

ALWICK INFIRMARY WARD REFURBISHMENT



CLIENT: Northumbria Healthcare NHS Foundation Trust

PROJECT VALUE: £0.5million

PROJECT DETAILS: Refurbishing a ward within the hospital complex to create additional assessment rooms and space for additional beds, including modifications necessary to accommodate new ventilation equipment.

The project comprised a full ward refurbishment involving structural modifications to accommodate the new layout and works to improve infection control measures. A new mechanical ventilation system was installed which required air handling units located in the roof space and significant builder's works for the new ductwork and other M&E items.

Portland were appointed by the contractor to provide services from RIBA stage 4 onwards. A full understanding of the existing building was required and we undertook a comprehensive survey of the building to ascertain load bearing elements, roof type, floor structure etc. Responsiveness and adaptiveness were key as the plant designs developed concurrently with the construction works often requiring reiterations of structural design.

As part of the works, Portland were required to familiarise with the existing building and as part of the initial survey and opening up investigations it became clear the building had been the subject of previous alterations and structural modifications. This posed challenges in that previous structural alterations also needed upgrading to accommodate the changes in load paths created by the new structural works.

A full understanding of the structural elements was required, both in terms of supporting vertical loads but also any contribution to horizontal stability, such as internal buttressing walls.

A significant element of the project was to provide side rooms each with an ensuite facility. Widespread alterations to the drainage were required and Portland were able to make suggestions in respect to the room layout that simplified the drainage works and reduce the magnitude of cuts to the internal slab.

The roof was a traditional timber construction and as such a full assessment was required to prove its capacity to support the new mechanical equipment and strengthening works to be designed.

