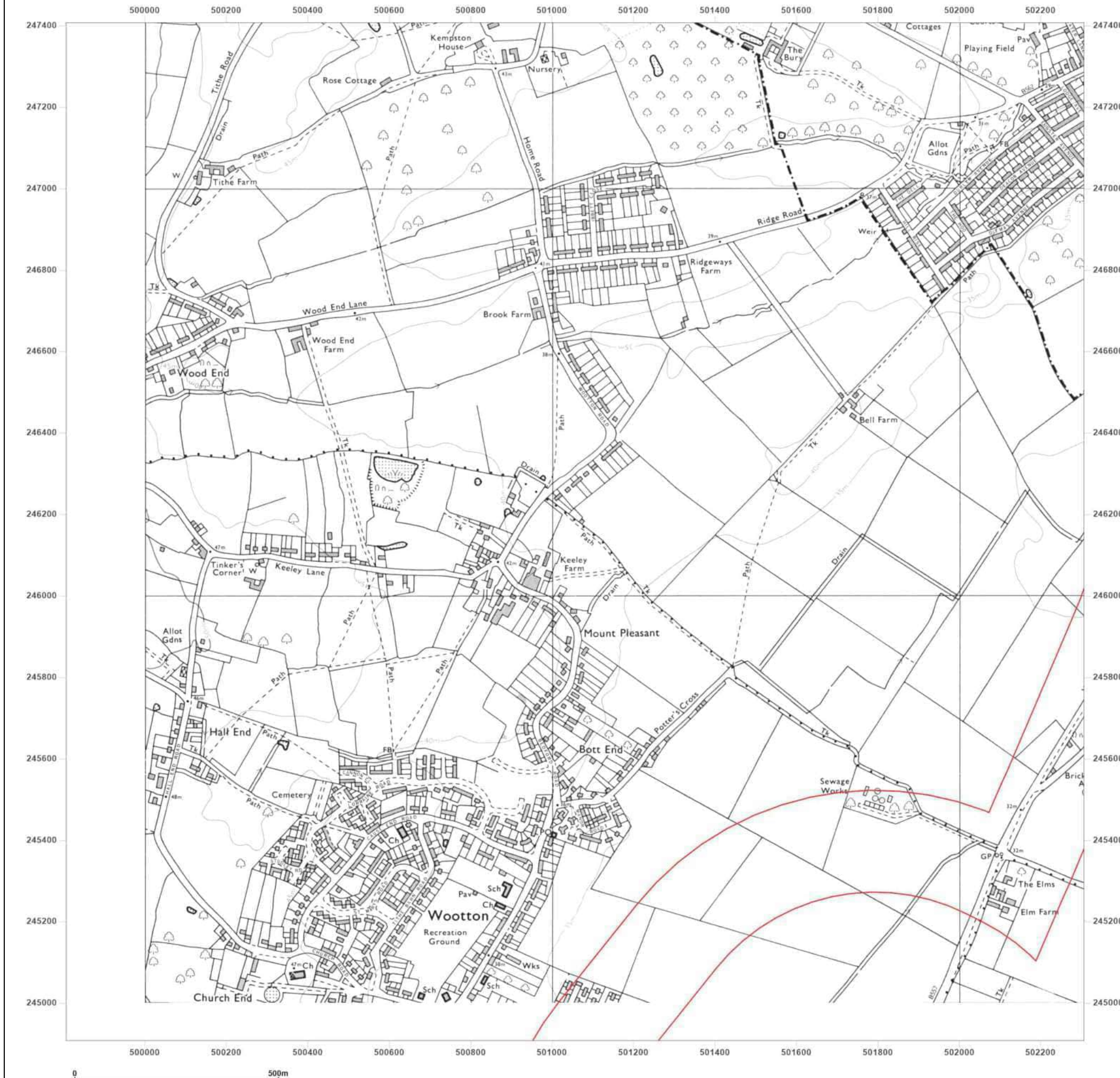


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**Site Details:**

70116516 Rev B

**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_1\_2  
**Grid Ref:** 501056, 246157

**Map Name:** National Grid

**Map date:** 1980-1982

**Scale:** 1:10,000

**Printed at:** 1:10,000



Surveyed 1977  
Revised 1982  
Edition N/A  
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Surveyed 1977  
Revised 1980  
Edition N/A  
Copyright 1980  
Levelled 1971

