

Wain Estates

Mineral Assessment Report

For

Scobell Street, Bury

May 2024

REPORT NO: 24CHE349/MAR

- *Desk Studies and Site Walkovers*
- *Intrusive Contaminated Land Investigations*
- *Geotechnical Appraisals and Ground Investigations*
- *Landfill Gas Assessments and Remedial Design*
- *Remediation Design and Implementation*
- *Remediation Project Management and Supervision*
- *Site Abnormal Assessments (Foundations and Contaminated Land)*

GEOTECHNICAL - CONTAMINATED LAND - FLOOD RISK

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DOCUMENT ISSUE RECORD

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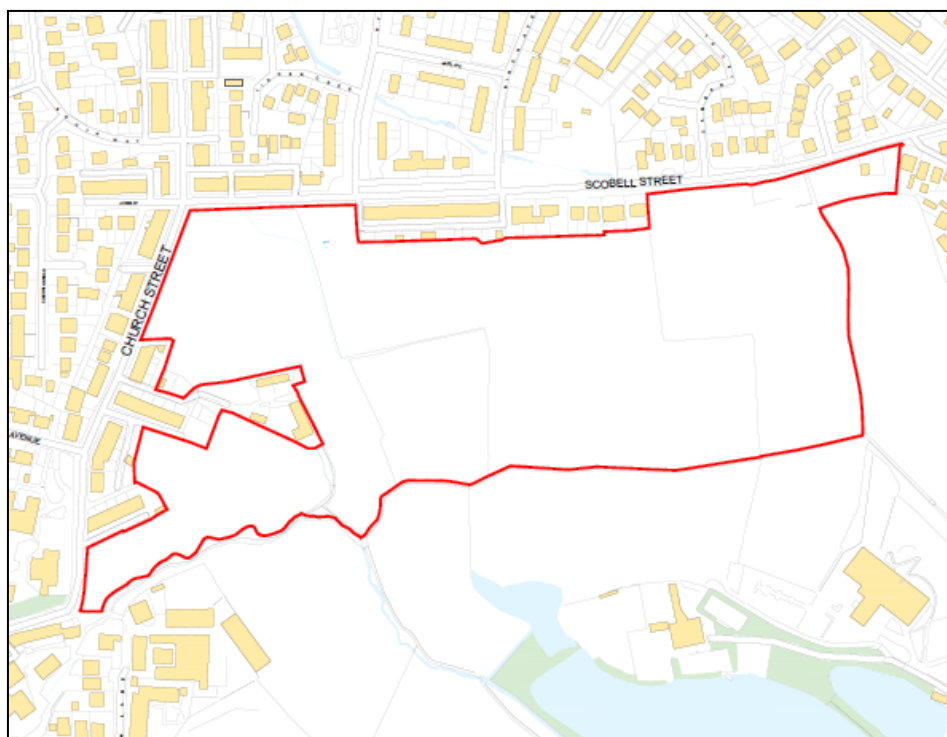
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1 SITE DESCRIPTION

1.1 Introduction

This investigation was carried out on the instruction of Wain Estates. The purpose of the work was to carry out a Mineral Assessment Report in connection with a detailed planning permission application regarding a proposed residential development at an area of land off Scobell Street, Bury. The site red edge can be seen below;



The Planning Policy for the site has the following requirement 'Consider the extraction of any viable mineral resources within Mineral Safeguarding Areas, in accordance with Policy 8 of the Greater Manchester Joint Minerals Development Plan (or any relevant policies in subsequent minerals plans).'

In light of the established principle of mineral safeguarding within national planning policy, it is necessary to determine the extent and quality of any resource and quality of any resource and likelihood of this being able to be worked in an environmentally friendly way.

This purpose of this report is, therefore, is to assess if the minerals both on and under site are ever likely to achieve planning permission for extraction, given its setting and the prevailing circumstances.

1.1.1 Proposed Development

The proposed development consists residential dwellings, public open space and associated infrastructure.

1.2 Site Location

The site is located off Scobell Street, Bury. The coordinates on the National Grid Reference is 378060, 412040. The site is approximately 11.75 hectares in total. See Site Location Plan in Appendix A.

1.3 Site Description

The following description has been taken from a third party desk study provided to Betts Geo by the client. This desk study is as follows:

- Phase 1 Desk Study Report for Land off Scobell Street, Bury by Clancy Consulting for Wain Estates (Land) Ltd – April 2024 – Report no: 10/2399/001 Rev. 00

Whilst Betts Geo Environmental Ltd cannot be held liable for the third party, client furnished, results/data, it is suggested that it is reasonable to assume that the data provided in these reports have been undertaken with suitable care and due diligence by suitably experience consultants. As such the data is regarded as being of an appropriate standard to utilise within this report.

