



Willow Dene SEN Primary School

The proposed scheme was to provide a new SEN Primary School of approximately 4,275sq. m gross internal floor area and would include a swimming pool, refurbishment of the existing foundation year block (1,238sq. m GIFA) and formation of new external play areas, car parking and landscaping. A completely new I.T. Infrastructure was to be installed whilst remaining fully operational during the works which were spread over three distinct phases.

Graham Construction were appointed as the principal contractor and due to previous work history with Willow Dene (as well as other schools throughout the Greenwich Borough), Baxter Communications were specified and appointed the role of specialist I.T Contractor.

To ensure that the final vision of the school's I.T. Infrastructure would be met, Baxter Communications worked closely with Paul Wheeler (Principal Information Officer), Claire Celisse (Principal Premises Officer) and the Graham Construction design team during the initial stages.

Having worked closely with many primary schools in the Greenwich Borough, including being involved in the rebuild of another SEN school, Baxter Communications were able to provide a solution that would meet the budget requirements and time frames that were already set in place.

The decision was made to use NETGEAR networking equipment to provide the backbone of the school's network. This also included a fully managed wireless network that allowed for expansion, should the need arise. NETGEAR products have proven to be reliable and cost effective as well as providing the level of support that was required by the end client, including NETGEAR carrying out an "off-plan" survey to reassure the school that what was being installed would meet their demands.

Being an SEN school, Audio/Visual solutions are extremely important in providing a stimulating environment for the pupils. In the classrooms SMART Technologies Interactive Whiteboards were installed, which staff were already familiar with. New EPSON Ultra Short-Throw Projectors were installed with the boards which allowed the complete installation to meet the schools budget.

Beyond the classroom environment, the Audio/Visual requirements expanded to two halls, conference rooms and open teaching areas.

The area each needed to have large electric screens complete with projection and audio facilities.

The main hall saw the installation of a 4m x 2.25m 16:9 Electric Projection Screen, Epson HD ready Projector, Rack-mounted amplifier audio system and Bose speakers. In conjunction with this, a software controlled DMX lighting system was installed using LED Par Cans and LED Moving Spot Lights. By introducing software based DMX, control of the lights is simplified and can even be controlled using a tablet/iPad.



"Now we have a modern, purpose-built school which affords even greater opportunities for teaching and learning and which, with its up-to-date facilities, more closely reflects the diverse and complex needs of our growing school population."

*Carolyn Vagg/Rachel Harrison (co-Headteachers of Willow Dene School)
5th February 2015*

Another element of the project also required a new VOIP phone system to be installed and needed to be implemented whilst the school remained fully operational. This task involved not only replacing the equipment with new but working with BT to ensure that new lines and existing telephone numbers were transferred at specific times so as to meet the requirement.

To ensure that all of the elements were able to function correctly, a new CAT6 infrastructure was installed across the 3 phases. Each phase consisted of a data cabinet with fibre optic links running back to the main server cabinet. Sufficient space was provided in each of the cabinets to allow for servers, VOIP and Network switches, backup solutions as well as the CCTV equipment.

Over 45 Wireless Access Points (centrally controlled using NETGEAR's WC7520 Controller) were deployed, providing gapless coverage across the whole site as well as covering multiple wireless channels.

Based upon the successful implementation of the I.T. systems at Swingate Lane, Willow Dene are keen to continue their working relationship with Baxter Communications as their preferred Contractor.

NETWORKS • AUDIO/VISUAL • WIRELESS