

Preliminary Unexploded Ordnance (UXO) Risk Assessment

Project Name	Garages at The Russets, Strand Close, Meopham, Gravesend
Client	Soils Limited
Site Address	The Russets, Strand Close, Meopham, Gravesend, DA13 0HB
Report Reference	PA22481-00
Date	18 th August 2025
Author	HJ
Quality Assurance	AT

1st Line Defence

3 Maple Park, Essex Road, Hoddesdon. EN11 0EX

Tel +44 (0) 1992 245 020 Email info@1stlinedefence.co.uk

Web www.1stlinedefence.co.uk Company Reg No. 07717863



1ST LINE DEFENCE



Assessment Objective

This preliminary unexploded ordnance (UXO) risk assessment is a qualitative screening exercise to assess the likely potential of encountering UXO at the Garages at The Russets, Strand Close, Meopham, Gravesend site. The assessment involves the consideration of the basic factors that affect the potential for UXO to be present at a site as outlined in Stage One of the UXO risk management process.

Background

This assessment uses the sources of information available in-house to 1st Line Defence Ltd to enable the placement of a development site in context with events that may have led to the presence of German air-delivered or Allied military UXO. The report will identify any immediate necessity for risk mitigation or additional research in the form of a Detailed UXO Risk Assessment. It makes use of 1st Line Defence's extensive historical archives, library and unique geo-databases, as well as internet resources, and is researched and compiled by UXO specialists and graduate researchers.

The assessment directly follows CIRIA C681 guidelines "Unexploded Ordnance, a Guide for the Construction Industry". The document will therefore assess the following factors:

- Basic Site Data
- Previous Military Use
- Indicators of potential aerial delivered UXO threat
- Consideration of any Mitigating Factors
- Extent of Proposed Intrusive Works
- Any requirement for Further Work

It should be noted that the vast majority of construction sites in the UK will have a low or negligible risk of encountering UXO and should be able to be screened out at this preliminary stage. The report is meant as a common sense 'first step' in the UXO risk management process. The content of the report and conclusions drawn are based on basic, preliminary research using the information available to 1st Line Defence at the time this report was produced. It should be noted that the only way to entirely negate risk from UXO to a project would be to support the works proposed with appropriate UXO risk mitigation measures. It is rarely possible to state that there is absolutely 'no' risk from UXO to a project.

Site Boundary



Risk Assessment Considerations	
Site location and description/current use	The site is located within Gravesend in northwest Kent, England. According to recent aerial imagery, the site is currently occupied by hardstanding ground and garages. To the north, south and west of the site are several residential structures and bordering the east of the site is <i>The Russets</i>. The site is approximately centred on the OS grid reference: TQ 64316 67061.
Are there any indicators of current/historical military activity on/close to the site?	No information could be found in-house to indicate that the site location has any former or current association with any military features. No features such as WWII defensive positions, encampments or firing ranges are recorded to have been located at the site. In addition, no information on ordnance being stored, produced, or disposed of within the proposed site boundary could be found. The closest recorded Heavy Anti-Aircraft (HAA) battery was situated approximately 3.4km to the north-east of the site. The conditions in which unexploded anti-aircraft ordnance may have fallen unrecorded within the proposed site are generally analogous to that of German aerial delivered ordnance - see below for further information.
What was the pre- and post-WWII history of the site?	Pre-WWII OS mapping, dated 1938-1939, indicates that the site was occupied by undeveloped land and shows it was encompassed by undeveloped land. Post-WWII OS mapping, dated 1960-1964, shows no obvious indications of changes across the site or its immediate surroundings.
Was the area subject to bombing during WWII?	During WWII the site was situated within the Rural District of Strood, which sustained an overall moderate bomb density according to Home Office statistics, with an average of 42 items recorded per 1,000 acres. This included 1,804 high explosive (HE) bombs, 24 parachute mines, 55 oil bombs, 117 phosphorous bombs, 14 fire pots, 37 V-1 pilotless aircraft, and 9 V-2 flying bombs. Kent Daily Bomb mapping records bombing incidents within proximity to the site boundary. However, owing to the scale of this mapping, it has not been possible at this preliminary stage to fully decipher whether any bombing incidents occurred within the site boundary.
Is there any evidence of bomb damage on/close to the site?	As the site was occupied by undeveloped land, there are no changes shown when comparing pre- and post-WWII OS mapping which would indicate bomb damage, such as missing buildings or structures labelled 'ruins'. The acquisition of high-resolution post-WWII aerial photography of the site is necessary in order to fully assess the extent of any bomb damage which may have been caused to the site.
To what degree would the site have been subject to access?	Owing to the undeveloped nature of the site through the war, it is not believed that it would have been subject to frequent access and observation.
To what degree has the site been developed post-WWII?	The site and its immediate surroundings has undergone significant redevelopment post-WWII, including the construction of the residential structures around the site and the construction of garages associated with them across the site.
What is the nature and extent of the intrusive works proposed?	The proposed works across the site were not available at the time of writing.

Summary and Conclusions

During WWII the site was situated within the Rural District of Strood, which sustained an overall moderate bomb density according to Home Office statistics, with an average of 42 items recorded per 1,000 acres.

Kent Daily Bomb mapping records bombing incidents within proximity to the site boundary.

However, owing to the scale of this mapping, it has not been possible at this preliminary stage to fully decipher whether any bombing incidents occurred within the site boundary.

Further research, including looking further into written records, is necessary in order to fully assess any bombing incidents which occurred within the site boundary.

Recommendations

Further research is recommended in the form of a **Detailed UXO Risk Assessment** in accordance with CIRIA guidelines. This would include consulting written records for the area in which the site was located and the necessary analysis of post-WWII OS aerial photography of the site, to fully assess any bombing damage which was caused to the site. The report would also outline any work-specific risk mitigation measures.

Prior to or in lieu of a Detailed Assessment, it is recommended that appropriate UXO Risk Mitigation Measures are provided for intrusive works proposed.

If the client has any anecdotal or empirical evidence of UXO risk on site, please contact 1st Line Defence.

This report has been prepared by 1st Line Defence Limited with all reasonable care and skill. The report contains historical data and information from third party sources. 1st Line Defence Limited has sought to verify the accuracy and comprehensiveness of this information where possible but cannot be held accountable for any inherent errors. Furthermore, whilst every reasonable effort has been made to locate and access all relevant historical information, 1st Line Defence cannot be held responsible for any changes to risk level or mitigation recommendations resulting from documentation or other information which may come to light at a later date.

This report was written by, is owned by and is copyrighted to 1st Line Defence Limited. It contains important 1st Line Defence information which is disclosed only for the purposes of the client's evaluation and assessment of the project to which the report is about. The contents of this report shall not, in whole or in part be used for any other purpose apart from the assessment and evaluation of the project; be relied upon in any way by the person other than the client, be disclosed to any affiliate of the client's company who is not required to know such information, nor to any third party person, organisation or government, be copied or stored in any retrieval system, be reproduced or transmitted in any form by photocopying or any optical, electronic, mechanical or other means, without prior written consent of the Managing Director, 1st Line Defence Limited, Unit 3, Maple Park, Essex Road, Hoddesdon EN11 0EX. Accordingly, no responsibility or liability is accepted by 1st Line Defence towards any other person in respect of the use of this report or reliance on the information contained within it, except as may be designated by law for any matter outside the scope of this report.

1st Line Defence

Unit 3, Maple Park
Essex Road, Hoddesdon
Hertfordshire EN11 0EX

Call +44 (0) 1992 245 020
Email info@1stlinedefence.co.uk
Web www.1stlinedefence.co.uk



1ST LINE DEFENCE