

Former Whitemoss Community Resource Centre

Phase 1 Preliminary Risk Assessment

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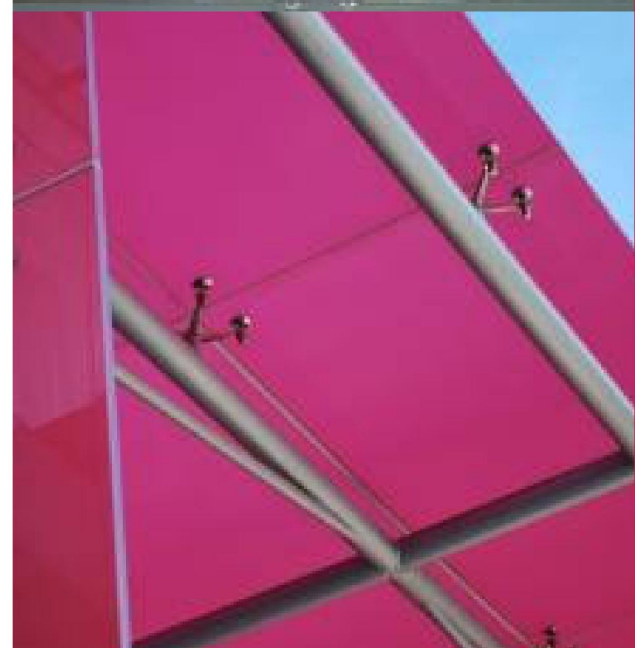
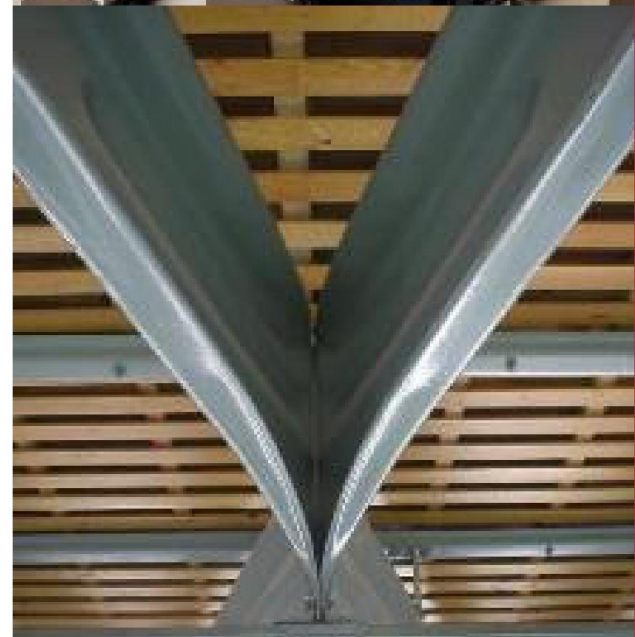
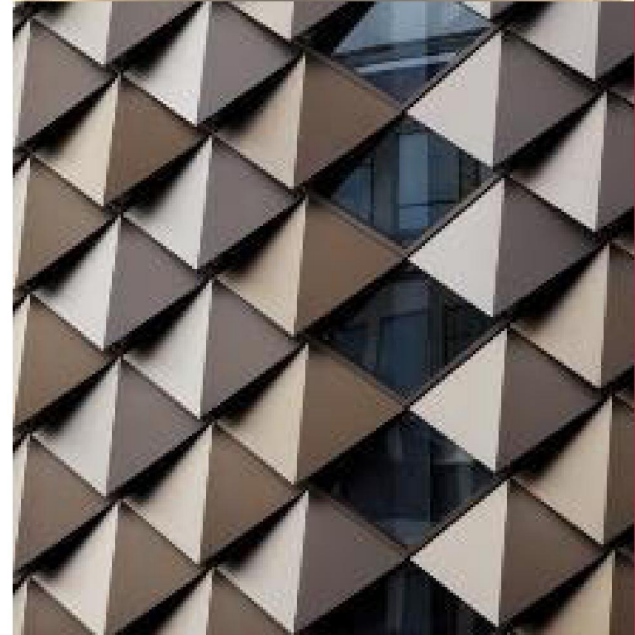
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Client Name: One Manchester Housing

Client Address: Lovell House, Archway 6, Hulme, Manchester, M15 5RN

Site Address: Former Whitemoss Community Resource Centre, Benmore Road, Manchester M9 6EH



