



# **Longsight Design Consultancy Ltd**

**Consulting Civil & Structural Engineers**

**Mr J Payne**

**Carr Head Farm, Hunshelf Road S36 2BS**

**LDC23-028-SR-01**

**Version 1.0**



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# 1 INTRODUCTION

Longsight Design Consultancy Ltd (LDC Ltd) “The Engineering Consultant” was appointed by Mr S Camps of SDC Projects Ltd “The Planning Agent” acting on behalf of Mr J Payne “The Client” to carry out a structural report on The Pony Stables and the Old Cow Shed at the following location.

Address: Carr Head Farm, Hunshelf Road S36 2BS.

Latitude & Longitude: 53.493318N -1.611527W

Altitude: 245.00m AOD

A site and Block Plans are included below. The site is located North of Stocksbridge Bypass A616 and East of Midhoptstones.

The site is accessed via an access road to Carr Head Farm

Inspection photographs of the buildings are presented in this report.

The inspection was carried out on 19/05/2023. The buildings were unoccupied at the time of the survey.

The survey is based on an inspection of the visible, exposed, and accessible parts of the structural fabric. No intrusive investigations were carried out other than trial pits excavated to determine type and depth of the existing floor slabs, foundations and ground conditions at shallow depths.

The following report shall be for the sole use of Mr J Payne this report should not be reproduced in whole or in part or relied upon by third parties for any use without the expressed written authority of Longsight Design Consultancy Ltd. This exclusion shall not apply to any party acting for Mr J Payne having a strictly professional interest in the specific matters to which this report relates.

The objective of this report is to establish if the buildings noted above are suitable for “Class Q” Planning Application to be submitted.

A “Class Q” Planning application is to be submitted, intending to convert the two buildings in question into a domestic residential dwelling. The brief was to determine whether the buildings in question were suitable for conversion into a dwelling under Class Q. Building works are allowed under the Permitted Development Right, allowing agricultural buildings to change to residential use:

Under Class Q of part 3 of schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015 as amended.

However, the right assumes that the agricultural building is “CAPABLE “to function as a dwelling. The rights permit building operations which are “REASONABLY” necessary to convert the building.

The intention of this survey is to determine:

- The general condition of the existing buildings
- The structural stability and integrity of the existing buildings
- If the buildings are capable of functioning as a dwelling
- If these buildings are “SUITABLE “for conversion



There have been many Class Q approvals granted for very similar types of structures in the area. Two examples (later construction but nevertheless comparable):

- App ref 2019/ 0333 Cross Royd Farm.
- App ref 2020/0480 Upper Belle Clive Farm.

The weather was generally dry and sunny on the day of the survey.

## 2 THE SITE

Figures 1 – 3 show the location of the site and block plans of existing and proposed layouts.

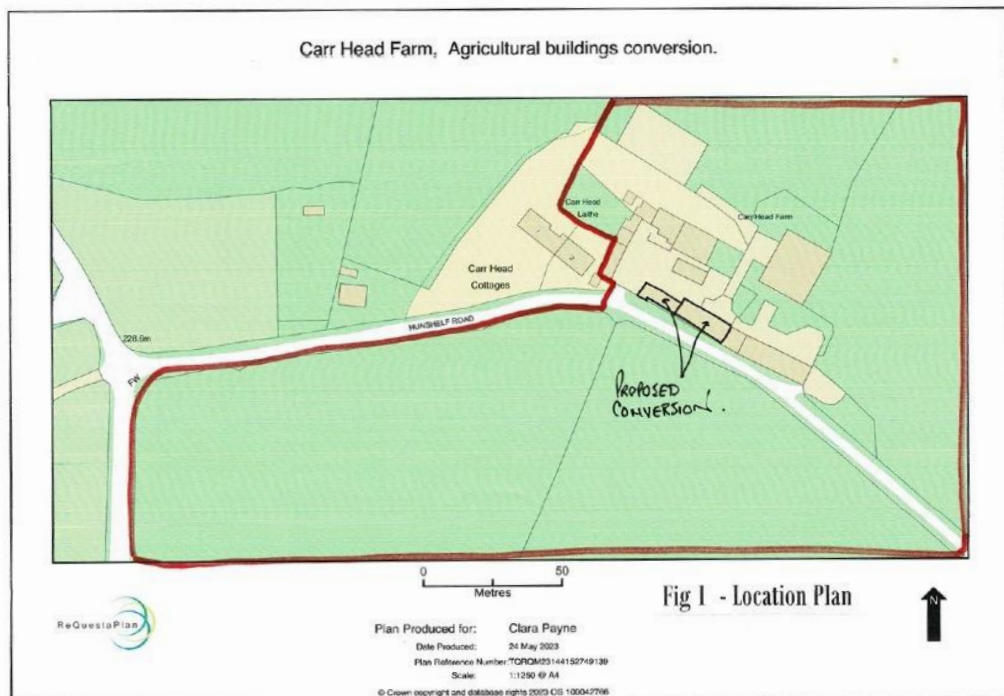


Figure 1 – Location Plan

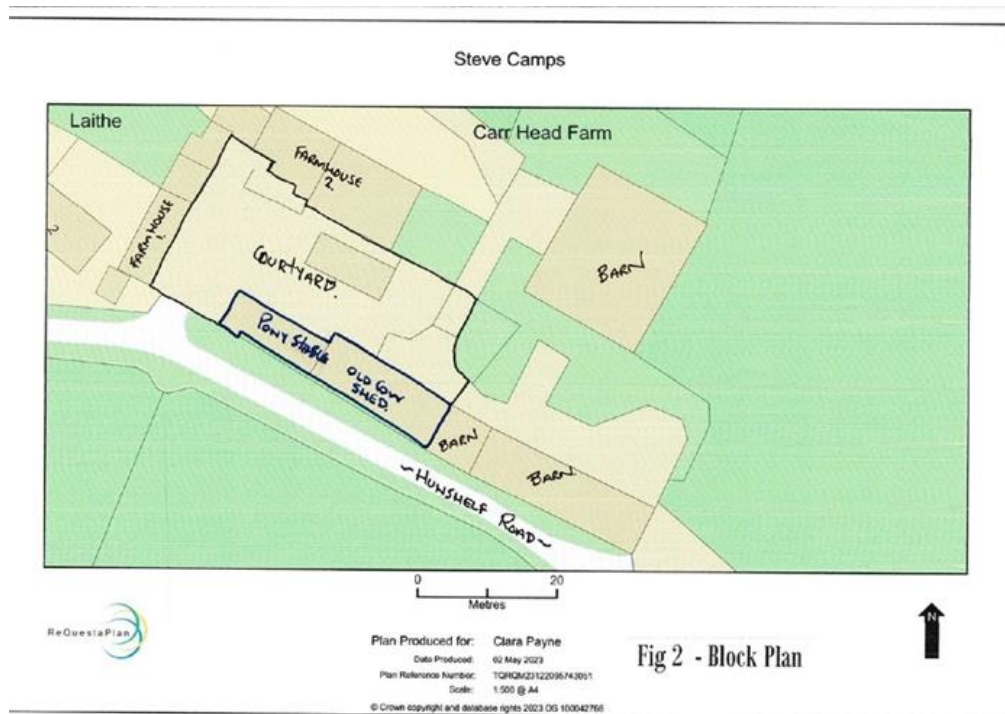


Figure 2 – Block Plan (existing)

