



Express Preliminary UXO Risk Assessment

Client	Hydrock
Project	Chingford Development
Site Address	Access off St. Martins Road, Nottingham, NG8 3AR
Report Reference	EP5988-00
Date	01/02/18
Originator	OG

Assessment Objective

This preliminary risk assessment is a qualitative screening exercise to assess the likely potential of encountering unexploded ordnance (UXO) at the Chingford Development 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

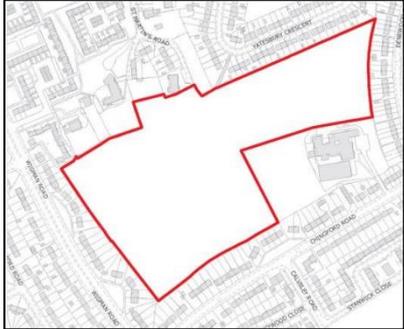
This assessment uses the sources of information available in-house to 1st Line Defence Ltd to enable the placement of a development site in context with events that may have led to the presence of German air-delivered or Allied military UXO. The report will identify any immediate necessity for risk mitigation 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.



Risk Assessment Considerations	
<p>Site location and description/current use</p>	<p>The site is located in Bilborough, within the City of Nottingham.</p> <p>The site is an irregular shaped parcel of land currently occupied by vegetation in use as a recreation area. It is bound by residential structures and their adjoining gardens on Yatesbury Crescent to the north, Denewood Crescent to the east, Chingford Road to the south, and Wigman Road to the west. St Martin’s Church borders to the north, with Westbury School to the south-east.</p> <p>The site is approximately centred on the OS grid reference: SK 5214141721.</p> 
<p>Are there any indicators of current/historical military activity on/close to the site?</p>	<p>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 or in the immediate vicinity of the site. In addition, no information of ordnance being stored, produced, or disposed of within the proposed site boundary could be found.</p> <p>The closest recorded Heavy Anti-Aircraft (HAA) battery was situated approximately 1.25km to the south-east of the site. The conditions in which unexploded anti-aircraft ordnance may have fallen unrecorded within the proposed site are analogous to that of aurally delivered Luftwaffe bombs. For a discussion on these conditions see the relevant sections below.</p>
<p>What was the pre- and post-WWII history of the site?</p>	<p>Pre-WWII the site was occupied and bordered by open and undeveloped agricultural land. St Martin’s Church and a roadway borders to the north, with Denewood Crescent to the east on 1938 historical OS mapping. Post-WWII mapping dated 1955 indicates that the site remained as open land now labelled as ‘playing fields’, although the surrounding area saw a number of significant developments. Immediately bordering the site to the east, south, and west are residential structures with their adjoining gardens and roadways.</p> <p>It is understood that the School to the east of the site was constructed by 1973, and the site has remained as open vegetated land according to recent aerial photography.</p>
<p>Was the area subject to bombing during WWII?</p>	<p>During WWII the site was located in the County Borough (C.B.) of Nottingham. Home Office (HO) statistics suggest that this area sustained a low density of bombing, with an average of 26.3 bombs recorded per 1,000 acres. This consisted of 422 high explosive (HE) bombs and 3 oil bombs culminating to 425 incidents over 16,172 acres.</p> <p>The site does not feature on mapping depicting the locality in the City of Nottingham most affected by HE bombs during WWII. This bomb plot map was published by the Nottingham Evening Post in May 1945. Although this map does not cover the site area in question, it indicates that the concentration of WWII bombing on Nottingham was situated away from the proposed site to the south-east towards the city centre.</p>
<p>Is there any evidence of bomb damage on/close to the site?</p>	<p>Due to the lack of structures present within the site during WWII, it has not been possible to ascertain if the site received bomb damage through historical OS mapping. High resolution WWII-era aerial photography would be required in order to identify any areas of ground disturbance and to understand the condition of the site during and immediately following the war.</p>



<p>To what degree would the site have been subject to access?</p>	<p>The site was situated in a largely rural area on the outskirts of the County Borough of Nottingham. A church was present to the north and a roadway to the east. While the area would have received some level of access, it is not considered likely that the site itself would have had specific post-raid inspections for evidence of UXO undertaken as it was occupied by undeveloped land which would not have been of importance.</p>
<p>To what degree has the site been developed post-WWII?</p>	<p>Limited post-war redevelopment appears to have taken place within the site, with OS mapping indicating that post-war the site became playing fields. While significant redevelopment has occurred in the surrounding area, the risk of UXO remaining is only considered to have been mitigated at the location of and down to the depth of any post-war foundations and excavations.</p>
<p>What is the nature and extent of the intrusive works proposed?</p>	<p>The proposed works are understood to include trial pitting using a mechanical excavator, and drilling window sample boreholes.</p>

Summary and Conclusions

During WWII the site was situated within the County Borough of Nottingham, which sustained a low density of bombing according to Home Office (HO) statistics. While the site does not feature within available bomb plot mapping for Nottingham, it does show that the proposed site is not situated within the area of concentrated bombing. Furthermore, no significant Luftwaffe targets are located within the vicinity. Historical OS mapping does not give any indication of damage to the structures in the site’s wider area including the nearby St Martins Church. No anecdotal evidence of bombing of the site or the wider area of Bilborough was found during the research for this preliminary report.

Recommendations

Given the findings of this preliminary report, it is recommended that **no further action** is taken for this site.

No evidence of significant risk of encountering UXO at the site of the proposed works could be found during preliminary research beyond the background risk of encountering UXO in this area of the UK. While 1st Line Defence cannot entirely discount the possibility that items of UXO could have fallen on the site undetected, it is not considered likely that further research undertaken in the form of a Detailed Risk Assessment, including the acquisition of additional information such as local archive records, would significantly alter the assessed risk level of minimal/low.

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