Rev	Description	Issued by	Checked	Date

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Executive Summary

Appointment	In March 2021 Curtins were instructed by One Manchester Housing on behalf of Guinness Homes to undertake a Phase 1 Preliminary Risk Assessment of a plot of land known as the former Whitemoss Community Resource Centre, Manchester M9 6EH. The site is centred on NGR SD 86650 03520 and covers an area of approximately 0.53 Ha. It is understood that the site is to be redeveloped into residential dwellings.
Current Site Status	The site is located east of Benmore Road and encompasses an area of vacant land with grass surface cover. The sites topography is generally level with sparse vegetation across the land.
Site History	Earliest mapping (1848) shows that the site was undeveloped and surrounded by farmland with several ponds noted within 250m of the site, all of which are infilled by 1980. A farm is located 190m west of the site (demolished around 1975) and a large wooded area from 65m southwest of the site. Through the 1930s to 50s the site remains unchanged with continued residential development first to the north and northwest, then from 1954 in all other directions. An electric substation is noted 224m northeast of site, and several schools appear in the area. From 1963 an irregular shaped building occupies the majority of site, named Whitemoss, the home for the elderly. By present day the building is no longer on site, demolished sometime between 2016 and 2021. Throughout the site's history, its local surroundings are generally occupied by residential properties with limited contaminative potential.
Geology	BGS mapping indicates the site is underlain by Glacial Till Deposits, Devensian superficial deposits, and the Pennine Lower Coal Measures Formation bedrock for the majority of the site and the Pennine Middle Coal Measures Formation bedrock in the southern corner of site. The BGS borehole scans close to the site encountered Topsoil/Made Ground overlying alternating bands of clay and sand. The site is located in a low probability radon area where 1-3% of homes are estimated to be at or above the radon Action Level.
Mining	The site is located within a Coal Mining reporting area. A review of available online data indicates the site is not located within the vicinity of recorded mine entries, or a development high risk area. The risk from shallow coal mining is therefore considered to be Low.
Hydrogeology	The site is underlain by a Secondary A Aquifer associated with the bedrock formations. The superficial deposits are designated as a Secondary Undifferentiated Aquifer. The site is not located within a Source Protection Zone (SPZ). There are no potable groundwater abstraction points within 1km.
Hydrology	The nearest surface water feature is an issue 158m south of the site. There are no surface water abstractions within 1km. There is one discharge consent within 500m of the site located 432m north for the sewage storm overflow of public sewage.
Unexploded Ordnance	The risk from UXO associated with WWII bombing to future intrusive investigation works is considered to be Low.
Initial Ground Contamination Assessment	The risk from Made Ground posed to the site's end-users and construction workers is considered to be Moderate / Low due to the anticipated lack of contamination in the Made Ground. The risk posed to controlled water is considered to be Low and Very Low due to low permeability superficial soils and the distance to the nearest surface water feature. The risk posed to site end-users from ground generating gases arising from organic / putrescible soils near the site is considered to be Moderate.
Recommendations	The following recommendations are made with regards to further works at the site: - Undertake a GQRA as part of the ground investigation; and - Undertake Ground Gas Monitoring over a period of two-three months for methane, carbon dioxide, oxygen, hydrogen sulphide, gas flow in l/hr, weather conditions and barometric pressure (with confirmation if falling, steady or rising). It is further recommended that this work is completed in advance of any development works taking place.

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Appendices

- Appendix A Drawings**
- Appendix B Envirocheck Report**
- Appendix C Qualitative Risk Assessment Rationale**

1.0 Introduction

1.1 Project Background

In March 2021 Curtins were instructed by One Manchester Housing on behalf of Guinness Homes to undertake a Phase 1 Preliminary Risk Assessment of the former Whitemoss Community Resource Centre, Manchester M9 6EH.

The location and extent of the site is shown in *Figure 2.1* on the following page. It is understood that the site is to be redeveloped into residential dwellings.

At the time of writing, no proposed site plans were available for review.

1.2 Scope of Services

The Phase 1 PRA is intended to provide an overview of the geo-environmental and geotechnical setting of the site, prior to the proposed development of the site.

Through this overview, the Phase 1 PRA aims to develop both a working conceptual and ground model for the site, as well as present an initial assessment of any risks that could be presented to the development including its intended end users and the wider environment.