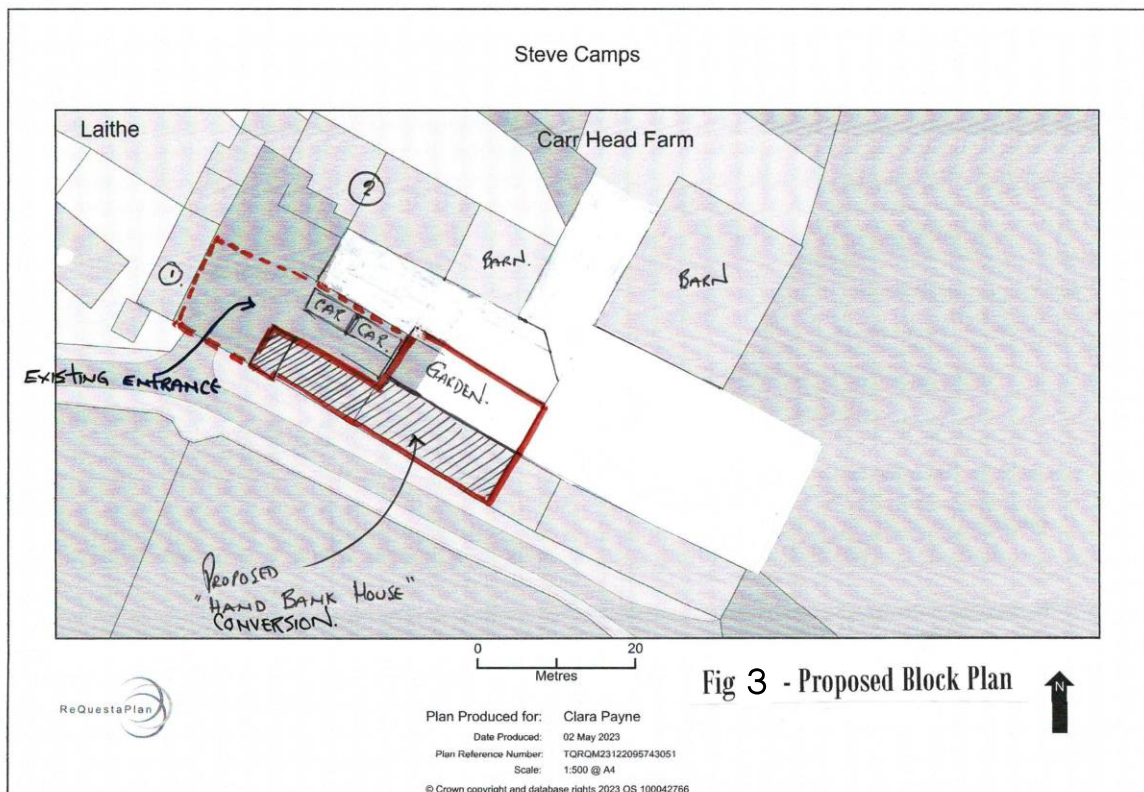


Figure 3 – Block Plan (Proposed)



### **3 OBSERVATIONS**

#### **3.1 GENERAL SITE OBSERVATIONS**

Upon entering Carr Head Farm from Hunshelf Road the buildings covered in this report are located immediately to the left. These are the red brickwork Pony Stables which adjoin The Cow Shed to the right. The Pony Stables is a single-storey building, and the Cow Shed is two-storey. The farm access road continues along the Northern side of both buildings with steep pastures to the South.

It is the owner's intention to create a courtyard environment (isolated from the day-to-day farm activities and access). The courtyard shall provide adequate private parking and gardens for the current properties and the proposed conversion. When complete the proposed dwelling will not form part of the agricultural ownership.

The adjoined buildings are close to other dwellings within the farm complex. There is no requirement for additional access to the proposed development. The conversion will not create hindrance or nuisance to the other dwellings on the farm or further along Hunshelf Road, nor will the farming activities affect the quality of life experienced from the proposed dwelling. The existing buildings are to be in keeping with the other farm buildings. On completion of the conversion, the appearance will remain in keeping.

There have been many Class Q approvals granted for very similar types of structures in the area.

#### **3.2 SERVICES**

Electricity and water services are currently supplied to both buildings. Supply capacity is to be confirmed.

An existing foul catchpit (discharging into a septic tank) is located adjacent to the Pony Stables and is to be utilised. The size of the existing septic tank is not known. Prior to connection, it is to be investigated to determine its suitability or need for enlargement/replacement.

Surface water discharge to be to new separate soakaway system with size and location to be confirmed.

#### **3.3 GENERAL BUILDING OBSERVATIONS – PONY STABLES**

This is single storey building under a corrugated asbestos cement sheet roof. The South, East Gable and West Gable elevations are constructed in red brickwork. The North elevation is partially constructed in red brickwork and painted concrete blockwork. The East Gable is a shared gable with that of the Old Cow Shed. The estimated construction date is approximately 1965, with a later addition dating to approximately 1980. These dates were advised by the Client.

#### **3.4 GENERAL OBSERVATIONS – THE OLD COW SHED**

This a double height steel framed building with profiled metal cladding to walls and roof.

Constructed dates to around the same time as the adjoining stables. Over the life of the building, it has been modified to best serve the farm activities. Circa 2005, perimeter walls were constructed both internally and externally up to a height of approx. 2600mm. The owners have confirmed that a timber first floor was present but was removed in 2015 to provide additional headroom within the structure. The original concrete floor slab has had an additional concrete slab added on top, presumably to cater for additional wall and floor loadings.



