

Refurbishment & Replacement of Roof Structure



Location:
The King's School,
Grantham, Lincolnshire



Client:
The King's School



Architect:
Alan Wood & Partners



Value:
£800k



Civil Engineering

Structural
Engineering

Building
Consultancy

Geotechnical and
Geoenvironmental
Engineering

Project
Management

Specialist services

The Grammar school property is situated on Brook Street, Grantham. The school was established in 1528 with various roof ages.

The “Old School” fronting on to Church Street was built in 1497. Numbers 1 and 2 Church Street which adjoin the “Old School” are 16th and 18th Century fronts. The buildings are generally Grade 1 or Grade II listed. The CIS building which comprised this project was predominantly grade II listed and the works consisted of refurbishing/replacing the existing roofs, repairs to existing lath and plaster ceilings, structural strengthening works to the roofs as required and replacement of existing dormer windows.

Engineering and Design Factors

Alan Wood & Partners working with the Client right from inception carrying out initial surveys to inform budgets for an application for funding under the Condition Improvement Fund (CIF). Initial surveys comprised full measured surveys and structural surveys. These were then fed into budgets to secure the CIF funding for the refurbishment and replacement of all the roofs comprising the CIS building. At the same time outline planning drawings were prepared for Listed Building Approval. Once the planning and funding were secured then AWP fulfilled the role of Project Managers, Contract Administrators, Structural Engineers, Architect and Principal Designer progressing the project through detailed design to construction including, tendering, appointing the successful contractor which was Lindum Construction and managing the contractor on site to the project’s successful conclusion. Due to the nature of the roofs, which were predominantly underdrawn the extent of works was only revealed once the existing roofs were stripped. To avoid delays this entailed ensuring structural surveys and timber decay surveys were carried as soon as the roofs were stripped to inform the construction process. AWP’s heritage engineers worked hand in glove with Hutton and Rostron the timber decay experts

to prepare reports and drawings for submission to the Listed Building Officer to secure the necessary approvals whilst in a parallel process Lindum’s construction team secured the necessary materials to construct the next phase of works.

Description of the Works

Refurbishment and replacement of roofs to the existing CIS block Grade 2 listed buildings. The refurbishment including, replacement/reuse of tiles, strengthening original roof trusses, sympathetic replacement of decayed original roof and ceiling timbers, interventions with new supporting steelwork where original features were too decayed/damaged to fulfil their original function and introducing additional support to an original chimney stack. Alan Wood & Partners carried out full Project Management, Contract Administration, Architectural, Structural & Principal Designer Services.

Core services

Civil Engineering / Structural Engineering / Building Consultancy / Project Management /
Conservation and Heritage

Sectors

Conservation and Heritage / Education