Surveyed 1976  
Revised 1982  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1977  
Revised 1980  
Edition N/A  
Copyright N/A  
Levelled N/A

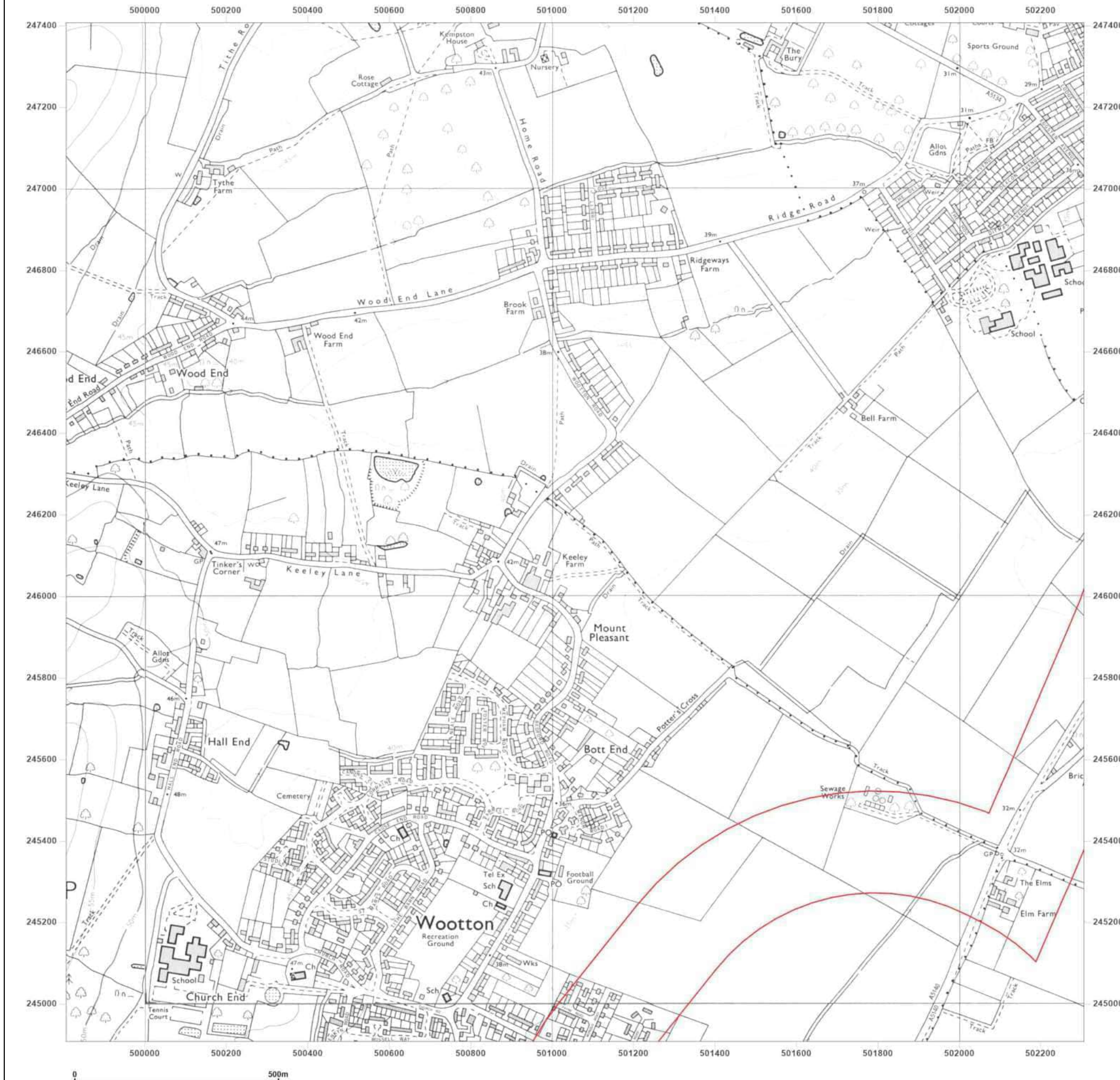


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#### Site Details:

70116516 Rev B

**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_1\_2  
**Grid Ref:** 501056, 246157

**Map Name:** National Grid

**Map date:** 1987-1992

**Scale:** 1:10,000

**Printed at:** 1:10,000



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 Revised 1992  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Surveyed 1985  
 Revised 1987  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Surveyed 1976  
 Revised 1988  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