## 4 PONY SHED OBSERVATIONS

### 4.1 SOUTH ELEVATION (HUNSELF ROAD SIDE)

This elevation is constructed in red brickwork. At the Western end of the stables there is a small projection which is a later addition (approximately 1980). The wall to this elevation appears to be in good structural condition. See Photograph P1

### 4.2 WEST ELEVATION (GABLE)

This is a gable elevation with a stepped profile above the roof line acting as a parapet. The roof is flashed into the wall. Where the later projection (noted on South Elevation) has been constructed there is straight joint which has opened slightly. The movement is due to a lack of bonding between the original gable and the gable to the projection. See Photograph P1A and P3. It is understood that the projection may be removed, and the original external wall reinstated. The movement is between 1-5mm and considered to be stable. If the projection is to be retained, then the straight joint should be remediated. The projection gable should be partially taken down and brick jointed into the original gable.

The remainder of the original gable wall is in good condition with no signs of cracking or settlement.



*Photo P1A – Pony Stable Walls to Hunshelf Road Elevation*



*Photo P1B – Cracking to Gable End*



### 4.3 NORTH ELEVATION (COURTYARD SIDE)

This elevation is constructed in a combination of blockwork (on the Eastern Half) and red brickwork (on the Western Half). There is an up-and-over garage style door and three stable doors in this elevation. There is no sign of cracking or movement along this section. See Photograph P2



*Photo P2 – Courtyard Elevation*



*Photo P3 – Pony Stable Gable End*



#### 4.4 EAST ELEVATION (GABLE)

This gable is a joint gable of both the Pony Shed and The Old Cow Shed. It is constructed in random coursed stone masonry for its lower section and red brickwork for the upper section, it follows the profile of the Pony Shed roof. This elevation is in good condition with no signs of cracking or settlement. See Photograph P4

#### 4.5 ROOF STRUCTURE

The roof is a dupitch span North-South. The structure is formed in king post trusses at third points supporting purlins spanning between the trusses and gable walls. In turn the purlins support rafters spanning between walls, purlins and ridge beam. The timbers forming the king post trusses are formed from substantial timber sections. The roof covering is of profiled asbestos sheeting.

Note – the roof sheeting is to be removed as part of the conversion by an approved asbestos removal and disposal contractor.

All roof timbers are in good condition showing no signs of rot or infestation. See Photograph P4

#### 4.6 FLOOR SLAB/FOUNDATIONS

Appears to be a 200mm thick concrete slab with a 300mm edge thickening. From internal inspection there is little cracking of the slab which would suggest that the slab may be reinforced.



*Photo P4 – Gable Separating Cow Shed/Stables and Roof Timbers*



## **5 THE OLD COW SHED OBSERVATIONS**

### **5.1 GENERAL OBSERVATION**

The Old Cow Shed is located adjacent to the Pony Shed sharing a gable wall at the East End of the Pony Shed and West End of the Old Cow Shed.

At the Eastern End the Gable wall is shared with an adjacent building.

The perimeter walls to eaves level are approximately 2600mm high.

Roof is a duopitch spanning North – South

### **5.2 SOUTH ELEVATION (HUNSHEF ROAD SIDE)**

This elevation is formed in red Brickwork external leaf with a combination of concrete panels/stonework/Blockwork inner leaf. There is a cavity between the two leafs which could not be viewed.

Externally the brickwork external leaf is clad in metal profiled sheeting which extend from eaves down to approximately 600mm above internal floor level. Due to the metal cladding, it is not possible to assess the condition of the outer brickwork wall behind.

### **5.3 NORTH ELEVATION (COURTYARD SIDE)**

The internal leaf is constructed in a combination of concrete panels / blockwork. The external leaf is constructed in blockwork. There is a cavity between the two leaves. As on the South Elevation profiled metal cladding extends from eaves to approximately 600 mm above the internal floor level.

### **5.4 WEST ELEVATION (ADJOINING THE PONY STABLE)**

This elevation is shared with Pony Stable and is constructed in red brickwork within The Old Cow Shed. The wall is in good condition with no signs of cracking or movement.

### **5.5 EAST ELAVATION (ADJOINING STORAGE BARN)**

External skin of this elevation is constructed in blockwork. There are no signs of settlement or cracking on this wall.



*Photo P5 – The Old Cow Shed, Hunshelf Road Elevation*



*Photo P6 – The Old Cow Shed, Courtyard Elevation*



## 5.6 STEEL FRAME TO THE OLD COW SHED

This is a double height steel-framed structure typical of this type of agricultural style of buildings of this period. The steelwork frame shows no signs of major deterioration or delamination.



