

PLACE DIRECTORATE
South Yorkshire Mining Advisory Service



To: Asset Management

FAO: Bethany Pell

My Ref: M3377/7

Your Ref: (S70 4SN)

Date: 20th December 2017

Enquiries to: Mr. M. Lyons

Ext: 2690

Subject: LAND OFF GROVE STREET, WORSBROUGH, BARNSELY S70 4SN.

Further to your consultation request of the 7th December 2017, regarding the above named site, I can confirm the following report for the geological, mining and past land use for the area.

Situation

The site under consideration for future works or development is shown edged orange on the attached plan no. M3377/7A.

Geology

The site is shown to be located on shales and mudstones of the Middle Coal Measures as indicated on the above plan. No geological faulting is conjectured in the vicinity of the site.

The Two Foot Coal Seam (of around 700mm thickness) is conjectured to outcrop some 30m away to the south-west as indicated on plan. Given the dip of the strata (around 1 in 10 to the north-east) this coal is expected to be around 5m deep beneath the site.

The Winter Coal Seam (around 800mm thickness) is conjectured to outcrop some 90m further to the south-west as shown. According to nearby mine shaft section detail the Winter seam lies around 14m below the Two Foot seam, which correlates well in terms of the conjectured outcrop positions, lay of the land and dip of strata.

The Meltonfield Coal Seam is conjectured to outcrop some 20m away to the north-east which should dip away clear of the site. As such this coal is not expected at shallow depth.

No alluvium or made ground is indicated in the immediate vicinity of the site; depth to bedrock beneath surface soils is uncertain.

Shallow Mining

Although no shallow coal mining of the Two Foot Coal Seam is known in the vicinity of the site, underground workings are known in the wider vicinity, the closest being around 650m away to the south-east from the small 'Lewden Bridge' pit/colliery which was abandoned in 1912. As such, unchartered workings of this coal should not be ruled out and if present then they are likely to be at a depth that would affect surface stability.

The deeper Winter seam is anticipated at a depth that should not affect surface stability be it worked or otherwise, even if the Two Foot seam is also worked.

Deep Mining

Deep mining has taken place beneath this area in several coal seams, the latest being in the Lidget Coal Seam at around 270m deep in 1967. All movement associated with these workings will be long complete, and as no coalfields now exist it should remain stable from the deep mining subsidence aspect for the foreseeable future.

Opencast Mining

No opencast mining is known within the vicinity of this site.

Mine Entries

None known in the vicinity of the site. Some risk will exist however for unknown historic shafts being present considering the likely shallow workable coal.

Fugitive Gas

None known in the area. However some risk will exist considering the potential shallow workable coal seam, particularly if any associated workings are present.

Past Land Use

According to historical records, the land was previously occupied by residential dwellings. No industrial uses are apparent.

Landfill

According to the current Borough Landfill Site Map, the site does not lie within 250m of a past landfill operation.

Conclusions

1. The site is stable from the deep mining subsidence aspect and should remain so for the foreseeable future.
2. The risk of shallow coal workings causing a stability concern to future development is considered as **MEDIUM to HIGH** in this instance. With regards any future planning applications for development of this land a Coal Mining Risk Assessment would be required which is most likely to conclude that an intrusive site investigation is required to safeguard from any associated stability issues.

3. A slight risk may be present for coal being encountered at the surface if the conjectured outcrop positions are not accurate. As such, any coal encountered should be removed and blinded off to help prevent spontaneous combustion from occurring, with foundations sited on firm ground beneath any coal seam horizons.
4. Although no mine entries are known within site or in close proximity, a watching brief would be recommended during any future development for any associated signs of such a feature considering the shallow workable coal. If a suspected feature is encountered then Coal Authority (as potential owners) should be consulted for verification and input for safe, appropriate design and treatment considerations.
5. All suitable safety precautions should be employed with regard to possible fugitive gases associated with the shallow coal (particularly if workings are discovered) during any ground works involving deep trenches or confined spaces. Future development may require mine gas mitigation measures to be incorporated into foundation designs.

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Report prepared by M. Lyons 20th December, 2017.



Principal Mining Engineer.