1.3.1 On Site and Surrounding Area

“Copthorne Cattery buildings are present in the west of the site, with the remaining areas forming predominantly undeveloped grassland with shrubs and trees. An unnamed stream is present in the north west of the site, leading to “sinks” in the central western part of the site. A spring is located in the south west with a drainage ditch or small stream leading southwards.

There is evidence of invasive plant species being present in the north east and south west of site.

The surrounding area is predominantly residential in nature. A stream is located 15m to the north of the site with Walshaw Brook forming part of the southern site boundary.”

1.4 Site History

“The majority of the site has been largely undeveloped though several small buildings have been constructed and demolished in the central and western parts of the site over time. A sand pit and brick works were also historically located in the north east of the site. The Copthorne Cattery buildings have been present in the west of the site prior to the first available OS historical map of the area in the 1800s and has remained largely unchanged. A well was located in the south west of the site before later being shown as a spring, which is still present. Another well was historically present on the north eastern boundary of the site.

The surrounding area has had a varied development history including industrial and residential uses. Mills, works, a laundry, reservoirs, pits, quarries and refuse heaps have all historically been within close proximity to the site.”

1.5 Geology

"The area is indicated to be underlain by both Glaciofluvial Deposits and Devensian Till, with solid strata indicated to be a mix of sandstone, siltstone, mudstone and coal of the Pennine Lower Coal Measures, Canal Rock and Old Lawrence Rock.

Historic borehole records from within the surrounding area indicate a variable depth of Made Ground, up to 5.80mbgl. Natural strata were noted to be a mix of sands, gravels and locally silts underlain by sandy and gravelly clay with bands of sand and gravel. Bedrock was encountered from approximately 20m to 30m bgl within the wider area.

The site is located within a Coal Mining Reporting Area, with an area of Development High Risk across the middle of the site. The western part of the Development High Risk Area is also indicated to be at risk from probable shallow mine workings. A mine entry is indicated to be present in the south west of the site with a further mine entry immediately south of the site boundary."

The historic sand pit on site is a recorded mineral site. Areas of worked ground are shown in the north east of site, in the location of this sand pit. Further mineral sites are also recorded within the wider area."

No ground investigation has been carried out on site to date. Historic borehole records from within the surrounding area indicate a variable depth of Made Ground, up to 5.80mbgl. Natural strata were noted to be a mix of sands, gravels and locally silts underlain by sandy and gravelly clay with bands of sand and gravel. Bedrock was encountered from approximately 20m to 30m bgl within the wider area.

2 MINERAL PLANNING

2.1 Policies

The Greater Manchester Joint Minerals Plan details the following minerals as either currently of economic importance or have the potential to become important in the future:

- Glaciofluvial sand and gravel
- Carboniferous Millstone Grit (sandstone)
- Brickclay with Surface Mined Coal (Shallow Coal)

Based on the findings of the third party Desk Study, both sand & gravel and shallow coal is anticipated on site.

Policy 8 of the Plan stated the proposals for non-mineral development within the Mineral Safeguarding Areas that do not allow for the prior extraction of minerals will only be permitted where:

1. The need for the development outweighs the need to extract the mineral; or
2. It can be clearly demonstrated that it is not environmentally acceptable or economically viable to extract the mineral prior to non-mineral development taking place; or;
3. It can be clearly demonstrated that the mineral is either not present or of no economic value or too deep to extract in relation to the proposed development; or;
4. The development is limited ⁽¹⁰⁾ or temporary and would not prevent minerals extraction taking place in the future.

3 SITE SUITABILITY

3.1 Constraints upon Mineral Development

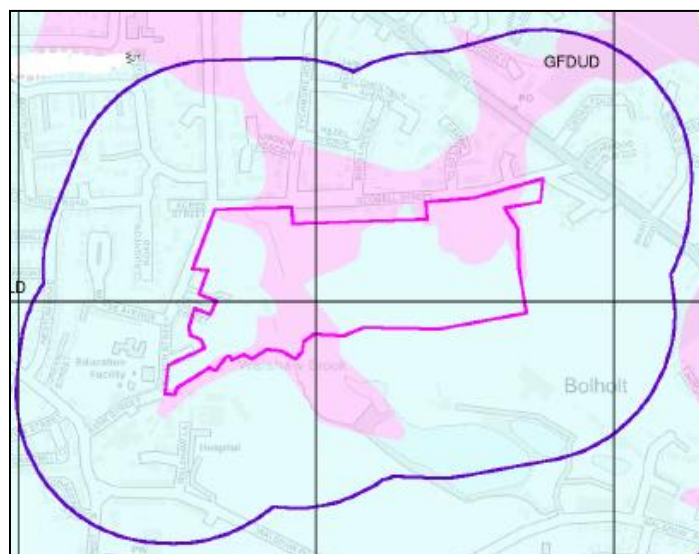
The application sites lie within a Minerals Safeguarding Area for sand & gravel and shallow coal. This policy requires proposals for development other than non-mineral extraction, to demonstrate that they will not sterilise the resource or that consideration has been given to prior extraction, on site constraints and the need for the proposed development. In relation to the land at Scobell Street, the primary considerations are as follows:

