

TPD/44-23/RGT/DGT

14th July 2023

**Former Castle View Print Works
Back York Street
Clitheroe
BB7 1LT**

For

Mr R Evans

Subject: Structural Report - Structural movement on right section of existing building

CONTENTS

1.0	Introduction
2.0	Site description
3.0	Problem description
4.0	Assessment and Findings
5.0	Recommendations / Conclusions
7.0	Appendices
	Appendix A - Photographs taken at the time of inspection

1.0 Introduction

On July 3rd, 2023, an inspection was conducted in response to observed structural movement and cracking on the property located at the former Castle View Print Works, Back York Street, Clitheroe. The focus was particularly on the right section of the building, specifically the elevations with existing window openings. This report is not intended as a full structural report on the whole building and is for the purpose to support the planning application

2.0 Site Description

The property is a commercial building situated off the high street in Clitheroe town centre. It has undergone previous extensions, with a narrow two-story side extension added later to the main three-story building. The construction of the building is traditional, featuring a slate roof on timber battens and rafters. The walls consist of solid brickwork with varying thicknesses ranging from 225mm to 325mm. Stone and brick arch lintels are present over windows and doors in the three-story section, while the two-story section has mild steel lintels over most of the openings.

3.0 Problem Description

Our inspection revealed that the primary structural movement is mainly limited to the two-story section of the building. Severe corrosion was observed on the existing lintels above all the openings, leading to displacement of the brickwork and cracks caused by the expansion of rusting steelwork. Please refer to Appendix A for photographs documenting these issues. Additionally, localized roof spread resulting from creep in the existing roof timbers has further contributed to structural cracks. The corrosion has significantly progressed and is now beyond a point where easy treatment is feasible.

4.0 Assessment and Findings

Based on our assessment, the following observations and findings have been made:

The structural movement is primarily caused by the corrosion of the existing steel lintels, which extend over all the windows along the entire elevation. These lintels need to be replaced. Sections of cracked brickwork will require removal and rebuilding.

5.0 Recommendations/Conclusion

Considering our assessment and findings, we recommend the following course of action:

Due to the extensive amount of brickwork that needs to be removed and rebuilt, coupled with concerns about the stability of the structure during these works, we suggest demolishing and rebuilding this section of the building using cavity wall construction. The project should include a new slate or tile roof, as well as new roof trusses. The new floors should be tied into the new wall to enhance stability. It is advisable to assess the suitability of the existing wall foundations; however, new foundations may be necessary.

Yours sincerely,

**R G Taylor C.Eng MI.Struct.E
Chartered Structural Engineer**

7.0 APPENDICES

Appendix A – Photographs



Photograph No. 1



Photograph No. 2



Photograph No. 3



Photograph No. 4



Photograph No. 5



Photograph No. 6



Photograph No. 7