Our Ref C2064/21/E/3181-2 28<sup>th</sup> of October 2022

South North Group Architecture Greengate Business Centre 2 Greengate Street Oldham OL4 1FN



## For the attention of Spencer Fretwell,

Dear Spencer,

### Ref: St Bega's Chapel Site, Cleator Moor - Mine Entry Positional Review

Following the issue of the phase one desk study and coal mining risk assessment by RGS (report ref C2064/21/E/3181, dated July 2022), the Coal Authority has subsequently issued a consultation response in relation to planning application 4/21/2504/001. The RGS study highlighted that there is a mine entry present within the most southern section of the site. As such, the Coal Authority have outlined that a positional review of the mine entry must be completed to advise of any potential zones of influence. Therefore, plans have been drafted and are attached to this letter. For reference, the following information has been used to create the plans:

Source 1) Coal Authority Interactive Map Viewer

### Mine Entry: 301515-002

Grid Ref: 301056, 515458 Departure: 8m Assumed Shaft Diameter: 2.5m Estimated Depth to Rock: 10m Departure Zone Circles: 8m Zone of Influence Circles: 10m

#### Source 2) Abandonment Plans

# Plan NC167A, issued 19th of October 2022 by the Coal Authority

In a letter dated 25<sup>th</sup> of August 2022 issued by RGS, it was determined from Source 1) that the zone of influence would be present in public land and outside the boundary of "property 11". However, the Coal Authority requested that abandonment plans be obtained in order to further validate this opinion. Subsequently, abandonment plans (Source 2) have been obtained and a reassessment of the mine entry positions and associated zone of influence has been undertaken. The reassessment has indiciated that the location of the mine shaft could be slightly further North than initially anticipated. However, the plans still suggest it is likely that the mine shaft, if present, is situated away from "property 11", such that the mine shaft itself will not be present within the boundary of property 11. Notwithstanding this, if the mine entry is positioned in the most northern point of the departure zone, it possible that the associated zone of influence attributed to the entry would encroach on to the property, albeit not below the building.



Rogers Geotechnical Services Ltd Offices 1 & 2 Barncliffe Business Park, Near Bank, Shelley, Huddersfield, HD8 8LU 1484 604354 Company No. 5130864 As such, it is recommended that the departure zone be subject to a series of excavations (dark blue area on Plan 4) in order to locate where the mine shaft is present, if at all. Moreover, it is recommended that the strata profile beneath property 11 is investigated (light blue area on Plan 4).

Indeed, the current zone of influence is set at 10m, which has been established utilising publically available geological data which would suggest that competent strata is present at approximately 10m depth. Should competent strata be revealed at shallower depths, then the zone of influence can be reduced. On the other hand, if this is determined to be deeper, then the zone of influence would be increased. Notwithstanding this, is the mine shaft is absent, then the zone of influence would become irrelevant.

It should be noted that the Coal Authority are the final arbiters on such matters. Therefore, this letter and the attached plans should be submitted for reconsultation to establish that the proposed investigation is deemed adequate.

We trust that this information is of interest and should you have any other requirements do not hesitate to contact us.

For Rogers Geotechnical Services Ltd, Yours Faithfully

**Rob Palmer** MSc, FGS, ACIEH Senior Geo-environmental Engineer

Appended

- 1) Mine Entry Position Demonstrates Source 1) and Source 2)
- 2) Mine Entry Position Departure Zone and Zone of Influence
- 3) ZOI Development Area
- 4) Areas of Investigation