*Photo P7 – The Old Cow Shed Adjoining Gable to Stables*



*Photo P8 – The Old Cow Shed, Adjoining Wall to Storage Barn*



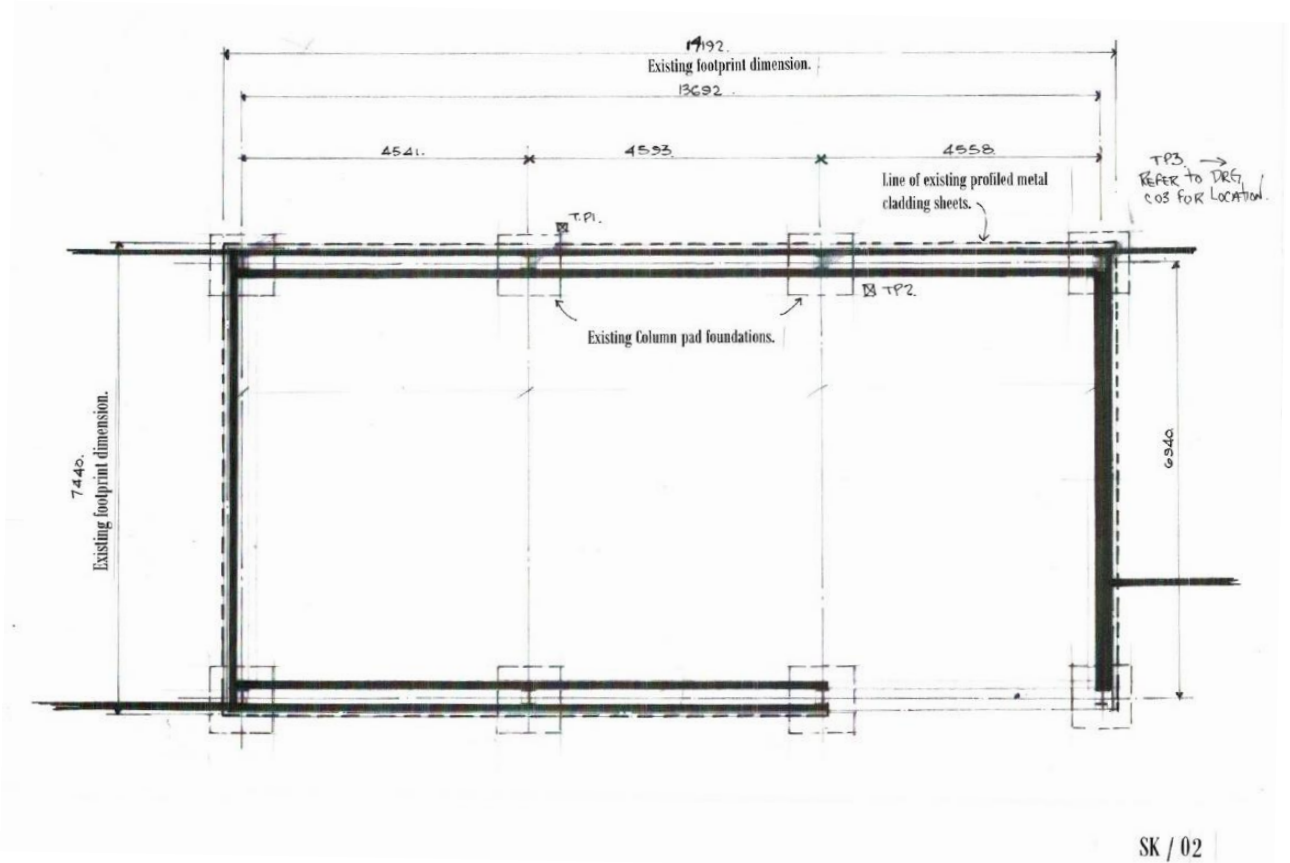
The roof structure as the Pony Stables, consists of substantially constructed timber framed trusses. A series of steel angles support the roof, which is profiled metal cladding.

All roof timbers are in excellent condition showing no signs of rot or infestation.

The wall cladding has been painted. This is showing signs of flaking. The roof sheeting presumably has not been maintained/painted due to the difficulty in access and is showing signs of rusting. In both cases the sheeting material is relatively sound.

For the existing floor plans please refer to drawing **SK2**

For existing elevations refer to drawings **C05/6/7**



## 5.7 FOUNDATIONS/FLOOR SLAB TO THE OLD COW SHED

Determined by trial holes. **TP1 TP2 and TP3**

Pad foundations to each column approximately 1000mm wide x 1000mm long x 1000mm deep

The original floor slab has at some point been topped with an additional concrete slab. This has presumably been carried out to cater for the additional loadings from the later addition of perimeter walls and first floor. Both slabs are approximately 150mm thick. It is unknown if either are reinforced. At the time of inspection, the internal surface was covered with solid debris and unable to check for any cracking.



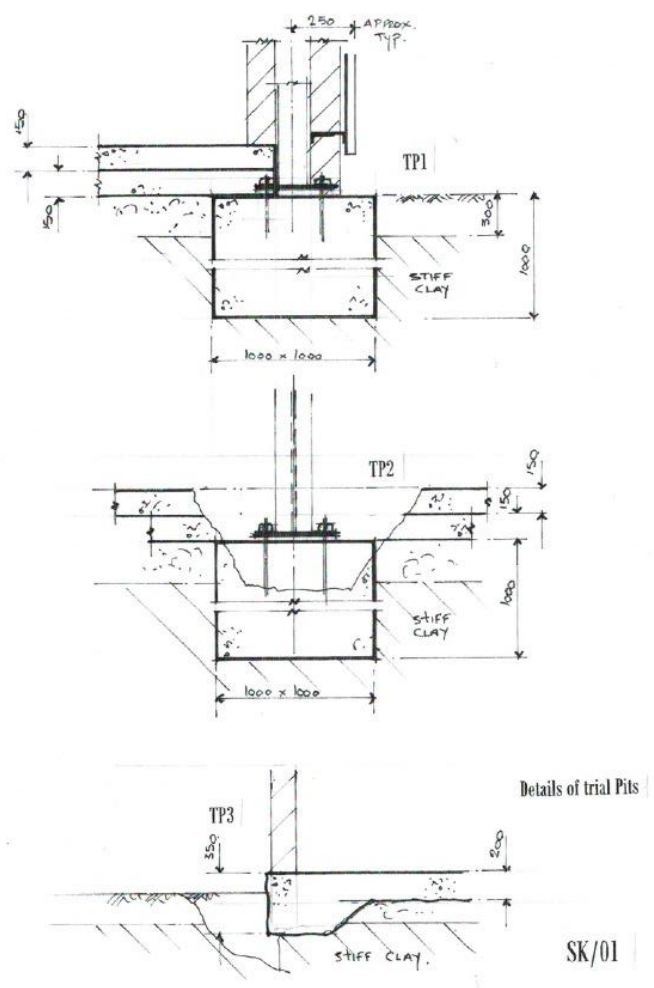
## 6 GENERAL SITE OBSERVATIONS & INVESTIGATIONS

### 6.1 TRAIL PITS

3 No trial holes were excavated to determine:

- Old Cow Shed main steel frame column/wall foundations **TP1**.
- The Old Cow Shed floor slab details **TP2**.
- Pony Shed floor slab/foundation **TP3**.
- Ground conditions at all locations.
- Check for any ground contamination.

Details of trial pits please refer to drawing **SK/01** below.



For location refer to **SK2 and C2/C3**

### 6.2 GROUND CONTAMINATION/GROUND CONDITIONS

From the excavated trial pits, the existing ground was consistent throughout.

All indicate approximately 300mm minimum compacted hardcore on virgin "stiff clay".



The ground bearing capacity is in the category of 100 – 150 KNm<sup>2</sup>.

There were no signs of any fill or contaminated material.

### 6.3 ENVIRONMENTAL CONSIDERATION

There are no records to suggest that the land and buildings have been used for anything other than farming activities. There is no evidence of any landfill deposits.

The only consideration for the proposed development would be from possible decomposition of natural vegetation/farm animal waste byproduct seepage.

This is easily catered for by placing a non-penetrable Visqueen membrane beneath the existing and new insulated floor construction. The proposed conversion and the site itself do not interfere with any service points nor does it affect the land on which it is located.

The land the conversion is located on is not on a protected area or high-risk area where construction may increase the risk of contamination. The surrounding land will remain unaltered; therefore, any risk of contamination or flooding will remain unchanged.