Surveyed 1977  
 Revised 1989  
 Edition N/A  
 Copyright N/A  
 Levelled N/A

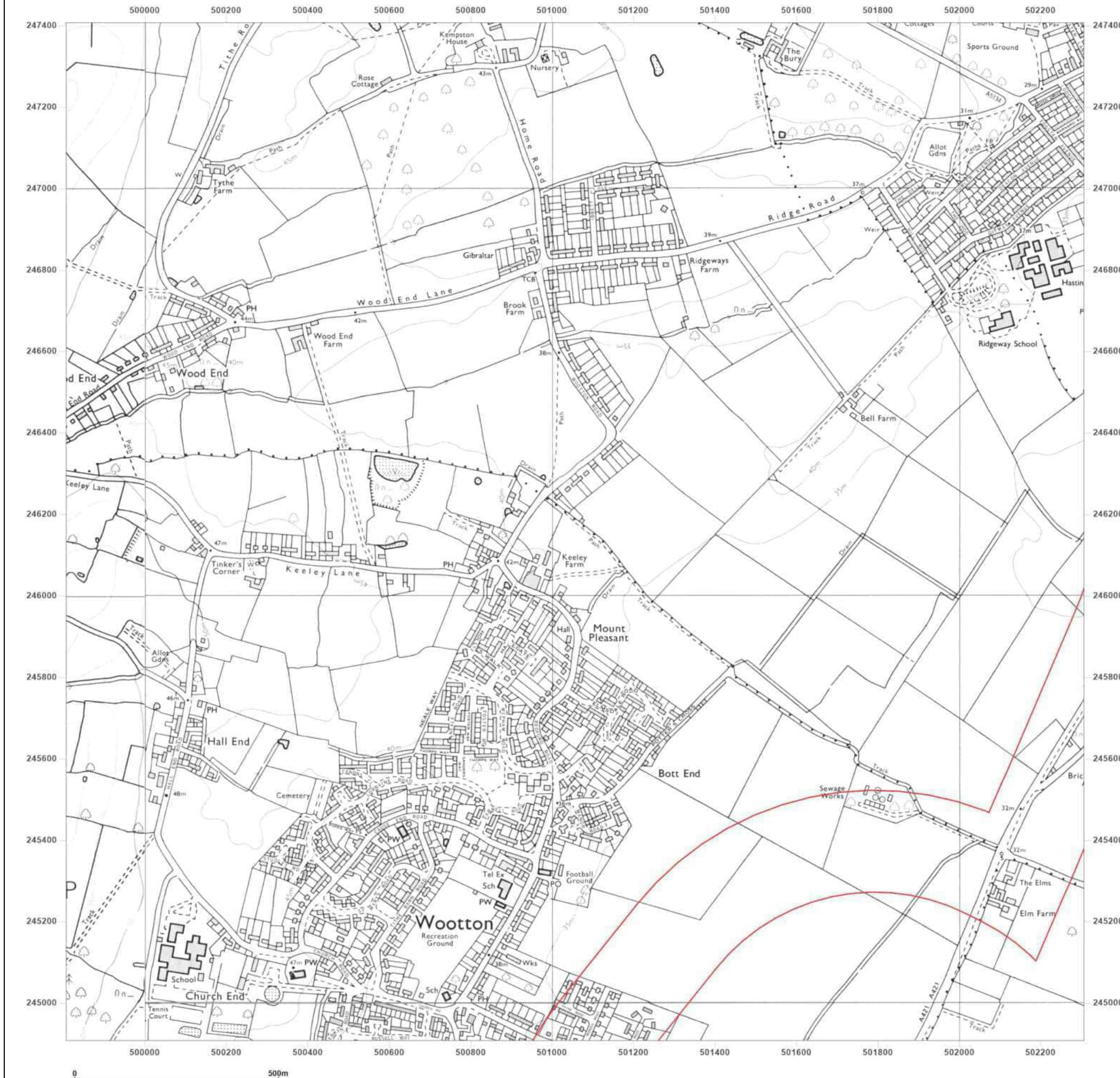


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#### Site Details:

70116516 Rev B

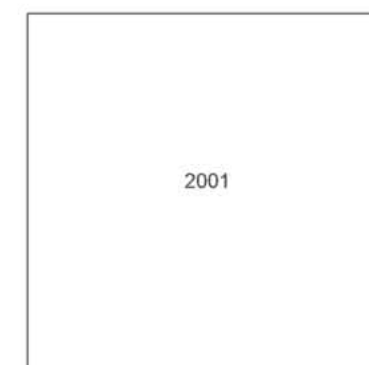
**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_1\_2  
**Grid Ref:** 501056, 246157

