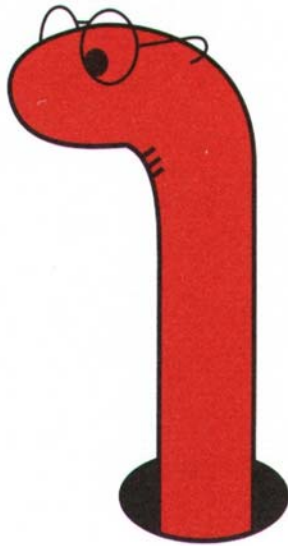


Electronic Report



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MOUNT PLEASANT, SIMISTER, BURY, M25 2SJ

PROPOSED INVESTIGATION

INTRODUCTION

A residential development is proposed. Following a PRA (22/5/25) the objective is to design a suitable investigation to consider contamination, landfill gas and geotechnical issues.

SITE DESCRIPTION

The site is an irregular shaped plot, about 100 by 70m, located to the southeast of Mount Pleasant in Simister, Bury and at OS Grid Reference 383600, 405850. The site comprises an overgrown plot with a small section of a larger pond encroaching onto the northwest corner and an area of hard-standing at the south corner (taken from aerial photographs). The overgrown site prevented a detailed inspection, limiting it to the site entrance.

The area slopes down to the southeast. To the northwest and south are houses, to the northeast and southwest are fields and to the west is a pond.

PROPOSED DEVELOPMENT

It is proposed to build one pair of semi-detached houses at the north middle and a block of five town houses at the southwest. Each houses will have associated driveways and private gardens. The southeast and northeast of the site will be used as a wildflower meadow.

INDUSTRY PROFILE

Although the site has had no industrial use and there have been no nearby industrial sites there is suspected hard-standing at the south corner and the following may be present:

- Heavy metals (arsenic, copper, lead, etc)
- Asbestos
- Inorganics (sulphate, cyanide)
- Oil/petrol/diesel (TPHs)
- General hydrocarbons (PAHs)

CONCEPTUAL MODEL

Source	Receptors	Pathway	Potential/Likely Pollutant Linkage
Asbestos	End-users	Inhalation	No – majority of site Possible – south corner
	Off-site	Migration off-site	Unlikely
Inorganic contaminants	Householders	Direct contact, ingestion, from home grown vegetables, ingestion and inhalation of dust	No – majority of site Yes – south corner
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Sulphate	Building fabric	Concrete directly in contact with soil	No – majority of site Yes – south corner
Hydrocarbons	Householders	Direct contact, ingestion, from home grown vegetables, ingestion and inhalation of dust	No – majority of site Yes – south corner
	Service pipes	Seeping into drinking water pipes	Unlikely
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Hydrocarbon vapours	Householders	Inhalation of vapours indoors and outdoors	No
Landfill gas	End-users (inside)	Seeping into buildings, explosion, asphyxiation	Yes
Radon	End-users (inside)	Seeping into buildings	No

PROPOSED INVESTIGATION

Contamination

Taking into account the site history it is thought unlikely that contamination will be present over most of the site at raised levels. However, low levels of contaminants, exceeding stringent residential thresholds, may be present around the south corner. Bearing in mind the proposed, sensitive, end-use a limited investigation is suggested, consisting of boreholes/trial holes and tests to confirm the findings of this desk study, this will also help to classify soils for disposal off-site, design buried concrete and select appropriate water pipes.

The south corner is a specific point source for contaminant and the investigation will need to target this with a lower density of sample locations elsewhere.

Proposed Action

- *Drill 7 boreholes to about 6m deep and excavate 4 trial holes up to 0.6 – 1.0m deep.*
- *Test 9 shallow samples (about 0.25m deep) and 2 deeper samples for: heavy metals, cyanide, sulphate, PAHs, TPHs, phenols and asbestos.*

Controlled Waters

No risk to controlled water is expected and no further action is considered necessary at this stage. This may need to be reviewed following the soil tests.

Landfill Gas/Ground Gas

There are two inert waste landfill sites from which a low gas risk is anticipated. A gas testing programme is required.

Proposed Action

- *Install 4 gas monitoring wells.*
- *Test for methane, carbon dioxide and gas outflow on 6 occasions over 3 months.*

Radon

Radon protection measures are not required.

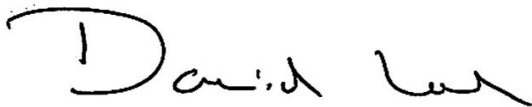
Foundations

A series of boreholes are required in the area of the proposed building to allow the most suitable foundations to be designed.

General

The PRA, and these proposals, should be issued to the Local Authority for their comments before proceeding with the investigation.

Yours faithfully
on behalf of Worms Eye Ltd

A handwritten signature in black ink, appearing to read 'David Lord', with a stylized flourish at the end.

David Lord
BSc (Hons)
FGS, MEnvSc, AIEMA