### 6.4 NOISE CONSIDERATION

The buildings are located within a rural setting. The noise from the farming activities will not create any detrimental/nuisance to the proposed development. The nearby steel works at Stockbridge (which has diminished in scaled in both size and process) does not pose a potential nuisance.

### 6.5 COAL MINING

From a brief desk top study taken from “The coal authority interactive viewer” historic coal mining activity has been carried around Carr Head Farm. See **Figure 4 & 5**- Mine entries.

Mine workings in this area are very common and should not dictate the location of future development. However, a more in-depth coal search should be carried out. It may be necessary to carry out a Coal Mining Risk Assessment if shallow mining workings are present. The level of any investigation into shallow mine workings will need to be agreed with the local Building Control Authority as will any treatment of any new foundations.



24/05/2023, 15:20

Interactive Map Viewer | Coal Authority

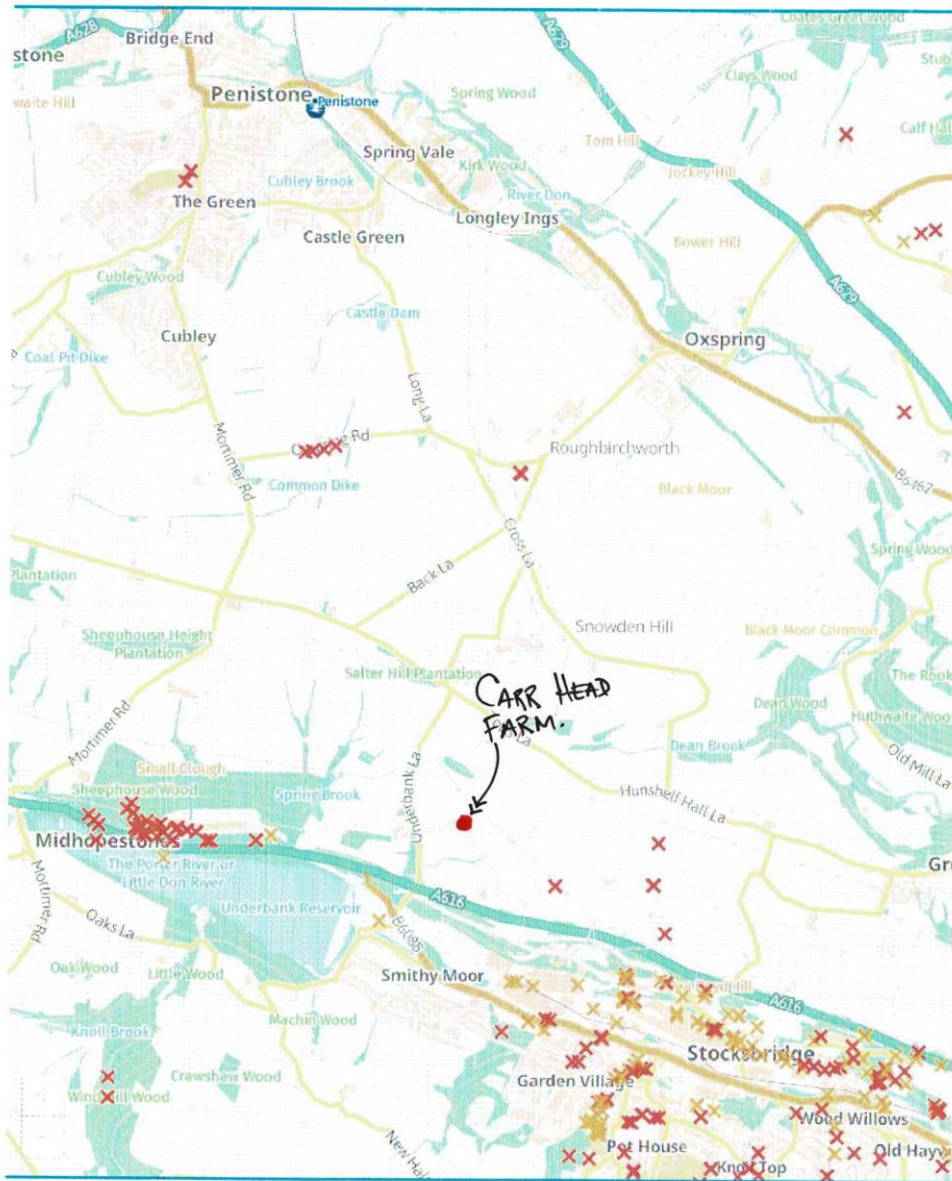


Figure 4 – Abandoned Mine Catalogue



24/05/2023, 15:20

Interactive Map Viewer | Coal Authority

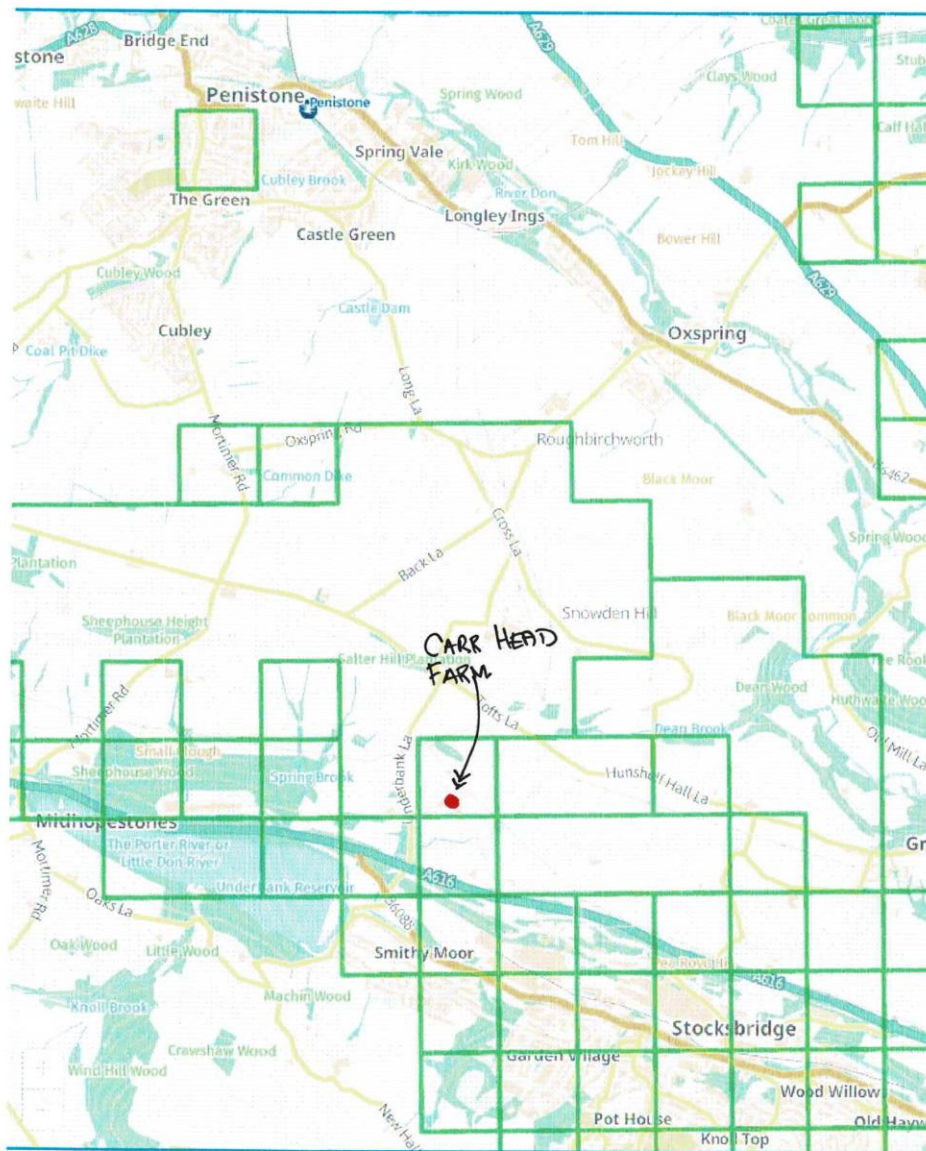


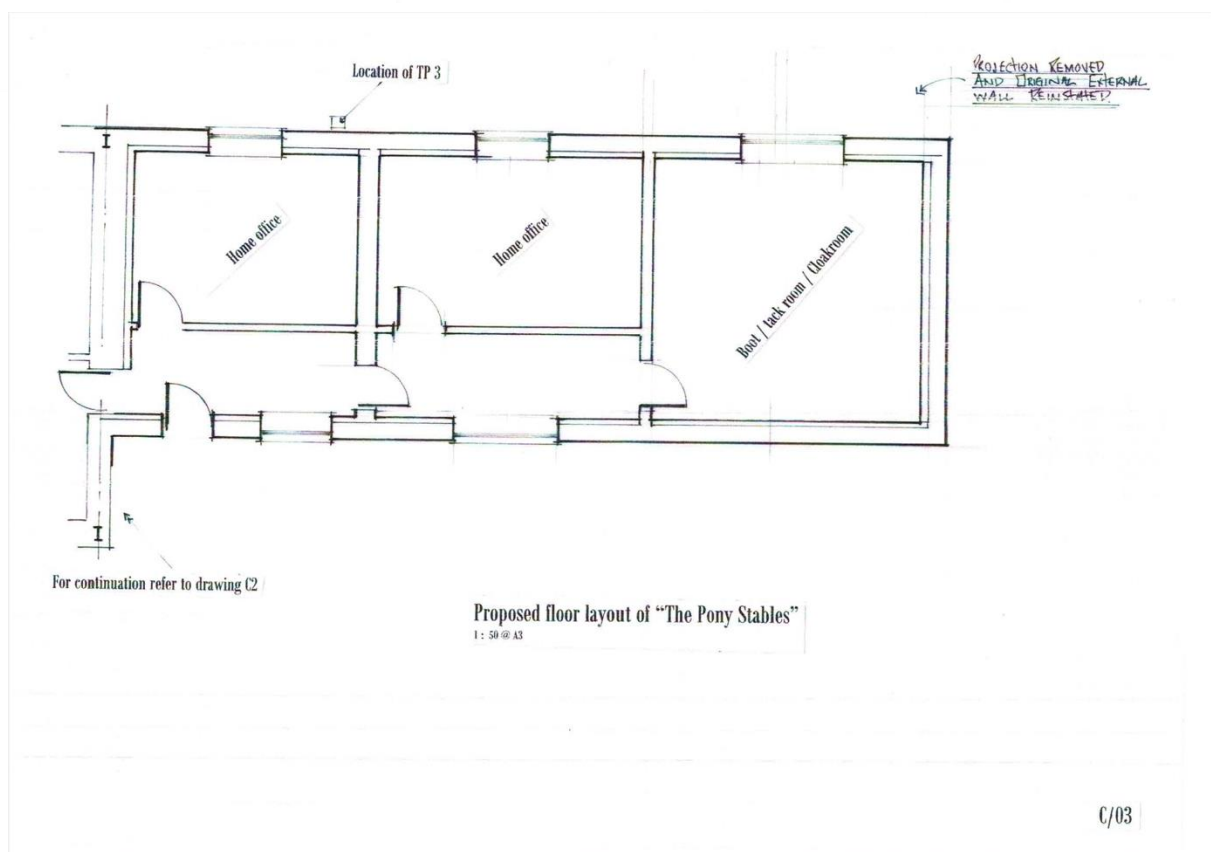
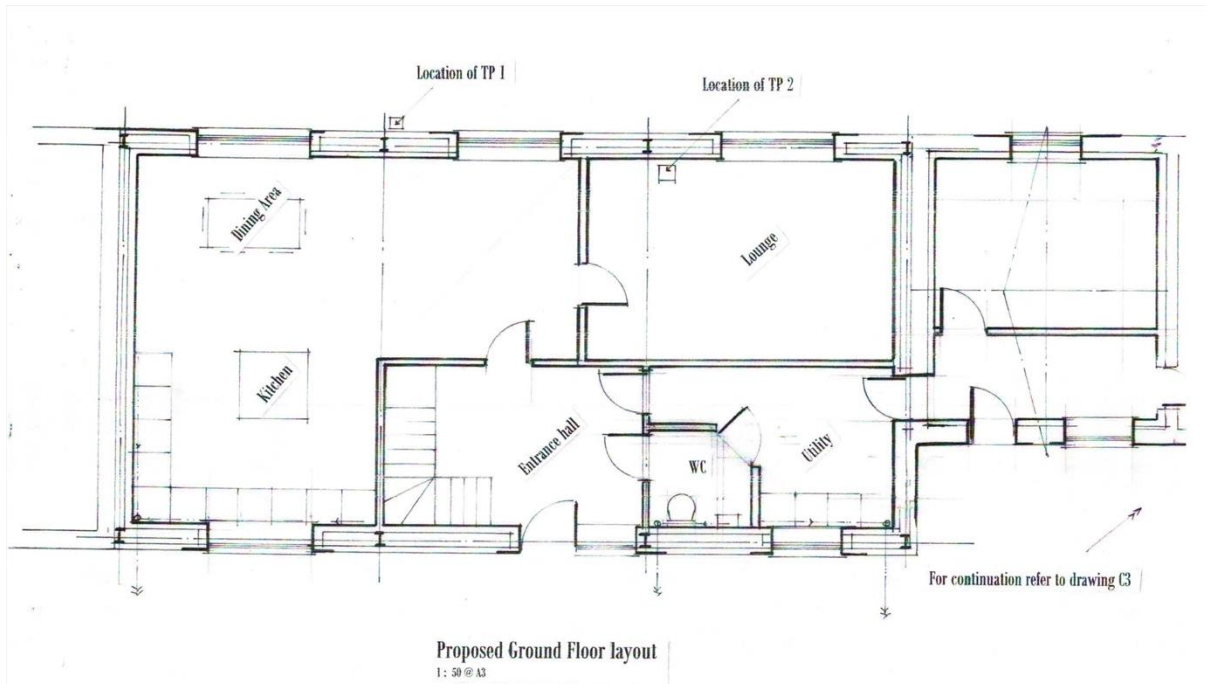
Figure 5 – Abandoned Mine Catalogue



