



In 2010, the London Borough of Bexley identified a vacant school building located in Erith, south-east London for the provision of Special Educational Needs facility to accommodate 180 pupils aged 7-16 and 60 of staff. The existing, dilapidated, single-storey brick building with flat roofs, built in 1960's, situated on 1.9ha site next to Thames Water Reservoir required full refurbishment, remodelling and extensions in order to meet the brief.

Martin Arnold Ltd were appointed as an architect / lead designer and cost consultant at strategic definition stage and as contract administrator at its technical design stage to deliver the project from its inception to completion.

The main challenges of the brief were to create calming and easily predictable environment for SEN pupils while working within constraints of the existing structure and meeting spatial and technical requirements as well as tight budget.

Client

London Borough of
Bexley

Contractor

Wilmott Dixon
Construction Ltd

Contract Value

£9,600,000

Duration

14 months

Address

Colyers Lane,
Barnehurst, Erith, DA8
3PB



The school has been divided into 5 zones (Admin, KS2, KS3, Gym and 6th Form) designated by use of different colours. Existing layout has been fully utilised while external courtyards were incorporated within the new layout to create usable spaces. The new extensions – which include Multi-Function Hall with Changing Rooms, Gym and Kitchen as well as 6th Form Block – doubled the existing school area. Externally – there is new MUGA pitch, soft and hard landscaped play areas, car parking and estimated 1km of anti-climb perimeter fencing with specially designed, lobbied entrance gates for vehicular as well as pedestrian access.

The challenges of working within the existing built environment included strengthening of the roof structure to withstand 1 in 100 years storm, overcoming overall site level differences reaching of up to 10m as well as the proximity of Thames Water Reservoir by careful set out of adjacent levels and cross over design.

Translucent Kalwall have been specified as replacement of the existing classrooms windows due to its robustness, thermal resistance and light dispersing ability which assisted in creation of calm learning environment while preventing overheating south-facing teaching areas. Roof mounted Passivent ventilation shafts have been used in all classrooms, Library and Multi-Function Hall to create natural ventilation system.

Martin Arnold led the design team to successful delivery of this challenging project on three years long journey to satisfaction of our Client as well as the End User.

Critical Challenges.

Management of End User's expectations with Client's budget and brief requirements while facing challenges of working within existing building environment requiring extensive improvements and additions as well as challenges arising with boundaries conditions.

Services Provided

Architecture

Contract Administration

Cost Planning & Cost Management