



Cullis Architectural Design,  
25 Sunningdale Road,  
Wrexham.  
LL13 9QU.

Ref: LETTER - land at Hillcroft, Pentrebychan

Date: 17 March 2022

**By email**

**Quotation: Proposed Dwelling on land adjacent to  
'Hillcroft', William Road, Pentre Bychan**

Dear Sirs,

Further to our recent discussions regarding the proposed dwelling at the above site and the concerns raised by the Coal Authority in this matter, we would respond as follows:

The Coal Authority concerns seem to revolve around the property requiring "bespoke foundations.... which may render the development economically unviable". Groundsolve Limited (GSL) has proposed that the foundations should comprise reinforced concrete ring beams supported off piles driven/drilled to the rock head at approximately 11m below ground level. This will reduce the risk on the property should any issues with the shaft become apparent. The solution will be expensive but is achievable.

The Coal Authority also states that the shaft "has not been remediated to a standard that would reflect the end use now proposed". GSL has stated that the shaft may not have been grouted due to artesian water pressure preventing this from being carried out successfully. There is an access shaft and hole in the cap to allow for further fill to be placed if required - GSL states that this is a typical detail to allow the fill to be topped up if required. There is also a drainage system connected to the shaft to dissipate the groundwater.

I believe GSL has proposed a foundation solution that would reduce the risk to the proposed property to almost zero whilst not surcharging the shaft cap or the shaft itself. If further justification is required, then I am sure that GSL will provide the necessary assistance due to their experience in this field.

Should you wish to discuss this matter further do not hesitate to contact the undersigned.

Yours faithfully,

Andrew Hannett  
B.Eng(Hons), C.Eng, MICE