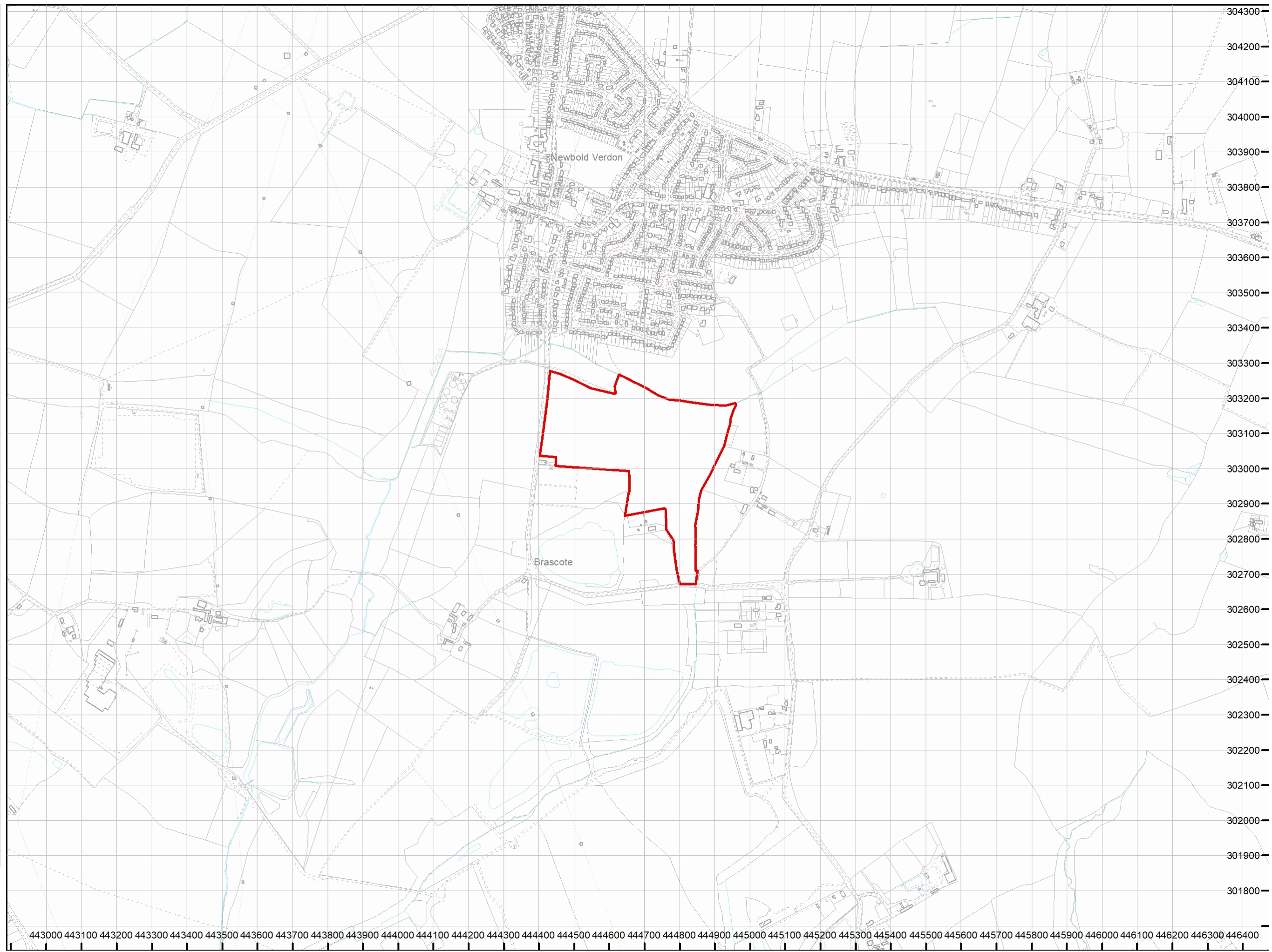


The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

Approximate position of the enquiry boundary shown 

How to contact us
0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
www.groundstability.com