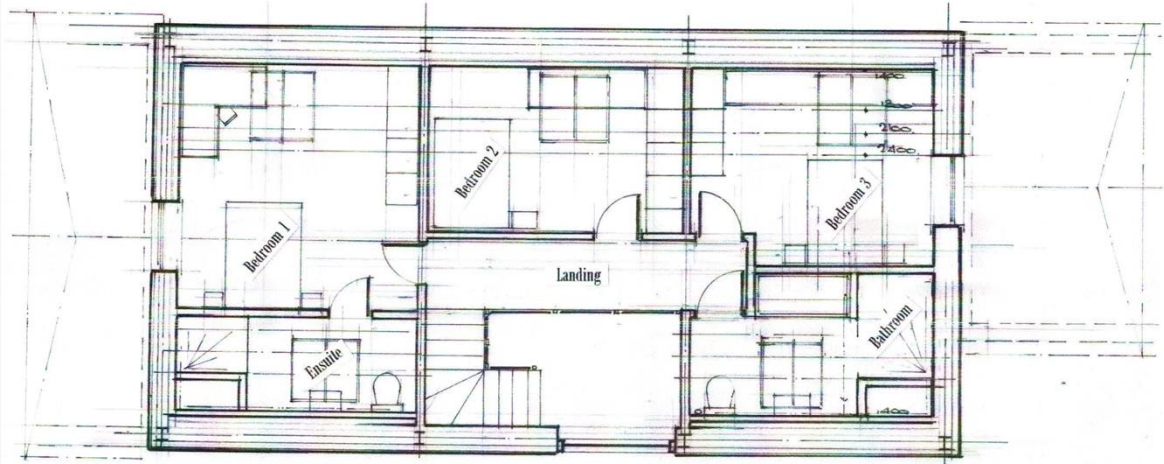
## 7 PROPOSED CONVERSION DETAILS.

These are indicated on drawings **C01 – C 08**

These are contained within this report for information only (reduced, therefore, not to scale.)

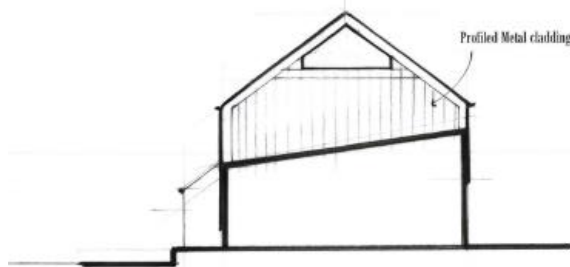


C/03

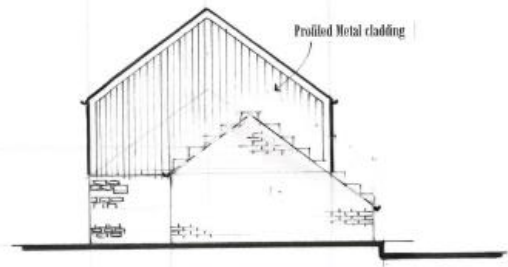


Proposed First floor layout  
1 : 30 @ A3

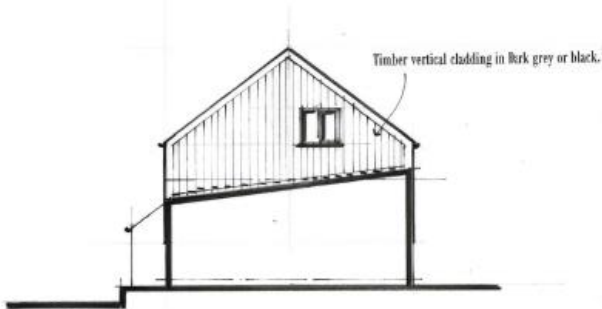
C/04



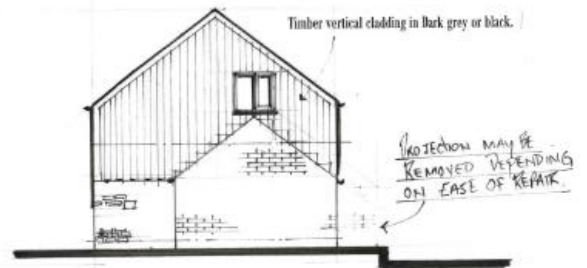
Existing Elevation Stone storage barn gable



Existing Elevation, Pony Stable gable



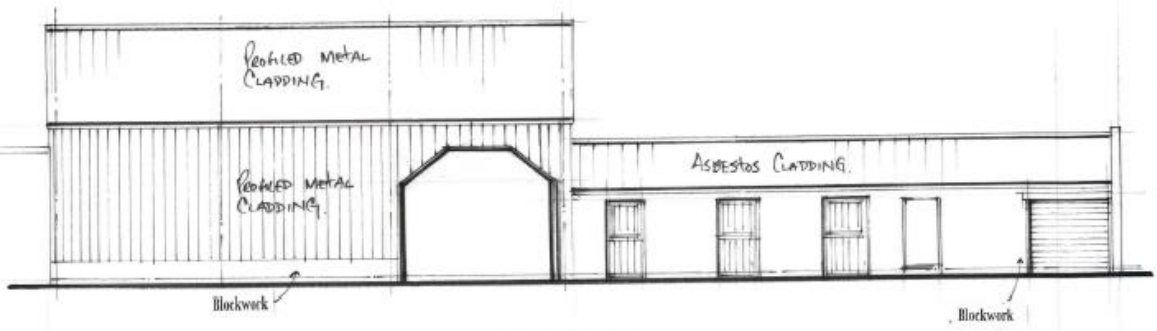
Proposed Elevation, Stone storage barn gable