**Map Name:** National Grid

**Map date:** 2001

**Scale:** 1:10,000

**Printed at:** 1:10,000

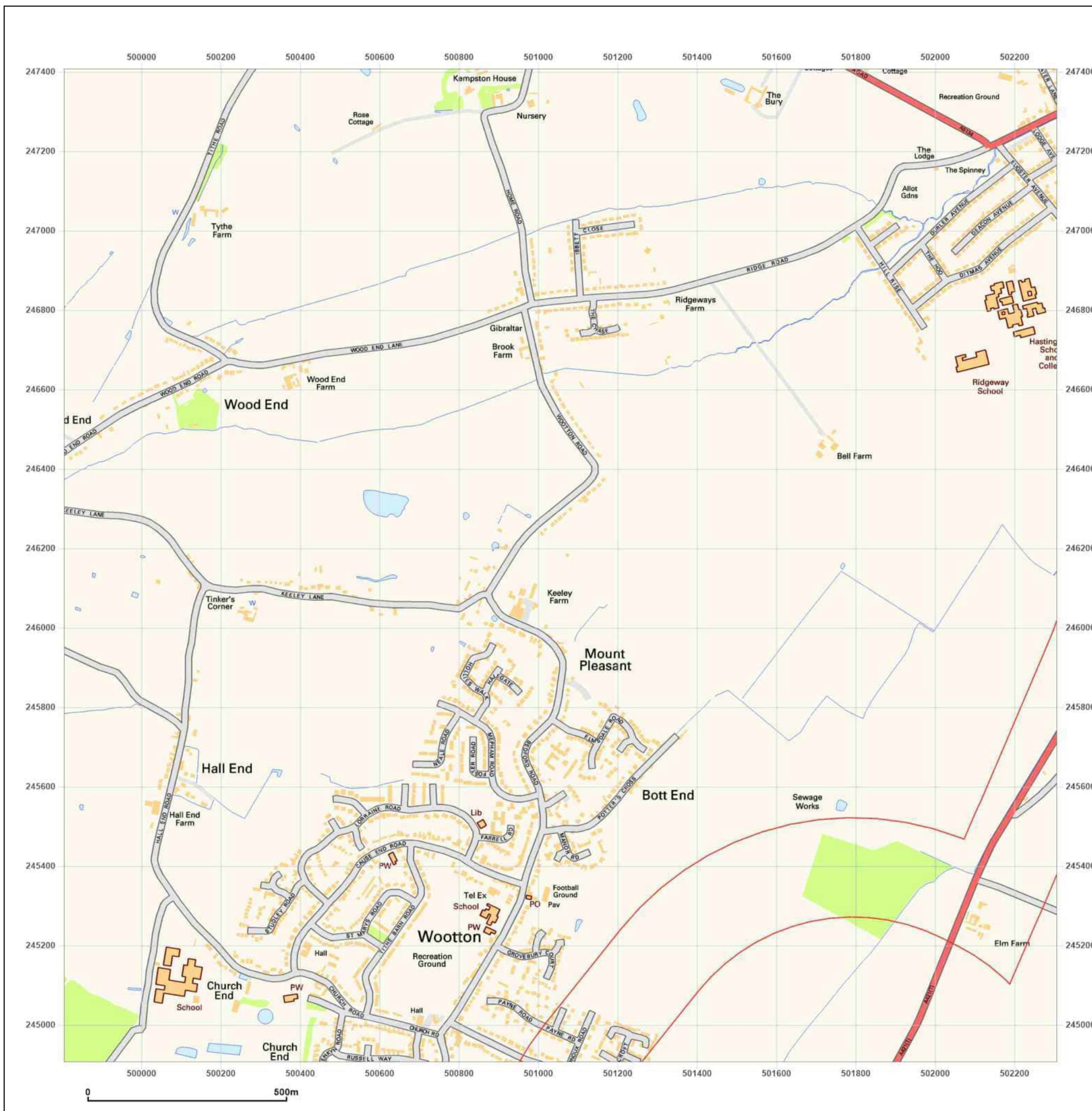


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#### Site Details:

70116516 Rev B

**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_1\_2  
**Grid Ref:** 501056, 246157

**Map Name:** National Grid

**Map date:** 2010

**Scale:** 1:10,000

**Printed at:** 1:10,000



2010



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**Site Details:**

70116516 Rev B

**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_1\_2  
**Grid Ref:** 501056, 246157

**Map Name:** National Grid

**Map date:** 2024

**Scale:** 1:10,000

**Printed at:** 1:10,000



2024

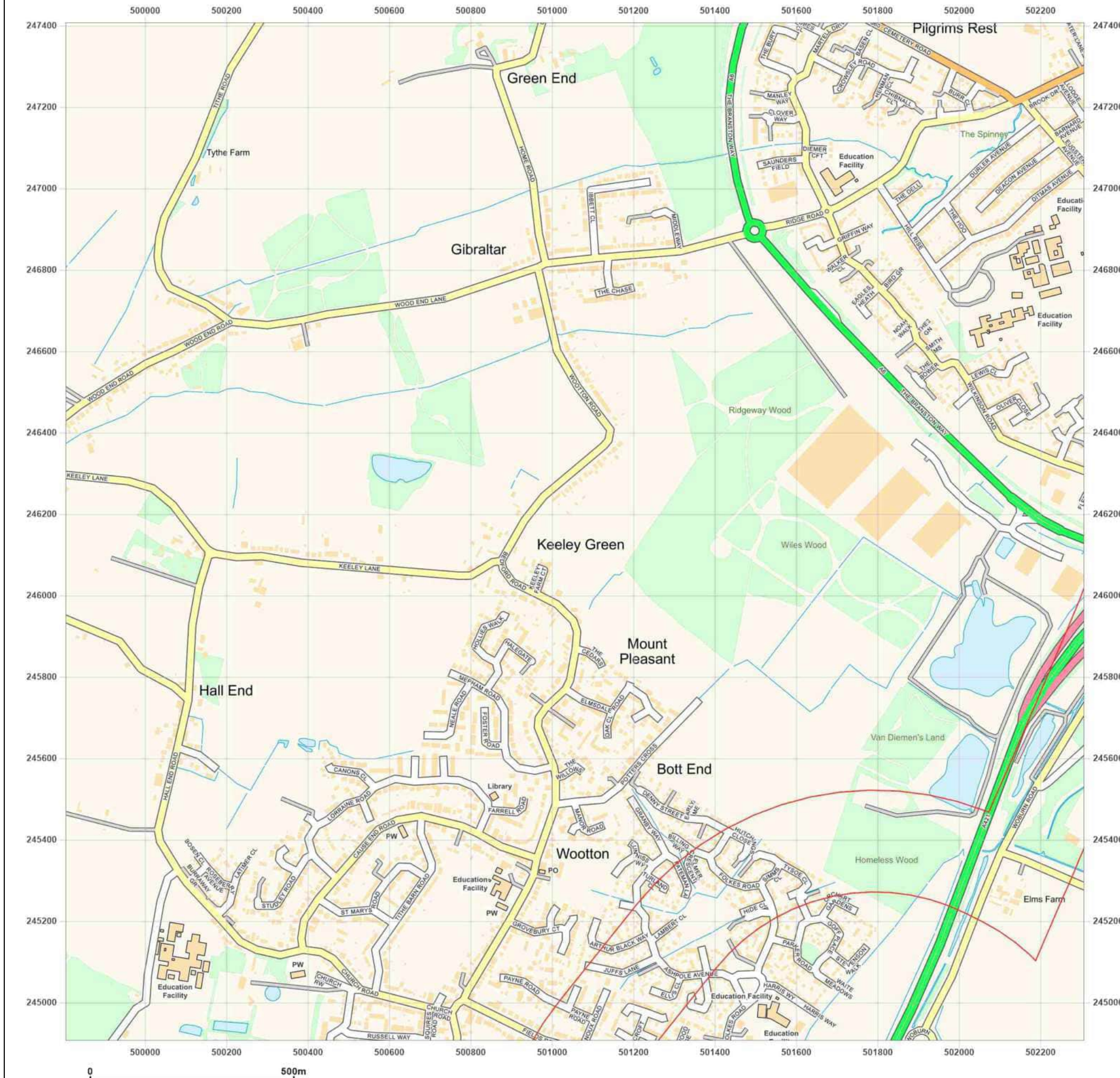


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Site Details:

70116516 Rev B

Client Ref: 70116516 Rev B  
Report Ref: GSIP-2024-14754-18112\_SS\_2\_1  
Grid Ref: 503556, 243657

Map Name: County Series

Map date: 1882

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1882  
Revised 1882  
Edition N/A  
Copyright N/A  
Levelled N/A

Surveyed 1882  
Revised 1882  
Edition N/A  
Copyright N/A  
Levelled N/A

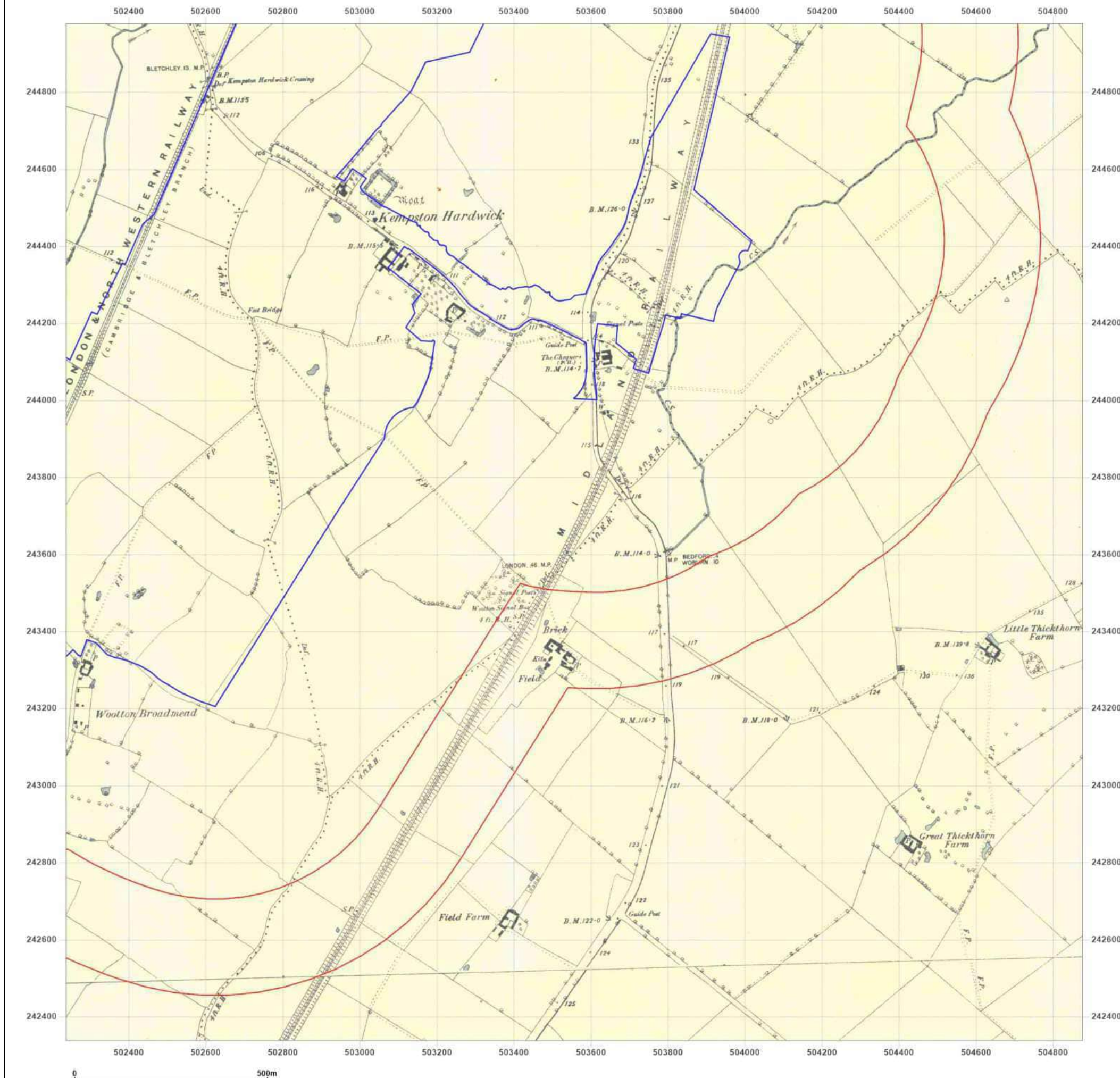


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#### Site Details:

70116516 Rev B

**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_2\_1  
**Grid Ref:** 503556, 243657

**Map Name:** County Series

**Map date:** 1900

**Scale:** 1:10,560

**Printed at:** 1:10,560



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Revised 1900  
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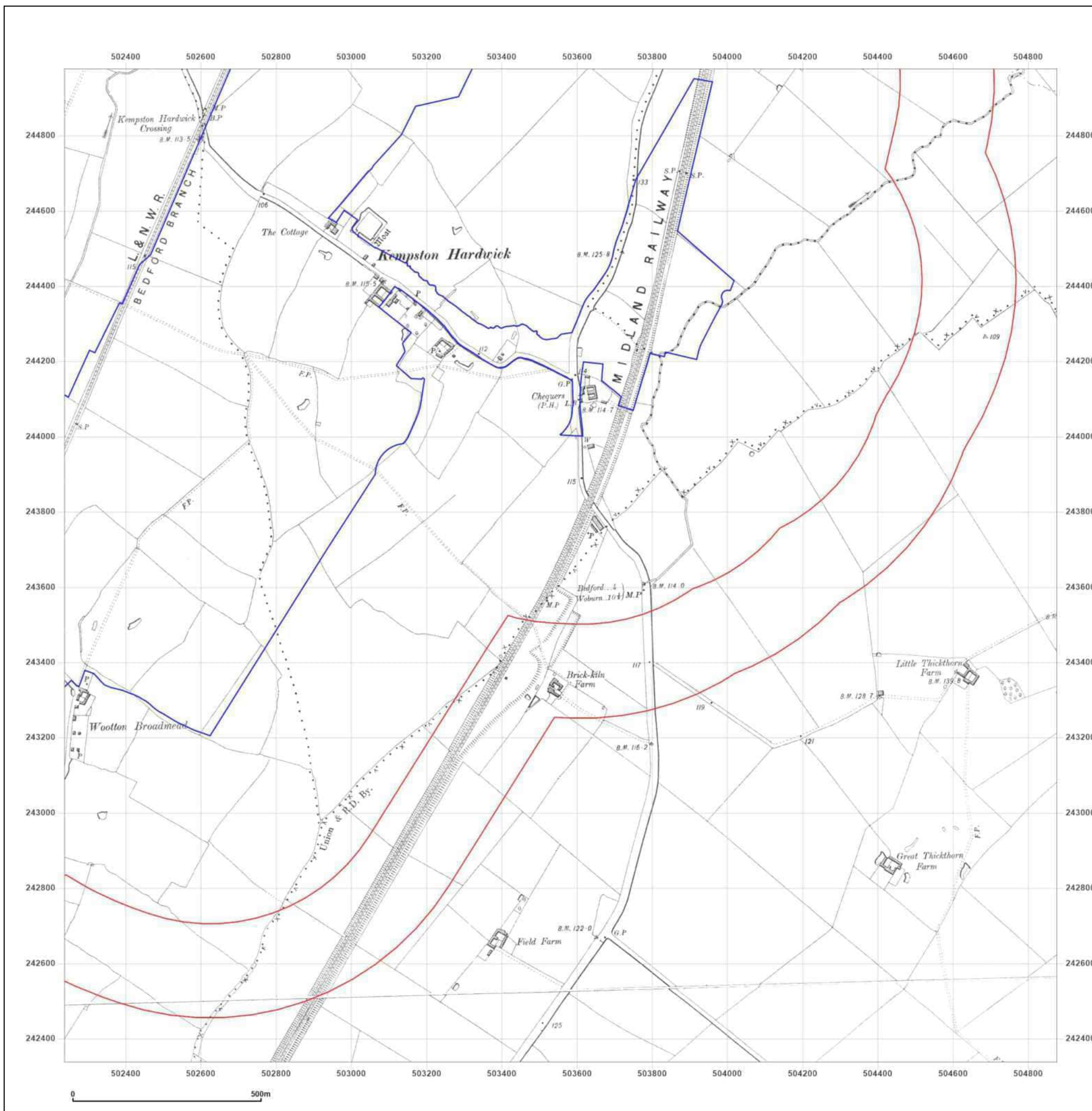


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**Site Details:**

70116516 Rev B

**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_2\_1  
**Grid Ref:** 503556, 243657

**Map Name:** County Series

**Map date:** 1924

**Scale:** 1:10,560

**Printed at:** 1:10,560



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Surveyed 1881  
Revised 1924  
Edition N/A  
Copyright N/A  
Levelled N/A

