

50 Broad Street
Leek
Staffordshire
ST13 5NS

E: mail@dbdconsultants.co.uk

W: www.dbdconsultants.co.uk

T: 01538 383 118



DBD Architectural
Consultancy

Building Fabric Condition Assessment

PLANNING APPLICATION FOR THE PARTIAL DEMOLITION OF THE SINGLE STOREY PORTAL FRAME BUILDING at 14 FOUNTAIN STREET, LEEK



March 2021



DBD Architectural Consultancy Ltd. Director A Dukesell MCIAT
Registered in England and Wales. Company No: 9168459

Building Fabric Condition Assessment

Planning application for the partial demolition of the single storey portal frame building at 14 Fountain street, Leek

1. INTRODUCTION / CONTEXT

It is proposed to demolish the rear section of the building to liberate part of the curtilage for a rear yard area, and allow for a fire escape door at the rear of the premises.

The purpose of this inspection is to report on the current condition of the building and comment on any requirements or limitations associated with the demolition of the rear section of the building

The building is located in between terrace properties close to the centre of town, predominantly shops/offices with accommodation over to the West, and terraced housing to the East of the property.

2. INSPECTION

The property was inspected on 2nd February & 26th March 2021 in preparation for the planning application.

The inspection was carried out by

Andrew Dukesell MCIAT
DBD Architectural Consultancy Ltd
50 Broad Street
Leek
Staffordshire
ST13 5NS

