

REF: 2165/BGP/Mining/mjs

Matthew Phillips

WCBC

By email

Matthew.Phillips@wrexham.gov.uk

23rd February 2021

Dear Matthew,

RE: 57 BRYN GLAS RHOSLLANERCHRUGOG: MINING RISK ASSESSMENT

Further to our letter of the 18th December 2020, and Mining Risk Assessment dated 17th June 2020, we have been asked to reply to the comments from the Coal Authority dated 24th November 2020. This letter should be read in conjunction with our previous reports and letters.

Our first comment is due to findings of our site investigation and the desk study, we considered the depth stated by the Coal Authority of 54m to be more accurate, especially as it was proved to be much deeper than 25m by the borehole. In any case, if the Coal Authority cannot interpret their own records, why shouldn't it be their responsibility to address this mistake. However, we will order a copy of this mine plan and comment in due course.

We did not consider it necessary in this case to research the source information for the shaft. Irrespective of what the source plan informed us; we would still have had to strip the entire development area to satisfy the Coal Authority.

As the shaft source information was proven to pre date 1850, it is our experience that the source information would be very poor, with the shaft position being inaccurate as was subsequently proven to be the case.

At this point, it is worth pointing out that the author was involved with the South Wales Mining desk study and Islwyn shallow mining projects, both for the Doe and Welsh Office, which involved extensive research into shallow abandoned mining, and subsequent risk assessment techniques. In addition, Mike has over 35 years' experience of investigating abandoned shallow mine workings.

The comments on whether the shaft being nearby is not relevant, as we cannot investigate any shafts off site, and any case off site shafts would be covered by the Coal Mining Subsidence Act.

However, in the hope of closing this matter, we would suggest that the foundations design for these plots be changed from strip foundations to raft foundations. These should be designed to span any potential collapse of 3m in diameter and cantilever 1.5m at their edges.

This would provide an appropriate measure for the low risk posed, especially as the previous house was on strip foundation, and all of the surrounding houses are on strips.

Finally, we are more than satisfied given the findings of the desk study and site investigation that 25m cover of superficial deposits provides a significant amount of material to choke any potential collapse before they can migrate to surface.

In conclusion, due to the low risk posed by abandoned mine workings, the raft foundations will provide adequate protection to address this risk.

Should you have any further queries please call Mike Scott on 01244 661361.

Yours Sincerely

M J Scott BSc (Hons), MSc, FGS, C.Geol.