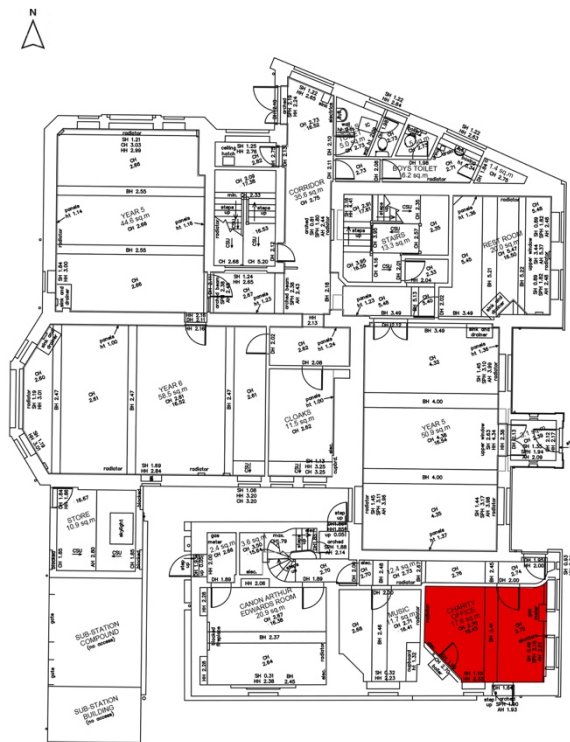


CHARLES WILLIAMS ENDOWED SCHOOL

Replacement Floor to Trustee Room: Justification Statement



Ross Hartland

On behalf of Initiate Architecture Ltd
29th September 2025

INITIATE

Existing Condition

The 18sqm floor within the existing Trustee Room (refer to Key Plan on Cover) was previously finished with a thin layer of plywood laid over softwood floorboards. Localised site investigation has involved the careful removal of the plywood, which revealed that the underlying softwood floorboards were entirely decayed. These floorboards had been laid directly onto compacted ash, into which softwood battens had been embedded to receive nail fixings. The battens, however, have completely perished as a result of prolonged exposure to ground moisture.

While most other floors within the building were replaced with concrete slabs during the 20th century, the Trustee Room is notable for retaining an earlier flooring substrate. This survival is significant as the room forms part of the front schoolhouse range, the oldest section of the building, constructed in 1724.



Photo Evidence from Local Site Investigation



Photo 1.



Photo 2.



Photo 3.



Photo 4.

Proposed Replacement

The extent of decay to the existing softwood floorboards is too great to enable their repair or retention. The most appropriate proposal for replacement is considered to be an insulated limecrete floor with a new carpet finish, meeting the functional requirements of the Trustees while ensuring an appropriately vapour permeable build-up.

The system proposed is Ty-Mawr's SubLime floor (without underfloor heating), comprising excavation of the existing compacted ash to an agreed depth, installation of a geotextile membrane, placement of recycled foam glass insulation aggregate, and a 100mm limecrete slab over.



Ty-Mawr SubLime Floor System

In practice, we recommend excavation to a depth of 400mm to remove the compacted ash substrate, allowing for:

- 270mm recycled foam glass aggregate insulation
- 100mm limecrete slab
- lime screed to achieve finished floor levels
- high-quality contract carpet finish

This build-up will provide a significant improvement in thermal performance, achieving an estimated U-value of 0.18 W/m²K whilst maintaining vapour permeability.

In the likely event that the external walls have shallow foundations, these can be suitably accommodated by stepping the excavation inwards at 45 degrees from the walls, and deepening towards the centre of the room, in accordance with Ty-Mawr's published guidance.



[Limecrete with shallow foundations](#)

Justification Statement

A limecrete floor is proposed as the most suitable replacement for the failed softwood floorboards. A suspended timber system is not recommended, as achieving adequate subfloor ventilation through the external walls would be invasive and is further constrained by the high external ground levels. A concrete slab with a modern damp-proof membrane is also considered inappropriate, such treatments demonstrated to apply pressure to ground moisture, driving it towards the wall perimeters and creating conditions conducive to rising damp.

The replacement is considered to have no detrimental impact on the significance of the building. We will ensure that a Level 3 record of the existing floor build-up is made prior to its removal. The proposed system provides an equally solid floor replacement and is confined to a single room where the surviving softwood floorboards are beyond repair. Retaining the compacted ash and reinstating timber directly over, without ventilation, would simply replicate the decay problems already observed. The finished floor level will be retained to match the existing.

In addition, the proposed limecrete system provides an opportunity to enhance the thermal performance and comfort within the space through the introduction of insulation within the floor build-up, thereby improving the room's overall environmental performance and enabling its continued, beneficial use.

Request to Heneb

Given the significance of the building and its setting, the location of this room within the earliest footprint of the Schoolhouse, and the site's position within an Archaeologically Sensitive Area, we are consulting with Heneb to confirm the necessary archaeological procedures, including whether a watching brief will be required during excavation of the floor substrate to enable its replacement. **No works shall be proceeded with until this confirmation is received.**