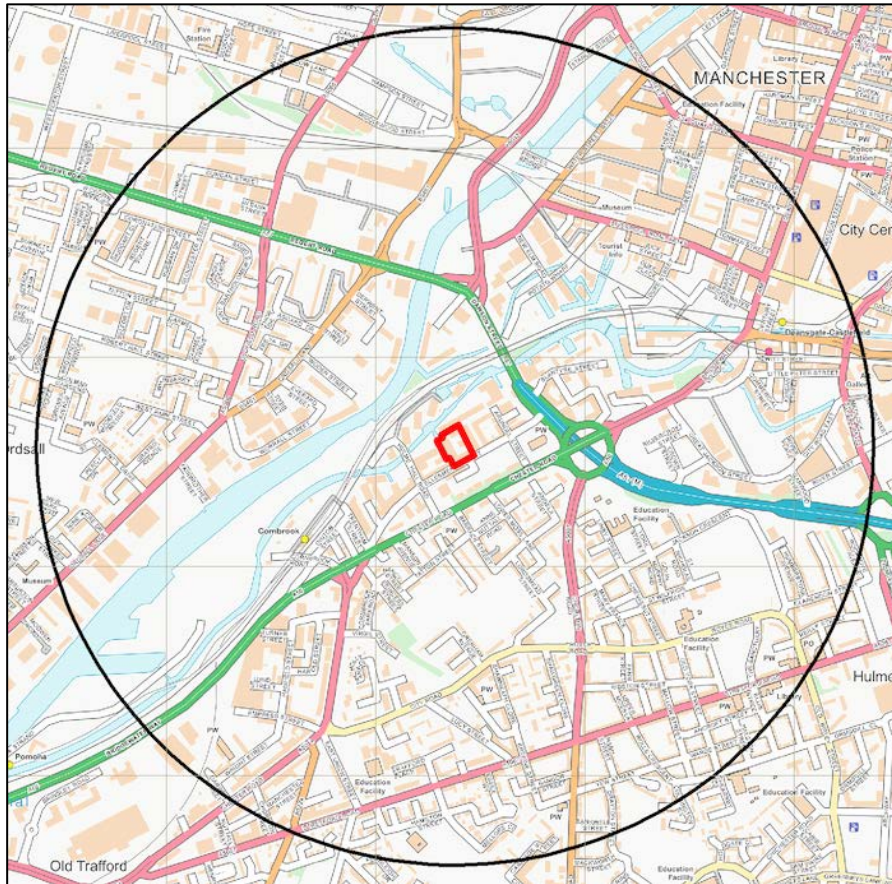


PRELIMINARY UNEXPLODED ORDNANCE (UXO) THREAT ASSESSMENT

Meeting the requirements of *CIRIA C681* 'Unexploded Ordnance (UXO) – A guide for the Construction Industry' Risk Management Framework



PROJECT NUMBER	P6074	ORIGINATOR	E. Petersen
VERSION NUMBER	1.0	REVIEWED BY	R. Griffiths (1 st August 2017)
CLIENT	Capital and Centric	RELEASED BY	L. Askham (2 nd August 2017)
SITE	Ellesmere Road, Manchester		
RATING	MEDIUM - This Site requires further action to reduce risk to ALARP during intrusive activities.		

STUDY SITE

The Study Site is described as 'Ellesmere Road, Manchester', and it is centred on National Grid Reference 382690, 397287.

THREAT POTENTIAL AND RECOMMENDATIONS

UXO PROBABILITY ASSESSMENT = 3 RATING, INDICATING A MEDIUM PROBABILITY OF UXO ENCOUNTER

The rating scale can be seen on *Figure 2* (Probability of UXO Encounter). In accordance with current guidelines (*CIRIA C681 Chapter 5*), the highest threat rating has been determined at this specific site for UXO threat consideration and has been used for the final assessment and recommendations.

In accordance with *CIRIA C681 Chapter 5* on managing UXO risks, *6 Alpha* recommends that the next stage in the risk management framework is:

DETAILED UXO THREAT & RISK ASSESSMENT



We would be pleased to provide this service, please contact *6 Alpha Associates* for further details.

