



**A lay person's guide to fabric and condition of the Church Hall ...**  
*Notes of a presentation given at the second community meeting*  
(November 2017)

## **General**

- The roof stresses were installed as a *temporary* prevention to the urgent and serious issue of the spreading of the roof – but they are not a permanent solution – they were designed to really only last 3 years.
- The condition of the structure of the Hall is sufficiently poor that the PCC is obliged to undertake annual structural surveys in order to ensure we can get proper insurance and maintain the safety of users. We take our responsibilities very seriously and don't think that this situation is one that should continue any longer than absolutely necessary.
- Our conversations with Richmond Council have made it clear that even a very minor refurbishment would still have to comply with a wider range of important building regulations in areas such as:
  - a) Structure
  - b) Fire Safety
  - c) Resistance to contaminants and moisture
  - e) Resistance to passage of sound
  - f) Ventilation
  - g) Hygiene
  - h) Drainage and waste
  - k) Protection from Falling, Collision and Impace
  - l) Insulation, Conservation of Fuel and Power
  - m) Disabled Access
  - n) Glazing Safety
  - p) Electrical safety

For example, even simple work such as re-rendering the walls would require that we upgrade the thermal insulation to current requirements. None of this, of course, in itself, resolves the bigger structural issues that are still urgent, serious and pressing.

## **Foundations and flooring**

The south gable of the Hall sits on top of the Thorne Passage wall, and this section of wall is slowly toppling into Thorne Passage with considerable leaning already taking place.

Six courses of class B engineering bricks supported by a concrete raft foundation carry the 100mm thick clinker block wall panels. Retro-fitting 300mm cavity walls to comply with part L of the Building Regulations would require additional sub-floor foundations.

The wooden floor of the Church Hall has been sanded many times and is now considered too thin to be sanded again. In 2009 it was covered with hardboard sheeting and vinyl. However there is also now a serious damp issue that is exacerbated by the blocked sub-floor ventilation. The floor has no insulation.

### **Load-bearing columns**

- Majority of the load-bearing columns on the west side of the building show signs of structural failure, most likely caused by combination of roof spreading and steel reinforcing disintegrating from moisture ingress. Half of load-bearing columns on east side show early signs of structural failure. You can see the cracks clearly on the surface.

### **Wall Panels and windows**

- The wall panels are constructed of 100mm thick clinker block (fly ash and aggregate waste from power stations and coal gasification plants). The high sulphur content of the clinker block has most likely compromised the structural steel. Housing of similar age, construction and materials has been designated defective under the 1984 housing defects legislation (now part XVI of the House Act 1986).
- Moisture from the ground level above the damp proof course is causing rising damp to the west wall of the panels.
- All of the wall panels and gable ends exhibit extensive vertical and horizontal cracking.
- There are no lintels above the steel framed windows, and all require replacing with thermal break and double or triple glazed glass units.
- The creasing tile window sills are not weather or water proof and draw damp and moisture into the fabric of the building and should be replaced.
- The walls have no insulation.

### **Roof trusses, roof structure and roofing**

- The weight of the roof has caused the Raised Tie Queen Post Roof Trusses to spread outwards, pushing the walls out of vertical alignment and cracking the load bearing columns.
- The principle rafters and tie beams of the roof trusses have extensive splitting of the wood where fixing bolts are located.
- The roof trusses and purlins have deformed to give a concave appearance to the asbestos roof panels due to the historical spreading of the trusses and the weight of the roof.
- The roof structure has no diagonal bracing and there is no sheet bracing of the roof plane itself, apart from a little bracing provided by the asbestos roofing material.

- The 3mm hardboard lining of the interior ceiling does not provide adequate resistance to the spread of fire.
- The roof structure has no insulation.
- Our survey of the building questions the use of the building under harsh weather conditions, specifically snow-fall, and suggests that the building should be closed and inspected before it can be reopened after such events. The PCC are obliged to take such advice seriously, even if it is cautious.

## **Facilities**

In addition to these important fabric and structural issues, are many issues to do with internal facilities such as decoration, toilets, kitchen etc, all of which adds to the complex picture of the current building.

## **Summary**

The overall condition of the building is such that its long-term use is in question and cannot be assured.

The PCC continues to monitor its safety and effective functioning, but this becomes increasingly worrying, difficult and expensive to maintain over time. The PCC takes very seriously the safety and wellbeing of all users of the building.

A full renovation of the building to resolve these issues would likely take between 8 and 12 months or more. The presence of asbestos and other HSE constraints would prohibit the use of the building being used during that period.

As a responsible organisation, St Michael's is required to take warnings and surveys seriously for the safety of its users. Our reports indicate that it is 'more practicable and cost-effective to demolish the building and replace it with a new structure.'

St Michael's wishes to confront these issues now, plan for the long terms and provide the best facilities and buildings for its use and that of the wider community rather than wait for a crisis in the future.