

011/4273/REG

5<sup>th</sup> October 2022



Registered in England 07068066

Parkhill  
Walton Rd  
Wetherby  
West Yorkshire  
LS22 5DZ

Ms K Mistry  
Newett Homes  
Thorp Arch Grange  
Walton Road  
Thorp Arch  
Wetherby  
West Yorkshire  
LS23 7BA

Dear Krishna

### Green Road, Dodworth

Further to your recent request, we have drafted a response to Coal Authority (CA) comments contained in their letter to Barnsley MBC dated 19<sup>th</sup> July 2022.

**Background.** In October 2021, Newett provided Lithos with a copy of a CON29M mining report dated July 2021 and requested a proposal for intrusive investigation to locate two known mine entries. Findings were reported in our letter dated 24<sup>th</sup> February 2022 (Ref. 005/4273/ REG/AP). The adit (CA ref. 431404-007) was located but the shaft (CA ref. 431404-008) was not (due to significant access constraints).

More recently, Newett commissioned Sirius to draft a Desk Study; their Report Ref. C9470 Rev A, dated May 2022. The Sirius report included reference to Lithos' investigation.

Newett submitted the Sirius Desk Study (but apparently not Lithos letter 005) to Barnsley MBC in support of their planning application. Barnsley consulted the CA and the CA responded in July 2022 with a Substantive Concern.

**CA concerns.** These can be summarised:

- i. Whilst the CA welcomed Sirius' recommendation for the investigation and remediation of coal mining legacies, they considered that the Desk Study did not adequately address the impact of coal mining legacy on the proposed development. The CA therefore objected to the application.
- ii. The CA note that the site investigation report (i.e. Lithos letter 005) did not appear to have been submitted with the application.
- iii. The CA's primary concern relates to failure of the submitted information to clearly demonstrate that the proposed housing layout has been suitably informed by the presence of the recorded mine entries.
- iv. The CA note that the proposed Planning Layout (Drawing No. Z087.002 Rev.C) includes an adit symbol to the immediate east of Plots 24 & 25, but are unclear whether or not this is the 'as found' adit location.
- v. The CA consider that further intrusive investigations should be carried out prior to the determination of the application in order to demonstrate the acceptability of the proposed detailed development layout. Further investigation should seek to locate and establish the condition of the recorded mine shaft and to establish ground conditions in the vicinity of the mine entries to enable the zones of influence and appropriate 'no-build' zones to be defined. It would



be prudent for the applicant to carry out a positional review of the mine entry from source data before commencing further intrusive investigation.

**Lithos comments.** We are able to provide the following comments regarding each of the CA's concerns.

- i. A Desk Study can only review available data and provide recommendations, most notably in the context of the CA's concerns, zones of influence (no-build zones) based on conjectured mine entry locations and the following calculation:

$$\text{Zone of influence} = 0.5 \times \text{assumed shaft diameter} + \text{departure} + \text{drift/made ground depth}$$

In essence, departure relates to the degree of certainty with respect to the entry's location; approximate co-ordinates have been provided in a CA consultant's mining report. It might be that review of the CA abandonment plan for known workings in the far north will yield further useful data although this is considered unlikely. Sirius do not appear to have obtained a copy of this abandonment plan and it should be requested and reviewed prior to any further intrusive investigation.

In the meantime, zones of influence were not included in the Sirius Desk Study, but were provided in Lithos' SI letter report (Ref. 005) as:

Shaft Ref.	Source	Departure /m	Diameter /m	Depth to bedrock/m	Zone of influence (circle of radius)/m	Remarks
431404-007	BGS Maps & abandonment plans	0	N/A	2	2	Adit located at E: 431448, N: 404917, Bearing: 349°
431404-008		10	≈2.5	2	14.5	Possibly located in gorge

- ii. Concern (ii) can easily be remedied by submitting the site investigation report (i.e. Lithos letter 005).
- iii. The Planning Layout (Drawing No. Z087.002 Rev.C) does show the recommended zone of influence (14.5m), but Plot 20 lies within this zone. Hence the CA objection.

This objection would be presumably be dropped if Plot 20 were omitted from a revised layout. However, given commercial implications, an alternative approach could be adopted; see (v) below.

- iv. We can confirm that the adit symbol immediately east of Plots 24 & 25 shown on the Planning Layout (Drawing No. Z087.002 Rev.C) is the 'as found' location.
- v. Further investigation of the entire zone of influence for the known shaft (CA ref. 431404-008) would be extremely difficult given site constraints (including a wooded ravine and the retaining wall associated with an existing private (terraced) garden). Consequently, you have a "Catch 22" situation here whereby further intrusive investigation would be difficult to justify (especially to the vendor & owner of the private garden) without planning certainty and planners might not grant permission prior to confirming the shaft does not lie beneath Plot 20.

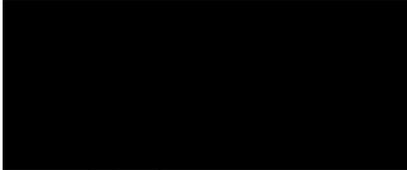
A possible solution would be to add a note regarding Plot 20 to the layout confirming that an area within and within 3m of the footprint for Plot 20 will be searched at the earliest opportunity during the construction phase and if the shaft is not encountered, then the current layout would be built. However, if the shaft were found to lie within the current footprint of Plot 20, revision of the planning layout would be undertaken. However, liaison with the CA to agree this principle is strongly recommended.

The only other option would be to clear vegetation within and within 3m of that part of the footprint for Plot 20 that lies *beyond* the retaining wall and private garden in the hope of finding

the shaft allowing earlier layout revision. Of course, there is a significant chance such investigation will not find the shaft in which case uncertainty regarding Plot 20 would remain.

Should you require any further information, please contact the undersigned.

Yours sincerely



Mark Perrin

Director

**for and on behalf of**

**LITHOS CONSULTING LIMITED**