- Topography
- Ground Conditions
- Land Ownership
- Residential Amenity
- Previous Mining
- Groundwater & Surface water

3.2 Topography

The site generally slopes from west (approximately 135m to 130m AOD) to the east and south east (approximately 120m AOD) with an approximate change in elevation of 10m to 15m. Steeper slopes are present around the north western boundary and west of the site, where the site dips towards the stream/drainage ditch. A small raised area is present in the centre of the site with an elevation of 126m AOD.

At this stage, proposed levels are not known, however it is presumed that some earthworks will be undertaken to level the site. It is likely that the higher elevations will be cut and the lower elevations will be filled. Looking at the published superficial geology for the site, sand and gravel areas are localised centrally on site, and the majority of site is anticipated to be glacial till (see extract below – sand and gravel shown in pink). As a result, it is anticipated that limited sand & gravel will be exposed during any earthworks required on the site.



Referring to Policy 8 – It can be clearly demonstrated that the mineral is either not present or of no economic value.

3.3 Ground Conditions

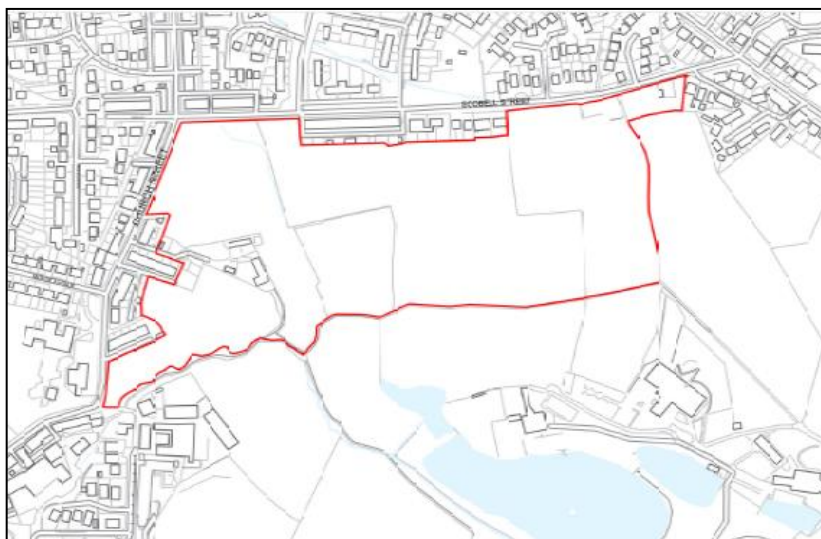
Nearby boreholes suggest that the sand and gravels are found in localised pockets/found as bands and therefore their occurrence can be unpredictable. Any shallow coal is also likely to be >10m bgl meaning extraction is likely to be uneconomic. Extraction is not proposed as part of the development. Referring to Policy 8 – It can be clearly demonstrated that the mineral is either not present or of no economic value or too deep to extract in relation to the proposed development.

3.4 Land Ownership

The application site falls within the control of Wain Estates. Any potential for mineral extraction would be dependent upon the willingness of the owners to put forward their land for such development. Whilst it may be subject to change, the position of the landowner is a critical factor and potentially an absolute constraint to minerals development for the foreseeable future.