REPORT SUMMARY

During WWII, the Study Site was situated within *Manchester County Borough*, which recorded six High Explosive (HE) bomb strikes per 100 hectares; a very low level of bombing.

Luftwaffe aerial reconnaissance photography associated with the Site identified a ship canal (155m west) and a works (240m west) as primary bombing targets. In addition, mills (on-site), an engineering works, a foundry and a works located in the vicinity may have been considered secondary bombing targets.

Air Raid Precaution (ARP) records did not identify any HE bomb strikes on-site. However, five HE bomb strikes were identified within 100m, the closest being 35m south of the Study Site.

Official bomb damage mapping identified damage to structures immediately east of the Study Site. In addition, an analysis of post-WWII mapping identified potential bomb damage 10m south and a 'ruin' located 215m to the south-east.

Given that a primary target and bomb damage was recorded in close proximity; it would suggest that further action is warranted to address the potential for UXO encounter.

USING THIS REPORT

This Preliminary Assessment is designed to inform environmental and construction professionals of the potential threat of military related explosives and/or ordnance on, or in, the vicinity of the Study Site.

This assessment is designed to be employed as a site-screening tool to meet with the requirement of Phase One of the *CIRIA UXO Risk Management Framework*; there are two broad prospective outcomes; either the threat level requires a detailed threat & risk assessment; or no further action is required. In the former instance we can provide a report within 14 working days (or more quickly upon application).

Two figures accompany the report, the *Second World War* (WWII) High Explosive (HE) Bomb Density and the final Probability of UXO Encounter. The purpose of this approach is to demonstrate that whilst bomb density statistics give an indication for WWII bombing, they should not be relied upon exclusively to generate a holistic assessment.

For further information, please contact *6 Alpha*:

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DATA FINDINGS

Threat Source (within 1,000m)	Detail	
	Identified	Comments
 Airfields/Military Facilities	✗	None recorded within 1,000m.
 Ordnance Manufacture/Storage	✓	A WWI munitions factory (730m north-east).
 WWII Decoy Bombing Sites	✗	None recorded within 1,000m.
 WWII Defensive Features	✗	None recorded within 1,000m.
 WWII <i>Luftwaffe</i> Designated Bombing Targets	✓	<i>Luftwaffe</i> aerial photography identified a ship canal (155m west) and a works (240m west) as primary bombing targets.
 Secondary Bombing Targets	✓	Mills (on-site), an engineering works (on-site), a foundry (10m south) and a works (25m east).
 WWII Bomb Strikes Within Site Boundary	✗	ARP records did not identify any HE bomb strikes on-site.
 WWII Bomb Strikes Near Site Boundary	✓	ARP records identified HE bomb strikes 35m south, 40m east, 45m south, 85m east and 100m south.
 WWII Bomb Damage	✓	Official bomb damage mapping recorded damage to structures immediately east.
 Abandoned Bomb Register	✗	The official abandoned bomb list did not identify any abandoned bombs within 1,000m.
 WWII Bombing Density Per 100 Hectares	✓	The Site was located within <i>Manchester County Borough</i> , which recorded six HE bomb strikes per 100 hectares.

IMPORTANT NOTES

1. The term 'Preliminary UXO Threat Assessment' has been used to describe this report, to fall in line with the *CIRIA* C681 guidelines. Whilst the term 'Risk' can be justifiably used at this stage, the reader should note that the 'Consequence' function of 'Risk' is not considered. Should it be required, this would be addressed in the 'Detailed UXO Threat & Risk Assessment' (Stages 2 and 3).
2. This report is accurate and up to date at the time of writing.
3. The assessment levels have been generated from historical data and third party sources. Where possible *6 Alpha* have sought to verify the accuracy of such data, but cannot be held accountable for inherent errors that may be in third party data sets (e.g. *National Archives* or library sources).
4. *6 Alpha* have exercised all reasonable care, skill and due diligence in producing this service.
5. Whilst every effort has been used to identify all potential UXO/explosive threats, there were a number of private facilities, which may not have released privately recorded information concerning UXO/explosive threats into the public domain. It is therefore possible that some of the aforementioned sites may not be included within the database.



ELLESMERE ROAD, MANCHESTER

Probability of UXO Encounter