On behalf of

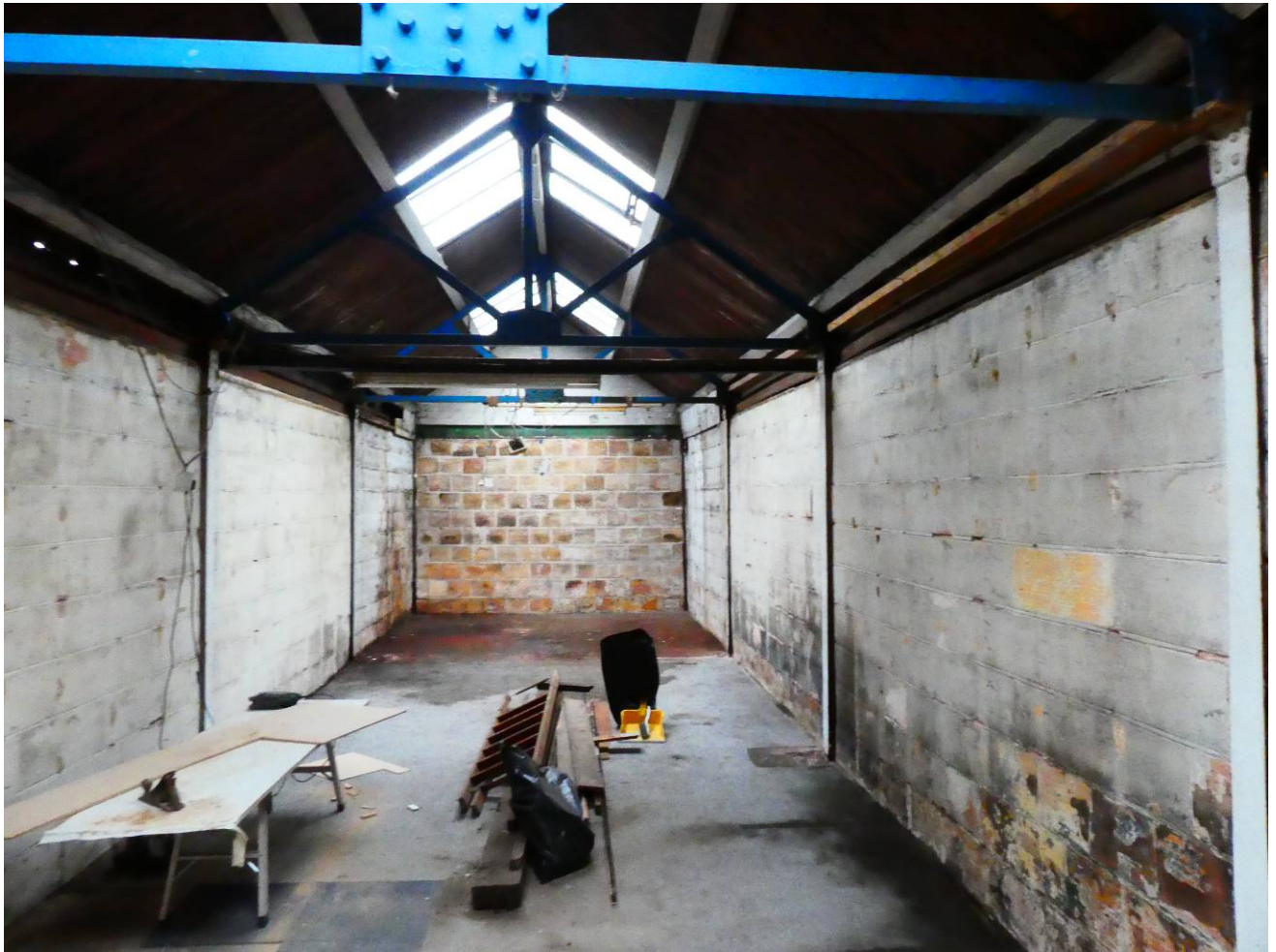
Mr C Morrison

3. LIMITATIONS

- 3.1** The survey was non-intrusive.
- 3.2** The inspection was limited to a visual inspection only, both internally and externally as necessary and subject to safe and reasonable access being available. This report is made on the findings of an inspection made from the ground and from other easily accessible points.
- 3.3** It is emphasised that the inspection is purely visual; we have not inspected woodwork or other parts of the structure that are covered, unexposed, or inaccessible and we are therefore unable to report that any such part of the property is free from defect.
- 3.4** ASBESTOS-containing materials (ACM'S) – DBD Architectural Consultancy Ltd. are not qualified to advise on the presence, or otherwise, of any asbestos-containing materials, nor insured to do so. Asbestos is a highly regulated and licensed specialist area of work controlled by the Health & Safety Executive (HSE).
- 3.5** DBD Architectural Consultancy Ltd are not qualified to comment upon, Electrical systems, Heating Systems and reference to more Specialist advice should be sought. However, any such items apparent during the inspection that are observed have been identified as requiring further inspection.
- 3.6** Toxic Mould – DBD Architectural Consultancy Ltd are not qualified to advise on the presence, or otherwise, of fungi, growth, mould, spores, mycotoxins of any kind, nor insured to do so. The building owner is advised to consult a specialist environmental monitoring or buildings diagnostics consultancy for further advice.
- 3.7** The survey is restricted to the rear single storey portal part of the building which is subject to the partial demolition.
- 3.8** The weather was generally dry on the day of inspection.

4. GENERAL DESCRIPTION

- 4.1 The existing building is a two storey brick construction with a single storey portal frame building to the rear having a street facing gable and the ridge running almost perpendicular to the road.
- 4.2 The building is set at a peculiar angle to the street frontage and tapers down in length. The two storey first section the building is approximately 13.4m across the longest wall from front to rear, and is approximately 1m narrower at the rear than at the front.
- 4.3 The rear single storey portal frame part of the building is marginally longer than the front section, approximately 14m long, but the side walls are now parallel, approx. 3.7m internally.