Specifically, the Phase 1 PRA provides an initial assessment of the site regarding:

- a) Potential on and offsite contamination from historical and/or current uses, including potential ground gas generating sources;
- b) The potential impact on the wider environment by historical and or current use of the site of interest;
- c) The potential impact from surrounding land uses and other environmental factors;
- d) Potential problems associated with geological features such as faulting, mineral extraction, mining and land instability; and
- e) The location of apparent sub-surface structures that may affect the proposed redevelopment.

Consideration of detailed flood risk, ecology and archaeological issues are outside of the scope of this report.

2.0 Current Site and Surrounding Area Details

2.1 Site Location and Current Details

Site use, location and description are shown below in *Table 2.1* and *Figure 2.1*.

Table 2.1 – Site Details

Site Address	Whitemoss Community Resource Centre, Benmore Road, Manchester M9 6EH
NGR	SD 86650 03520
Area of Site	Approximately 0.53 Ha.
Current Site Use and Description	The site is located east of Benmore Road and surrounded by residential developments and associated roads. The site is currently occupied by public open space, with grass surface cover. The site is relatively flat, with sparse vegetation across the land.

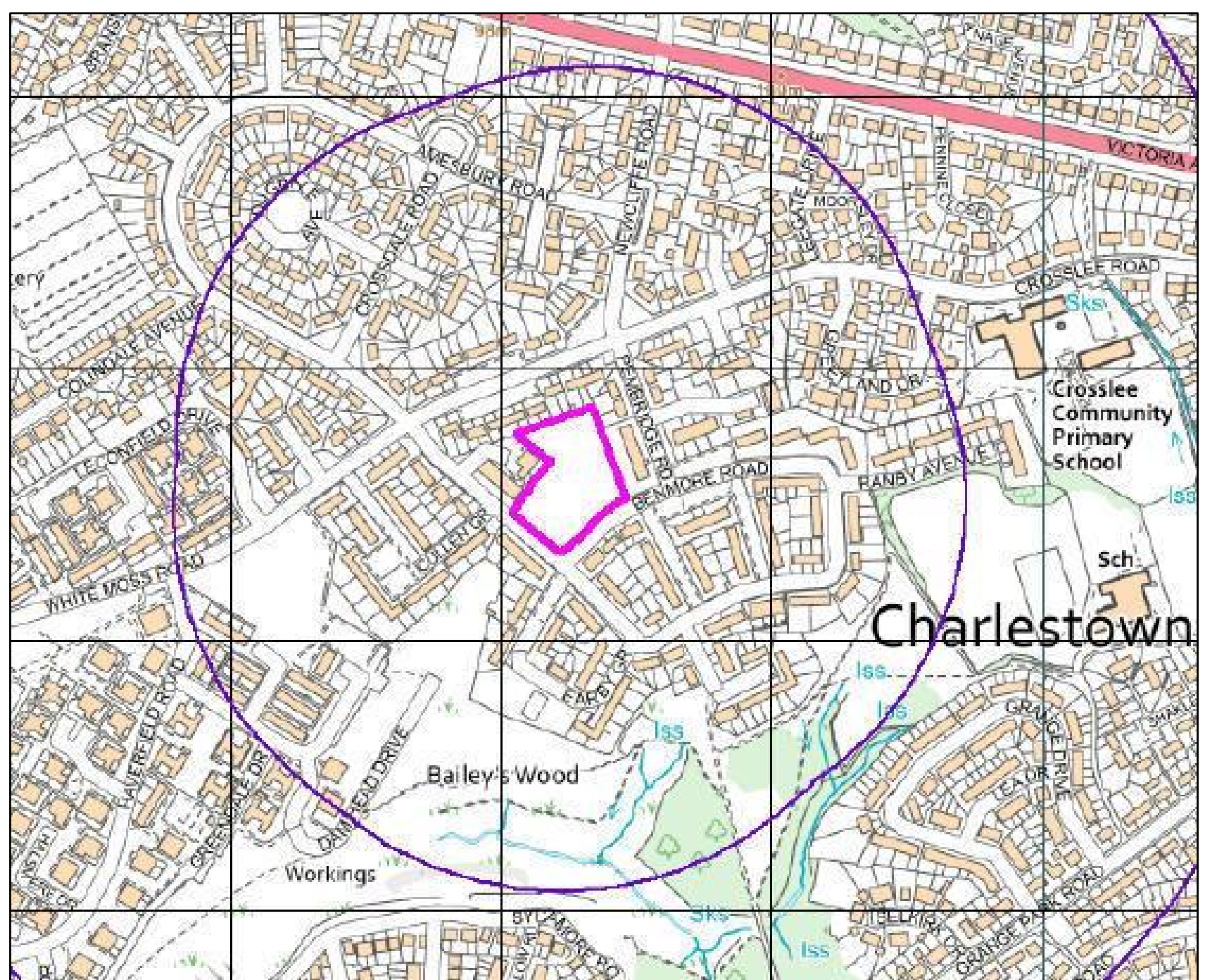


Figure 2.1 – Site Location Plan (site boundary shown in pink and 250m buffer in purple).
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2.2 Surrounding Area Details

The following information was established through undertaking an environmental database search. The full Envirocheck report (Ref. 1) is included in *Appendix B*.

Table 2.2 – Surrounding Land Uses

Surrounding Area	N	Residential developments followed by White Moss Road.
	E	Pembridge Road followed by residential developments.
	W	Benmore Road followed by residential developments and dense areas of vegetation, associated with the wooded area 130m to the south.
	S	Benmore Road followed by residential developments.

3.0 Site History

A review of the available historical mapping and other information for the site, as presented within the Envirocheck Report (Ref. 1), has been undertaken and is presented in *Table 3.0* below.

Table 3.0 – Previous Site and Surrounding Area Uses and Potential Sources of Contamination. *Bold text refers to on-site activity.*

Date	Description	Potential Sources of Contamination
1848 – 1932	The earliest available mapping (1848) shows the site as undeveloped land, forming part of wider agricultural fields. In the surrounding area, the Dam Head Farm is located 190m west of the site, with two ponds 163m (from 1848) and 190m (from 1893) west in close proximity to the farm. Several other ponds are noted within 250m of the site including two 204m and 241m northwest, three 109m, 165m and 194m north, two 33m and 43m east, and two 128m and 159m southeast of the site. A wooded area is located from 65m southwest of the site, becoming widespread 194m south, later named Bailey’s Wood from 1893. A small watercourse (issue) runs towards the west, 225m south of the site through the wood, with smaller tributaries connecting flowing south from 20m southwest of the site. Several buildings named as <i>New Houses</i> are noted 90m north of the site. From 1909 the ponds 190m west and 159m southeast of site are no longer present on the historical maps.	