

Preliminary Unexploded Ordnance (UXO) Risk Assessment

Project Name	Hinckley Day Case
Client	Darwin Group
Site Address	Hinckley District Hospital, Mount Road, Hinckley, LE10 1AG
Report Reference	PA18787a-00
Date	15 th January 2025
Author	JBM
Quality Assurance	HW

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 Hinckley District Hospital 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 in Hinckley, Leicestershire. Recent aerial imagery indicates that the site comprises part of the Hinckley and District Hospital. It is bound by hospital buildings to the north and east, Mount Road to the south, and undeveloped land adjacent to the Hospital Annexe to the west. The site is approximately centred on the OS grid reference: SP 42956 93703.
Are there any indicators of current/historical military activity on/close to the site?	In-house records do not indicate that the site footprint had any former military use. No features such as WWII defensive positions, encampments or firing ranges are recorded to have been located at the site. In addition, no information of ordnance being stored, produced, or disposed of within the proposed site boundary could be found. The closest Heavy Anti-Aircraft (HAA) battery was situated approximately 800m south-west of the site. The range of HAA batteries could be up to 15km. The conditions under which unexploded anti-aircraft ordnance may have fallen within the proposed site are analogous to that of aurally delivered Luftwaffe bombs.
What was the pre- and post-WWII history of the site?	Pre-WWII OS mapping dated 1923 indicates that the site comprised the <i>Cottage Hospital</i> and surrounding grounds. To the north is undeveloped land, to the east are terraced properties adjacent to <i>Hill Street</i>, to the south is <i>Mount Road</i>, and to the west is undeveloped land and properties adjacent to <i>Mount Road</i>. Online research indicates that the Hospital was opened in 1900.¹ It appears that the original hospital building comprises part of the present-day development on site. Post-WWII OS mapping dated 1958-1967 provides indications largely analogous to the 1923 mapping, although the hospital has undergone development and expansion, now labelled the <i>Hinckley and District Hospital</i>.
Was the area subject to bombing during WWII?	During WWII the site was located in the Urban District of Hinckley, which sustained an overall very low bombing density according to official Home Office bombing statistics, with an average of 7.4 items of ordnance recorded per 1,000 acres. This included 85 high explosive (HE) bombs and three parachute mines, comprising 88 items across 11,882 acres. A bomb map for Leicestershire, published in 'Birds Eye Wartime: Leicestershire 1939-1945' by Terence C. Cartwright, was consulted.² The map is of small-scale, though no bombing incidents are recorded in close proximity to the site. The Hinckley Local History's magazine, <i>The Hinckley Historian</i>, chronicles the wartime history of Hinckley, including records of bombing incidents and anecdotal accounts. Two parachute mines reportedly fell near Hinckley train station – an incident also recorded on the Leicestershire bomb map – though as the station was more than 500m distant from the site, the likelihood of on-site UXO contamination is not anticipated to have been increased. A heavy raid on Hinckley in May 1941 saw approximately half of all the HE bombs dropped on the town during WWII delivered in one night. However, in accounts of this raid – and others – in written sources and in online research, no mention of the Cottage Hospital or surrounding streets being affected could be located.³

¹ <http://www.hinckleypastpresent.org/cottagehospital.html>.

² Terence C. Cartwright, 'Birds Eye Wartime: Leicestershire 1939-1945' (Wigston: TCC Publications, 2002).

³ <http://www.hinckleypastpresent.org/ww2hinckley.html>; <http://www.hinckleypastpresent.org/ww2hinckleybombing.html>.

Is there any evidence of bomb damage on/close to the site?	On this occasion, low-resolution post-war aerial imagery was available for consultation. No major evidence of bomb damage such as ruined or repaired buildings, cratering, or indentations in the ground are obvious on or in the immediate vicinity of the site.
To what degree would the site have been subject to access?	As the site comprised a hospital in an urban area, access at the outbreak of WWII is anticipated to have been high. As an important public amenity, the hospital was likely subject to higher than average levels of observation and post-raid inspection. Evidence of UXO is more likely to be noticed and recorded in frequently accessed areas.
To what degree has the site been developed post-WWII?	Comparison of historical and recent aerial imagery indicates that the original Cottage Hospital, which opened in 1900, comprises a significant portion of the development on site. Development appears to have occurred immediately adjacent to the original hospital post-WWII, including most of the current hospital premises.
What is the nature and extent of the intrusive works proposed?	Immediate proposed works are believed to include ground investigation, including soakaway testing, facilitating the future redevelopment of the site into a new hospital day care unit

Summary and Conclusions

During WWII the site was located in the Urban District of Hinckley, which sustained an overall very low bombing density according to official Home Office bombing statistics, with an average of 7.4 items of ordnance recorded per 1,000 acres. A small-scale Leicestershire bomb map was consulted, and does not record any bombing incidents in close proximity to the site. This was corroborated by online research and examination of available relevant literature, in which no references to the site or its immediate surrounds could be found in historical and anecdotal accounts of the bombing of Hinckley.

A lack of bombing on site is also supported by low-resolution post-war aerial imagery, available on this occasion, in which no major evidence of bomb damage such as ruined or repaired buildings, cratering, or indentations in the ground are obvious on or in the immediate vicinity of the site. As the site comprised a hospital, which was likely subject to higher than average levels of observation and post-raid inspection, evidence of UXO was more likely to have been noticed and recorded.

Recommendations

Given the findings of this preliminary report, the risk from UXO on site is not considered to be significantly elevated above the 'background level' for this part of Leicestershire. Whilst it would be possible to conduct further research in the form of a Detailed UXO Risk Assessment for this site, it is not thought likely to significantly alter the findings of this report. It is therefore recommended that **no further research** is taken.

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

It should be noted that although the risk from unexploded ordnance on this site has been assessed as minimal, this does not mean there is 'no' risk of encountering UXO. This preliminary report has been undertaken with due diligence, and all reasonable care has been taken to access and analyse relevant historical information. By necessity, when dealing with historical evidence, and when making assessments of UXO risk, various assumptions have to be made which we have discussed and justified within this report. Our reports take a common-sense and practical approach to the assessment of UXO risk, and we strive to be reasonable and pragmatic in our conclusions. As referenced, it would be possible to undertake further research into this site, but based on the evidence to hand, this is not deemed strictly necessary, and no reasonably justifiable requirement for proactive on-site mitigation has been identified.

It should however be stressed that if any suspect items are encountered during the proposed works, 1st Line Defence should be contacted for advice/assistance, and to re-assess the risk as necessary. Furthermore, we would recommend that ground personnel are always made aware of the potential for encountering UXO, what to look out for and what to do in the unlikely event that a suspect item is encountered, and that a UXO Risk Management Plan is put together for the proposed works. We would be happy to provide a template and guidance for this – contact us on 01992 245020. Should the scope of works change or additional works be proposed, 1st Line Defence should be contacted to re-evaluate the risk.

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