Appendix F - UXO Risk Map

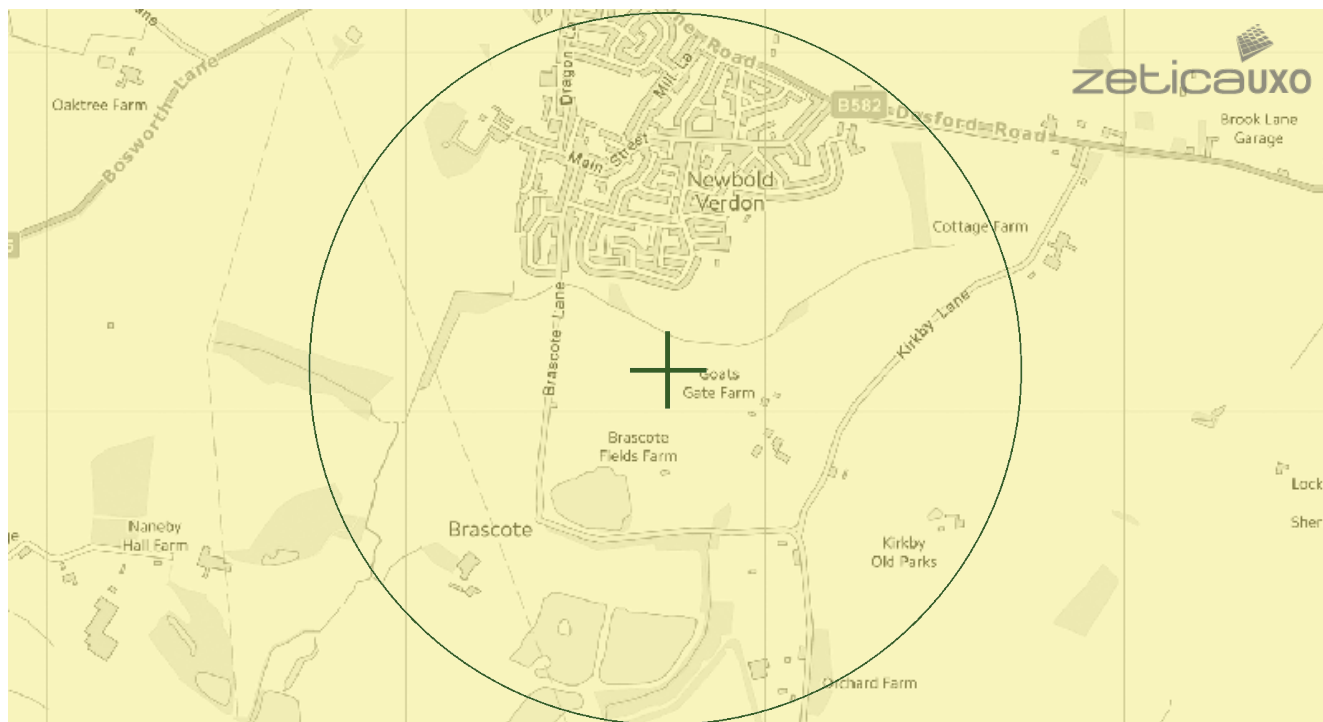


UNEXPLODED BOMB RISK MAP



SITE LOCATION

Map Centre: 444734,303120



LEGEND

- High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- Low:** Areas indicated as having 15 bombs per 1000acre or less.

- military**
- industry**
- UXO find**
- transport**
- dock**
- Luftwaffe targets**
- utilities**
- Bombing decoy**
- other**

How to use your Unexploded Bomb (UXB) risk map?

The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our **pre-desk study assessments (PDSA)**

If I have any questions, who do I contact?

tel: **+44 (0) 1993 886682**

email: **uxo@zetica.com**

web: **www.zeticauxo.com**

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (<https://zeticauxo.com/downloads-and-resources/risk-maps/>)

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It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.

Appendix G - Contamination Risk Assessment Procedure

By considering the sources, pathways and receptors (contaminant linkages), an assessment of the human health/environmental risks is made regarding the significance and degree of the risk. This assessment is based on consideration of whether the source of contamination can reach a receptor and hence whether it is of major or minor significance.

The risks associated with construction materials are considered outside of this procedure. The risk from ground gas has not been assessed in this report.

The risk assessment has been undertaken regarding BS10175:2001 and CIRIA Document C552: Contaminated Land Risk assessment 'A Guide to Good Practice'.

The risk assessment has been carried out by assessing the severity of the potential consequence, considering both the potential severity of the hazard and the sensitivity of the target, based on the categories given in Table 1.

Table 1: Potential Hazard Severity Definition

Category	Definition
Severe	Acute risks to human health, catastrophic damage to buildings/property, major pollution of controlled waters;
Medium	Chronic risk to human health, pollution of sensitive controlled waters, significant effects on sensitive ecosystems or species, significant damage to buildings or structures;
Mild	Pollution of non-sensitive waters, minor damage to buildings or structures;
Minor	Requirement for protective equipment during site works to mitigate health effects, damage to non-sensitive ecosystems or species.

The likelihood of an event (probability) considers both the presence of the hazard and target and the integrity of the pathway and has been assessed based on the categories given in Table 2.

Table 2: Potential of Risk Definition

Category	Definition
High Likelihood	Contaminant linkage may be present, and risk is almost certain to occur in long term, or there is evidence of harm to the receptor;
Likely	Contaminant linkage may be present, and it is probable that the risk will occur over the long term;
Low Likelihood	Contaminant linkage may be present, and there is a possibility of the risk occurring, although there is no certainty that it will do so;
Unlikely	Contaminant linkage may be present, but the circumstances under which harm would occur are considered improbable.



The potential severity of the risk and the probability of the risk occurring have been combined in accordance with the following matrix to give a level of risk for each potential hazard as listed in Table 3.

Table 3: Level of Risk

Probability of Risk	Potential severity			
	Severe	Medium	Mild	Minor
High Likelihood	Very High	High	Moderate	Low/Moderate
Likely	High	Moderate	Low/Moderate	Low
Low Likelihood	Moderate	Low/Moderate	Low	Very Low
Unlikely	Low/Moderate	Low	Very Low	Very Low

The assessment is discussed in terms of plausible contaminant linkages.

A description of the risk classifications and likely action required are given in CIRIA 552. These risk classifications are listed in Table 4.

Table 4: Risk Classification

Risk Classification	
Very High Risk	High probability that severe harm could arise to a designated receptor from an identified hazard OR there is evidence that severe harm to a designated receptor is currently happening. This risk, if realised, is likely to result in substantial liability. Urgent investigation and remediation are likely to be required.
High Risk	Harm is likely to arise to a designated receptor from an identified hazard. This risk, if realised, is likely to result in substantial liability. Urgent investigation is required, and remedial works may be necessary in the short term and are likely over the long term.
Moderate Risk	It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. Investigation is normally required to clarify risks and to determine potential liability. Some remedial works may be required in the long term.
Low Risk	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild.
Very Low Risk	It is a low possibility that harm could arise to a designated receptor. In the event of such harm being realised it is not likely to be severe.





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