• No local sources of contamination identified until 1909. • Potential contamination from infill of pond off-site with unknown material from 1909.
1932 - 1950s	The site remains unchanged. Ponds to the north and northwest are no longer present on historical maps. Surrounding area directly north of the site boundary populated with residential developments. White Moss Road constructed parallel to the site boundary, approximately 30m to the north.	• Potential for uncontrolled deposition of Made Ground off-site during construction of residential developments and associated roads.
1950s	The site remains unchanged. The surrounding area becomes increasingly developed with residential developments. A playing field is located 111m northeast and Crosslee Primary School 216m northeast of the site. An electric substation is located 224m northeast of the site and an electricity pylon 225m northeast. The pond 33m southeast of the site appears on historical mapping to have increased in size. From 1954 surrounding land in all directions of site becomes populated with residential developments and associated roads. All ponds to the east and southeast are no longer present on historical mapping.	• Potential for uncontrolled deposition of Made Ground off-site during construction of residential developments and associated roads. • Potential contamination from infill of pond off-site with unknown material.

Date	Description	Potential Sources of Contamination
1963 - 2016	A large irregular shaped building across the majority of site named <i>Whitemoss</i>; a care home for the elderly. Continued construction of residential developments in the surrounding area. The playing field no longer appears on historical mapping, instead White Moss School is constructed. From 1975 Dam Head Farm is no longer present on historical mapping. From 1980 the White Moss School is redeveloped into residential developments. The pond the 163m west of site no longer appears on historical mapping.	• Potential for uncontrolled deposition of Made Ground on-site during construction of care home. • Potential for uncontrolled deposition of Made Ground off-site during construction of residential developments and associated roads. • Potential contamination from infill of pond off-site with unknown material.
2016 - present	The building on site is demolished and the area appears as vacant land with grass surface covering. No significant changes in the surrounding area, continued development and redevelopment of residential dwellings.	• Potential for uncontrolled deposition of Made Ground on-site during demolition of the care home.

Potential sources of onsite contamination are further discussed in *Section 6.0*.