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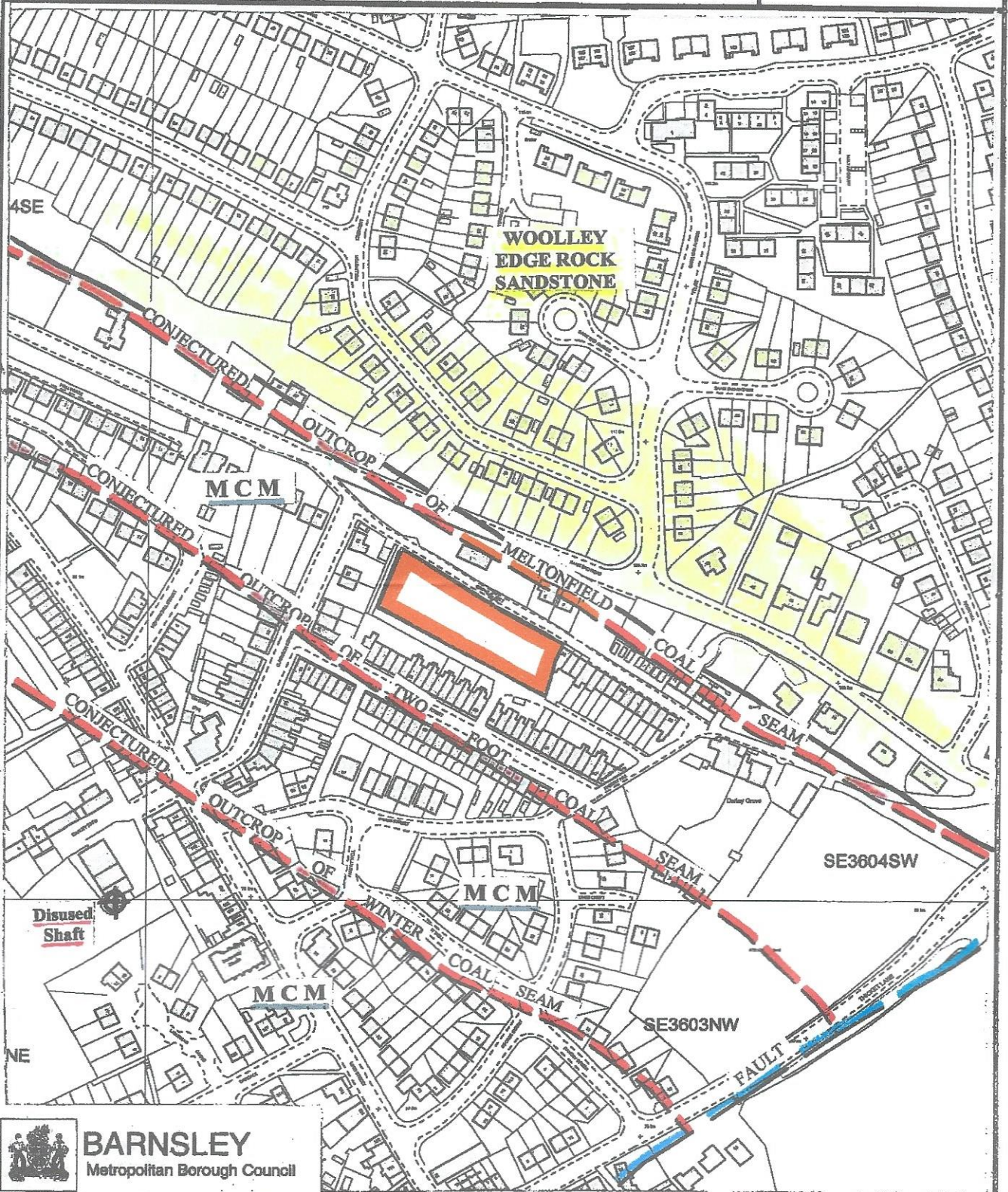
DRAWING NO.

**LAND OFF GROVE STREET
WORSBROUGH, S70 4SN**

M33777A

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 **BARNLSLEY**
Metropolitan Borough Council

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**SOUTH YORKSHIRE MINING
ADVISORY SERVICE**

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