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Chris Whawell

Minden Cottage
Church Lane
Bakewell
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Date: 04/11/2022
Your Ref: MD/2018/0023
Our Ref: R3060-001-A

RE: Temporary/permanent works for the replacement dwelling at Blakeley, Rudyard Lake

Dear Chris,

Following our visit to the site and the review of the provided drawings (and other supporting information), please find below our review of the proposed scheme, how we propose that this should be approached to ensure the safe development of the site and the limitations on this from the planning conditions.

Planning condition 7 states:

> "*No development on the site including site clearance shall take place until a Method Statement detailing the means of demolition, site clearance and construction of the dwelling hereby permitted, including the design and means of constructing the foundations and any other proposed earthmoving and excavation works required in connection with its construction*"

Having reviewed the information and carried out a site inspection this has raised some issues with the wording of the above condition. The site is very uneven and the access to the lower part of the site is restricted by the existing building. In order that a fully informed temporary/permanent works design can be carried out it will be necessary to get a full and detailed ground investigation report for the site. Below is an extract from a geotechnical engineer's quotation following his site visit

> "*At this time, it should be noted that currently there are accessibility issues that would need to be overcome in order to complete any kind of meaningful investigation. Some works could be undertaken at road level, but access to the lower area to confirm ground conditions and bearing capacities will need to be made; clearly the existing building and all vegetation needs to be removed in the first instance, but some form of gently sloping access track that would be suitable for a drilling rig to use will also be required. The logistics of this are currently unknown and will need to be defined at some point.*"

Notwithstanding the above, we have had discussions with the owner of the neighbouring building – who carried out a similar development several years ago – and they have advised that during excavations they encountered a consistent firm to stiff clay through the full depth of excavation. The full design will be informed by a full ground investigation (by others) taking consideration of temporary and permanent slope stability, ground sulphates and groundwater levels.

Given the above information, the site constraints and the proposed building layout we anticipate that the works will be carried out in the following way.

1. Site clearance and building removal;
2. Installation of temporary drainage/runoff interception drains;
3. Installation of temporary/permanent works to allow safe excavation to lower ground floor.

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Given the details that we have determined regarding the expected ground conditions we anticipate that this will be carried out using one of the following methods:

a) Sheet pile wall with/without top whaling beam and ground anchors to tie back the head of the wall.
b) King pile wall with steel king piles and precast concrete infill panels spanning between piled steel section.
c) Augured contiguous/secant pile wall with/without top whaling beam and ground anchors to tie back the head of the wall.

Of the options above, only option c) would be considered to be a permanent works solution. Should the other options be followed, based on the feasibility of installation, suitability for the site and overall costs, then it will be necessary for the permanent retaining solution to be formed as part of the rear wall of the building – inside the temporary works retaining structure.

4. Following the safe excavation of the site it is anticipated that the building construction will be using traditional methods of construction. This is proposed to be:
    a. Reinforced concrete raft slab foundation;
    b. Blockwork/stone external and internal walls;
    c. Timber suspended floor;
    d. Steel frame(s) around glazed gable elevation and under any external balcony areas;
    e. Steel frame(s) as required to support timber rafter roof structure.

As part of the chosen method of construction due attention will be given to determining safe methods for delivery and removal of material from the site. This will include the required lay down areas, necessary standoff distances or loading from construction materials, weight and width restrictions of the access road and the provision to transport material onto, around and off the site.

It would be anticipated that site rules would limit lightweight material being left unsecured on site and that any wind-blown waste would be prevented from leaving the site by means of setting up debris containment netting to the site perimeter.

On site drainage and across site drainage will be determined by the main contractor and will be approved by the planning officer prior to commencement of the works, however these will be influenced by the chosen method of construction – which will be influenced in turn by the ground investigation report.

Yours sincerely,