3.5 Residential Amenity

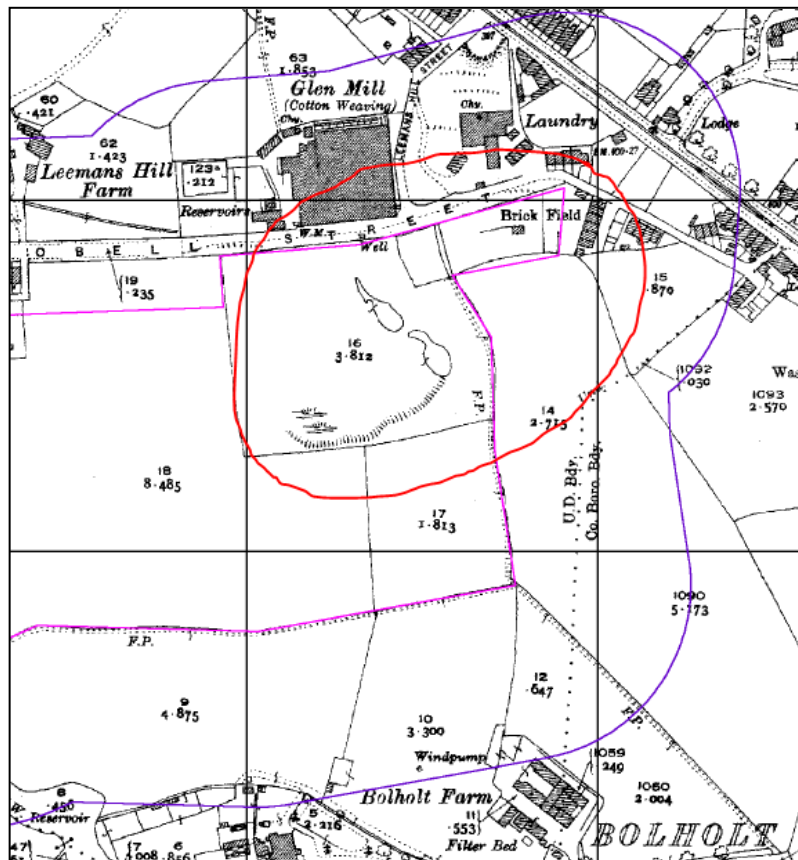
There is currently no statutory guidance on minimum working distances of mineral sites from houses. However, Technical Guidance to the Framework states that permissions for mineral extraction close to residential property may not provide adequate protection and in some cases it may be justified to consider adequate separation distances. Any such distance should be effective but reasonable. The site adjoins the existing residential properties along the northern and western boundary of the site (see below). The proximity to housing would, therefore, present a significant consideration for any future mineral working proposal in terms of resultant impacts arising from noise, dust, air quality, traffic and visual intrusion.



In consideration of the potential noise and dust impacts, minimum working distances from infrastructure and utilities are usually based upon cautious geotechnical criteria and would be likely to require an unworked margin of at least 100m, between the edge of any proposed mineral working and the existing properties / public highway.

Referring to Policy 8 – It can be clearly demonstrated that it is not environmentally acceptable or economically viable to extract the mineral prior to non-mineral development taking place.

As mentioned in the third party Desk Study report, a sand pit and brick works were also historically located in the north east of the site (see extract below).



The historic mining in the area is likely to have removed all of the available and economically viable sand & gravel from the area, as it is anticipated to be localised based on the superficial geology map.

In relation to shallow coal mining onsite, the desk study concludes that the site is at high risk from shallow coal mining. Two coal seams sub-crop beneath the site and a mine entry is indicated to be present in the south west of site with a further mine entry immediately south of site. As with the sand & gravels, the historic mining in the area is likely to have removed all of the economically viable shallow coal from the area.

Referring to Policy 8 – It can be clearly demonstrated that the mineral is either not present or of no economic value.

3.7 Groundwater & Surface Water

An unnamed stream is present running north to south in the west of the site, connecting to Walshaw Brook which forms the south western boundary of the site.

A number of sinks and issues are also noted on site in the historic maps indicating shallow groundwater. Shallow groundwater will make mineral extraction problematic and potentially uneconomically viable.

The environmental database report obtained for the third party desk study indicates there is a potential for groundwater flooding to occur at the ground surface. Parts of the north east of the site, eastern boundary of the site, along the surface water feature in the west of the site and the south western boundary of the site are also indicated to be at risk from surface water flooding/pluvial flooding.

Referring to Policy 8 – It can be clearly demonstrated that it is not environmentally acceptable to extract the mineral prior to non-mineral development taking place. Policy 2 also states that proposals for minerals working will be permitted where any adverse impacts on the following criteria is avoided or appropriately mitigated: controlled waters and flood risk management.

3.8 Summary

In summary, the site has a number of constraints that make mineral extract of the underlying sand & gravels and shallow coal both environmentally unacceptable or uneconomically viable. The site is bounded by residential properties to the north and west, is likely to contain shallow groundwater, and has previously been used as an extraction site for a neighbouring brickworks.

The majority of site is anticipated to be covered by glacial till, with only localised areas anticipated to contain the sands & gravels covered by the Greater Manchester Joint Minerals Plan. It is also anticipated that due to development levels, any significant change in levels for removal of the remaining sand & gravels and shallow coal would not be viable.

4 REFERENCES

- 4.1** *BS 5930:2015 Code of Practice for Ground Investigation.*
- 4.2** CIRIA 'Abandoned Mine Workings Manual (C758D)' 2019
- 4.3** Greater Manchester Joint Minerals Plan – Development Plan Document – April 2013.