Proposed Elevation, Pony Stable gable

Elevations  
1 : 100 @ A3

C/05



Existing elevation

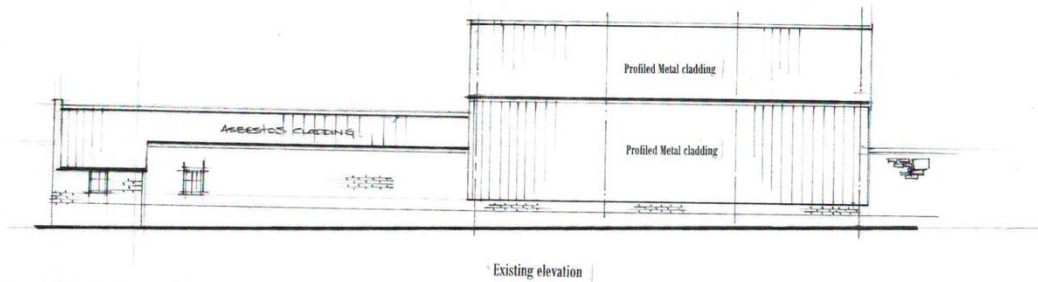


Proposed elevation

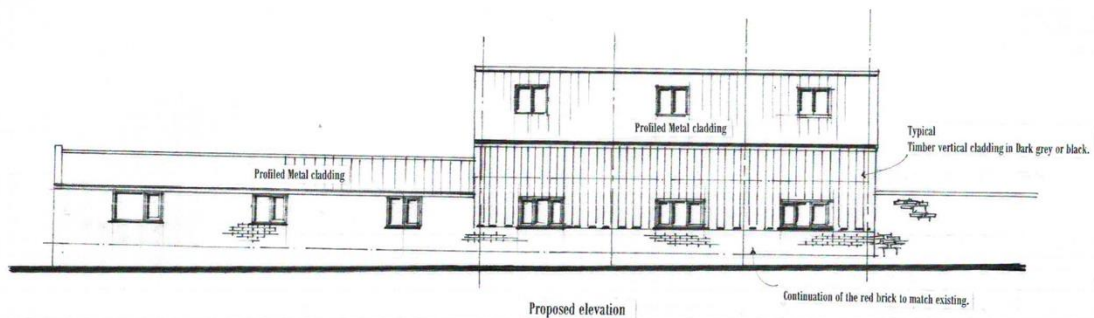
Elevations, Courtyard side

1 : 100 @ A3

C/06



Existing elevation

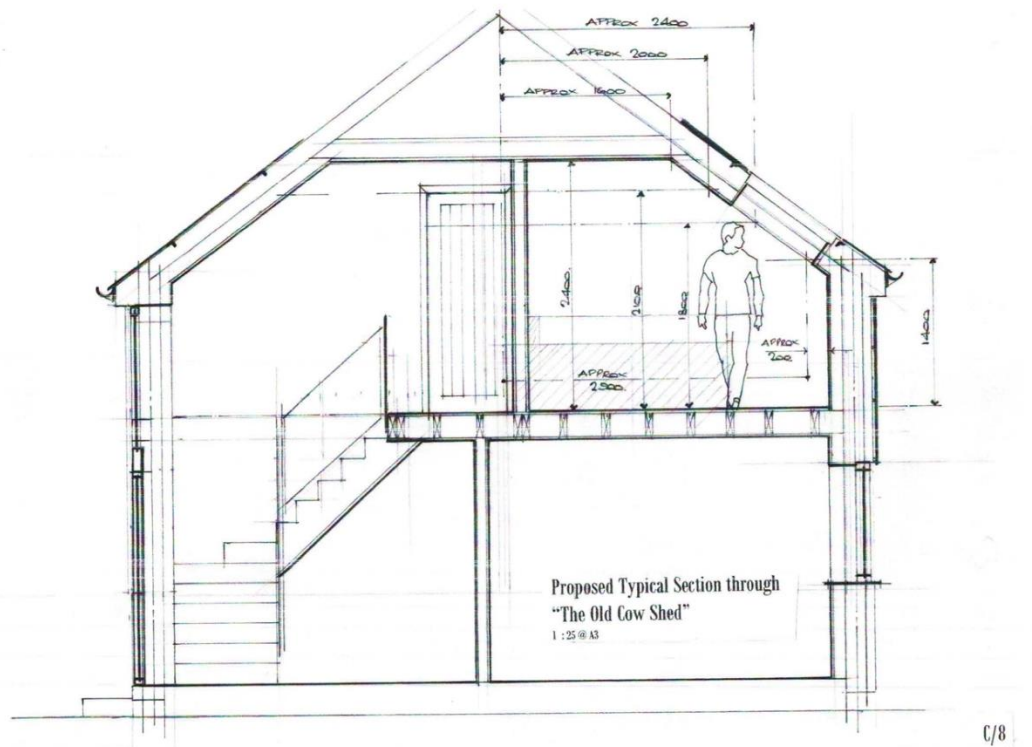


Proposed elevation

Elevations, Hunshelf Road Side

1 : 100 @ A3

C/07



## 8 DISCUSSION/CONCLUSION

The above survey aims to determine the following:

- The general condition of the existing buildings.
- The structural stability and integrity of the existing buildings.
- If the buildings are capable of functioning as a dwelling.
- If these buildings are "SUITABLE" for conversion.

From the observations of the buildings known as "The Pony Stables" and "The Old Cow Shed", I can confirm that there are no observable structural hazards present at the time of the inspection carried out on 19/05/2023.

Whilst the structures are both quite old and have elements such as cladding/roofing materials that need replacing, the existing fabric of the building is intact and structurally sound. The buildings are therefore considered suitable for conversion into a residential dwelling.

The buildings are not currently at risk from any extreme damp, insect or fungal infestation and there is no potential for unexpected settlement during the conversion process.

**Having carried out the above assessment and studied the proposed scheme, I can confirm that we believe that the intended conversion complies and fulfils all criteria as set out by the Class Q Planning Policy requirements.**

**Antonio Rubino**

**Longsight Design Consultancy Ltd**

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