DCC/JTH/S8341

9th February 2024



Genesis Centre, 18 Innovation Way, North Staffs Business Park, Stoke-on-Trent, ST6 4BF

Tel: 01782 366160 Email: info@cceng.co.uk www.cceng.co.uk

Dear Sirs,

# Re: 62 Albion Hill, Brighton

Further to our recent discussions I thought it may be beneficial to summaries the findings from the various reports that have been undertaken on the condition of the building.

This summary document sits alongside the more comprehensive assessment report following the structural inspection carried out on the subject building on 21st October 2022. This report aims to outline the specific defects identified in each separate portion of the building that requires attention, based on my professional evaluation.

# **Structural Steel and Lintels**

Upon inspection, it was identified that all structural steels, particularly the RSJ beams to the rear extension, are experiencing severe corrosion. These elements, crucial for the building's support, are embedded within the structural fabric and have deteriorated to a point where replacement is unavoidable. Localized demolition will be necessary to excavate and replace these failing steels.

Similarly, the RSA steel lintels embedded within the building's fabric are severely corroded. This has compromised their structural integrity, necessitating their removal and replacement. The process will involve the careful removal of some of the decorative tiled cladding on the building's façade, this needs to be undertaken to ensure the ongoing safety and stability of the structure.

## Timber Components: Floor Joists, Boards, Roof, Soffits, and Fascias

The building's timber components, including floor joists and boards, are in various states of decay. The evidence of rot and an active infestation of wood-boring insects has compromised their structural capacity, to the extent that the suspended ground floor is potentially unsafe.

At roof level the timber rafters, soffits, and facias exhibit visible signs of dampness and widespread mould growth, due to a lack of ventilation causing condensation and a lack of effective water-proofing. The deterioration of these components will require the roof to be stripped to allow detailed assessment and may require replacement to prevent potential collapse and to ensure the building's integrity.

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### **Staircases**

The structural integrity of the staircases is compromised due to rot and insect attack on the timber components. Given their critical role in the building's structural framework, the replacement of staircases is required to provide safe access to the upper floors.

### **External Envelope**

The roof's condition is particularly concerning, with the old bitumen-papered sarking felt perished and not performing its protective function and missing hip tiles due to wind damage. This has led to significant water ingress, visible decay, and damage, undermining the roof's structural integrity. Additionally, lead flashings have been partially stolen, further exacerbating the problem of water ingress. The guttering and downspouts are also in disrepair, primarily due to the degradation of the timber fascia boards to which they were attached.

The chimney stack has exhibited extensive damage, including loose chimney pots and horizontal cracks within the stack itself, posing a risk of collapse and necessitating immediate attention which may involve rebuilding.

## Masonry Walls

The building's walls, constructed of bungaroosh, present a unique challenge. This material, characterized by its lack of bonding and friable nature, has resulted in walls that are structurally compromised. The previous survey identified a number of cracks within the walls particularly to the main elevations extending between window openings. The inherent weaknesses of bungaroosh construction, combined with the current state of disrepair and ingress of water, may mean that significant sections of the walls need to be rebuilt to ensure structural integrity.

#### Windows, Doors, and Plumbing Fixtures

All window frames and doorframes are severely rotten and ideally need to be replaced. Furthermore, the building's plumbing fixtures have been substantially removed, a likely consequence of metal stripping during a period of squatting. This has left the building without functional plumbing, necessitating a comprehensive overhaul of the plumbing system.

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## **Electrical System and Other Timber Elements**

The building's electrical supply has been terminated due to the poor condition of the building and its wiring which pose a safety hazard. It is anticipated that a full rewire is essential to bring the electrical system up to current safety standards.

Additionally, other timber elements, such as architraves and skirting boards, are rotten and infested with woodworm, requiring their complete replacement.

It is also likely that large areas of the plaster work will need to be removed due to degradation and dampness.

### **Conclusion and Recommendations**

Based on the findings of my structural assessment, it is clear that the building requires extensive repairs and partial rebuilding to address the myriad of structural issues identified. The scope of work encompasses the replacement of critical structural elements, including steel beams, lintels, timber components, and the complete overhaul of the building's external envelope, plumbing, and electrical systems. These interventions are essential to restore the building's structural integrity, ensure safety, and make it suitable for habitation.

As a result of the extensive nature of the repairs required the property has been removed from the Local Authority register for community charge due to it being deemed as uninhabitable.

The necessity of these works stems not from a need to address its significant structural failures. It is my professional opinion that the proposed repairs and rebuilding efforts are critical to preserving the building's integrity and ensuring its long-term viability.

I trust the above is sufficiently clear, but please do not hesitate to contact me for any further clarification.

Yours sincerely

Douglas Croft BSc(Hons) CEng MIStructE MICE Director

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