

PLACE DIRECTORATE
South Yorkshire Mining Advisory Service



To: Development Management

FAO: INNER TEAM

My Ref: 2021/1090

Your Ref: 2021/1090

Date: 31th October 2023

Enquiries to: Mr. P. James

Ext: 2689

Subject: Hybrid application for residential development for 1,560 dwellings comprising: a) Full planning permission for: earthworks to create development platforms; strategic drainage ponds/dry detention basins and associated drainage infrastructure; construction of a new link road; location of strategic landscaping and ecological areas; demolition of existing buildings; works to Hermit Lane; and erection of Phase 1(a) residential development comprising 216 dwellings, b) Outline planning permission for: Residential development comprising up to 1,344 dwellings; new primary school; small shops and community facilities; and associated infrastructure works, (Amended Description and Amended Plans). LOCATION: Land south of Barugh Green Road and east of Higham Common Road, Barnsley.(Residential).

Further to your consultation request of the 24th October 2023 I have the following comments.

The site is located within a Coal Authority coal mining referral area due to the presence of opencast backfill, opencast highwalls, shallow workable coal, potential shallow coal mineworking's and mineshafts. The land is therefore potentially at risk from coal mining legacy risks such as ground instability and fugitive gas migration.

The proposals are supported by several Geo-environmental/Geo-technical reports as detailed in section 10.2.1 of the applicants Environmental Statement.

To ensure the safe and sustainable development of the site the reports make recommendations for appropriate mitigation based on site investigations undertaken to date and recommendations for further ground investigation, the results of which will finalise ground remediation and design mitigation for the area of consideration and the wider site as a whole.

It is recommended that if planning permission is approved a condition be attached to the decision notice to ensure the developer(s) adequately address mining legacy issues on site thereby ensuring safety and sustainability.

For your assistance a draft condition is set out below

The site is located within a Coal Authority coal mining referral area due to the presence of opencast backfill, opencast highwalls, shallow workable coal, potential shallow coal mineworking's and disused mineshafts. The land could therefore be at risk from mining legacy risks such as ground instability and fugitive gas migration. A suitably qualified third-party consulting engineer shall be appointed to advise upon the necessary site investigations, ground remediation and design mitigation requirements. The developer shall ensure these recommendations are planned and actioned in a timely manner in the context of the wider development and in consideration of Construction Industry Research and Information association publication C758D "Abandoned Mine Workings Manual" where applicable.

For guidance the scope of works should include but not be limited to the following

- Rotary boreholes to target areas of uncertainty regarding unrecorded underground coal mine workings.

- Targeted investigation of recorded mine entries on the site where considered necessary
- Delineation of the opencast highwalls to map no build zones using techniques such as geophysics, rotary open hole probing and trial trenching.
- Trial pits across the site to obtain more samples for geotechnical and chemical testing to further inform design.
- Intrusive boreholes with in-situ testing, to provide geotechnical parameters and to obtain undisturbed geotechnical samples. Gas and groundwater monitoring wells installation in selected boreholes.
- Monitoring of extensometers to be continued as long as possible to inform creep settlement assessment.
- Static cone penetration testing to assess the in-situ geotechnical parameters.
- Adequate development platform slope stability assessment and design to ensure industry best practice factors of safety are achieved.
- Adequate geotechnical & chemical testing to classify materials and inform foundation design.
- Adequate assessment of the groundwater regime below the site, to include groundwater contours.
- Adequate embankment testing to assess the effects of raising ground levels in areas of fill and the effectiveness of surcharging in relation to future settlement.

In designing the layout of the development, consideration shall be given to the identified positions of coal mining legacy features such as (but not limited to) opencast highwalls and mineshafts. Suitable standoffs should be maintained in consideration of industry best practice and Coal Authority guidance.

A validation report undertaken by the appointed third-party consulting engineer shall be submitted to the Planning Authority upon readiness of the development areas/plots and prior to construction of permanent end use buildings upon them. The report(s) shall confirm the suitability of the land, and ultimately the site as a whole, and include detail of any mining legacy related layout and construction mitigation requirements for end use buildings (both employment or residential use).

Responsibility for securing a safe and sustainable development rests with the developer and/or landowner.

Reason- Land stability NPPF sections 183 a,b,c. 184 and 174 e & f

Principal Mining Engineer.