- 4.4 The portal frame building generally consists of a steel truss supported off steel columns stanchions, with block walls in filling between the stanchions. The roof structure is a metal corrugated panel fixed to timber purlins bolted to the steel trusses. The construction method is similar to traditional modern agricultural, commercial workshops / garages, etc

5. EXTERNAL OBSERVATIONS

- 5.1 The rear of the building is only visible from the rear yards of neighbouring buildings, as such it is difficult to get close to carry out a visual appraisal.
- 5.2 The steel columns are exposed and proud of the block walls.
- 5.3 The block infill wall appears to be a sandstone block rather than concrete, built in a simple stretcher bond, but unusually this is only a partial bond rather than the normal half lap seen in the brick walls forming the garden wall and the building walls in the image below. The mortar joints have some gaps and need pointing with a lime/sand mortar to match the existing. Otherwise the external walls appear to be sound.



- 5.4 The metal corrugated roof is rusting, the galvanised finish has perished in places and there are holes and gaps in places.
- 5.5 There is a painted metal flashing screw fixed to the wall, and presumably dressed under the corrugated sheets, which appears to be intact and serving the correct purpose.

- 5.6** The eastern elevation can only be seen from the rear yard of the apartment block off Queen st. Additional pressed metal flashings have been screw fixed to the side walls, and dressed over the boundary wall, presumably the gap between the garden wall and the external wall of the subject building was gathering debris and water, causing damp problems inside the building,



- 5.7** The rear gable can only be partially seen from the shared alley above the brick boundary wall. The flashing has also been fitted on the rear wall over the garden wall to keep the water away from the block wall. Again there is sections of mortar missing from the coursing joints. There is a steel cross bracing visible which wall tie the stanchions together in the absence of a truss in the gable. Above the steel tie the gable becomes a brick wall.



6. INTERNAL OBSERVATIONS

- 6.1 The inside of the two storey element of the property appears to be generally weathertight, the internal pointing in the brickwork has some gaps in the mortar, but otherwise in reasonable structural condition, for the nature and use of the building.



- 6.2 The first floor roof structure is supported by a King Post Truss at mid span, tiles are underboarded.



- 6.3** The exposed steel trusses and supporting stanchions have been tidied up and painted after cleaning of the rust, with fabrication repairs carried out as necessary. The steel structure is in a sound structural condition and capable of supporting the roof structure for many years to come. The steel stanchions are an estimated 6" x 4" steel I beam.



- 6.4** The roof covering is in a poor condition and would be replaced with planning permission using an insulated metal clad panel.
- 6.5** The internal block walls have been painted as the bricks have elsewhere, the pointing appears to be generally sound, although there are some damp/mould patches evident likely caused by the water and debris falling between the garden boundary walls and the building walls. The internal walls are single leaf blocks, approximately 100mm thick width.



- 6.6 The examination of a damaged block reveals it be a slim hollow cinder block that appears be coated with a clay slip to produce the sandstone/terracotta appearance.



CONCLUSION

The building has been leave empty for a year or so and has not been regularly maintained over the preceding years but there are no major defects within the structure that need to be addressed other than cosmetic and TLC, aside from replacing the single storey roofing sheets.

The single storey part of the property has been built as a portal frame building which are generally low-rise structures, comprising columns and horizontal or pitched rafters, connected by bolts or in older building rivets. The concept of the portal frame structure is that the identical steel frames can be erected to create long length wide, spanning structures, using with a panel cladding system to create the walls and roof, as in factories, warehouses and retail outlets. It is relatively easy to extend a portal frame building by adding in another 'A' frame structure in line to the others at the appropriate distance and infill the roof and walls with matching materials.

The reverse is true to dismantle a 'bay' from a portal frame building. The roof cladding is unscrewed, cladding wall panels removed and the exposed gable reclad. The redundant end 'A' frame is removed.

In this instance it would only require the removal of the gable wall, and the two side walls, and roof panels to facilitate the shortening of the building. The proposed new rear wall will coincide with the position of the last steel truss, so the stanchions and truss will remain in situ and the new wall can be rebuilt as a cavity wall. It is likely that the original blocks liberated from the demolished walls could be cleaned up and reused where practical to do so.

There are no structural issues that would make the building unsuitable for the proposed alterations