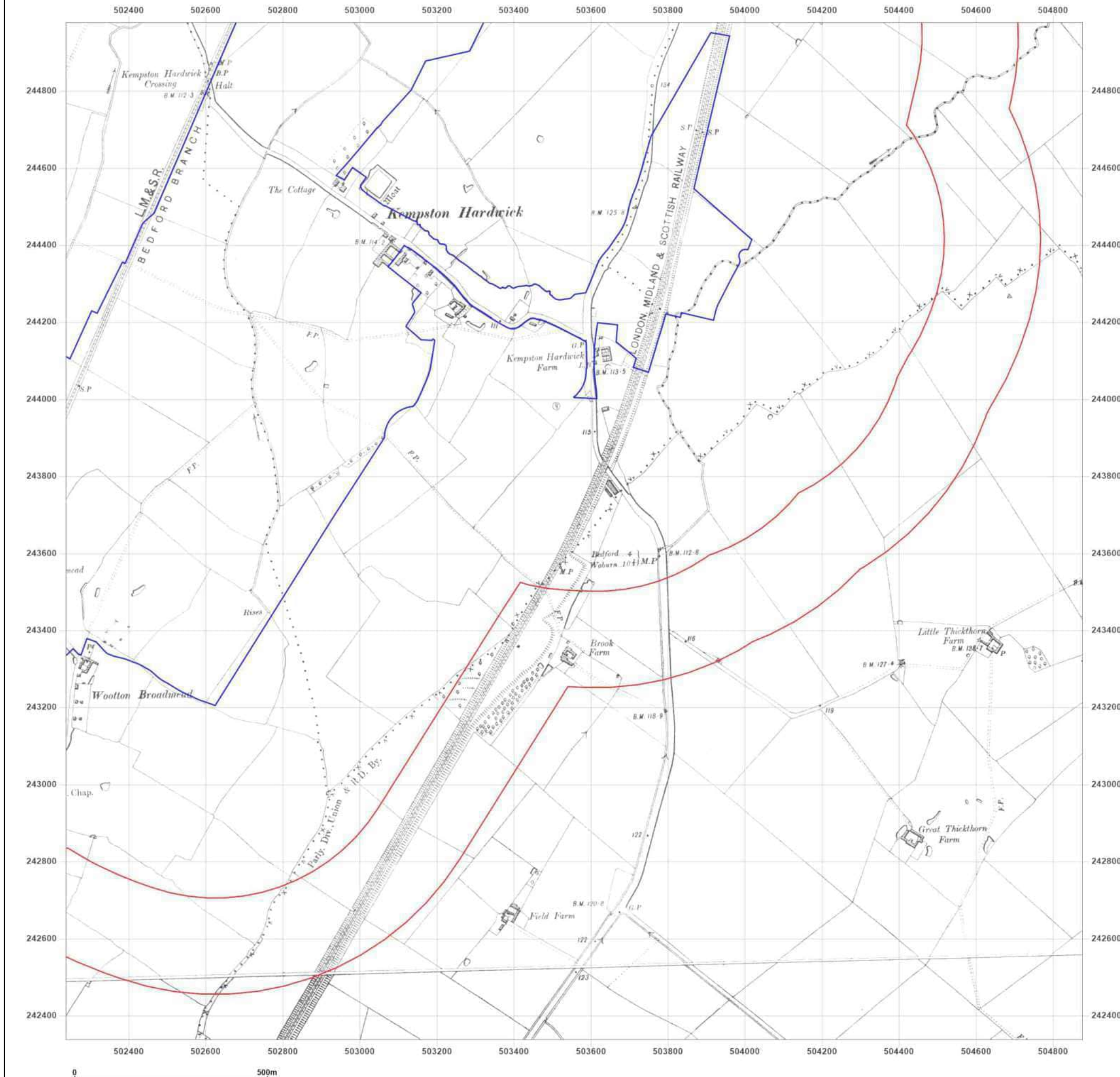


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**Site Details:**

70116516 Rev B

**Client Ref:** 70116516 Rev B  
**Report Ref:** GSIP-2024-14754-18112\_SS\_2\_1  
**Grid Ref:** 503556, 243657

**Map Name:** County Series

**Map date:** 1938

**Scale:** 1:10,560

**Printed at:** 1:10,560



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