

project dossier



projects

■ Design and construction ■ Technical ■ Project management

Report: **Sally Rowat**

Mention Swanley in Kent and for many people the name is synonymous with motorway snarl-ups and an uninviting town that developed in the mid 19th century out of one crossroad and a railway junction. Up until the 1930s, its main claim to fame was exporting flowers and vegetables to the metropolis, and receiving in return railway wagons full of manure from the London horse traffic, to enrich the land!

But all that is Swanley Town. Tucked away less than a mile to the east is the other Swanley, by contrast an appealing mix of vernacular domestic building, set amidst country lanes and with a character all its own. Swanley Village, popular today with affluent commuters, is so much more of a rural idyll than the surrounding area, far removed from its big brother namesake and seemingly worlds ▶





▲ In the cloakroom, each basin panel is a different colour, and transfers decorate the cubicle doors to make the space child friendly.



▲ Architect Terence Symmons (left) discusses phase two of the St Paul's School project with Headmaster, Desmond Watson.



▲ The lighting system fitted by DJA allows the pupils to experience different moods in the main teaching area.

BEST IN CLASS

away from the M25 and M20 motorway – which are, in reality, just 1.2 miles distant!

The Church of St Paul has stood at the heart of this village community since 1861. And close by, sharing the same acres of diocesan Glebe land, sits St Paul's village school. The fact that the Church address is School Road – and the school buildings border both sides of the same rural thoroughfare – would seem to indicate that these two architectural stalwarts were built cheek by jowl at much the same time, to promulgate Victorian village life.

Today, the site is designated green belt, within a Conservation Area. The village boasts a local pub, no shops and barely enough youngsters to support the primary school. Updating the school to attract children from the surrounding area and so maintain student numbers was an imperative for Kent County Council in 2004. At that date, the Victorian School Hall was the only space in which to teach reception-age children. On the other side of the split site were two temporary mobile classrooms, adjoining a Second World War air-raid shelter used as the staff room.

Committed to reducing the number of mobile and temporary classrooms in Kent by 40 per cent, the County Council turned to Parsons Brinckerhoff, the engineering and architectural global practice. The firm had signed a framework agreement with the Authority and already completed other assignments, but this was its first school project. Architect Terence Symmons takes up the story. "Initially, we were asked to present plans for phase ►

one: to demolish the air-raid shelter and to erect a reception classroom in its place. The old School Hall could then be converted to provide a staff room, resource library, a one-to-one teaching area and a secretary's office."

Presenting his plans for phase one to Headmaster, Desmond Watson, the architect made a further suggestion. Both men agreed that it made sense to propose a second phase to Kent County Council: the mobile classrooms should be removed and the reception classroom extended to incorporate two further permanent classrooms. This would get the older children out of the mobile accommodation occupied for the past 15 years. And so, despite the fact that there was insufficient funding to complete the proposed phase one – let alone embark on phase two – Terence Symmons approached the Kent authority and secured agreement to proceed to planning on that basis.

Both phases of the scheme were then presented to the School Governors and to parents and children at St Paul's. Their response was very enthusiastic. The architect's designs were influenced by the surrounding fields and the Victorian School Hall with its pitch roof, Bath stone window surrounds and a very rural feel. But when he put this scheme to the Kent Planners, they came back saying they wanted it even more vernacular, in keeping with the locality and community. Although this would increase costs still further, to get Planning Permission on both phases he re-presented the drawings in a vernacular style that pleased the Planners. His scheme was 'highly recommended'.

Phase one was next put out to competitive tender. All the contractors' costs came in hugely over budget: a result of the initial high cost of details and quality materials necessary to satisfy the Kent Planners. It seemed at one stage that even the first phase wouldn't go ahead.

"But Kent County Council agreed that I could negotiate on its behalf with David Johns Associates, the contractor that came in at the lowest price," continues Terence Symmons. "Steve Bateup from DJA and I looked at all the elements in the building and identified substantial cost savings of £80,000, mostly by going for alternative suppliers. I explained to Kent that if we had to go back out to tender on a reduced scheme, the Planners would refuse it as 'not in keeping'. Although still over budget, we had made a substantial saving and DJA had negotiated down to £259,619, which was a competitive price. On that basis, we got the go-ahead, although it was still above average funding for such a project."

The David Johns team went on site in late July 2005. First task was to demolish the former air raid shelter and so clear the way for new classroom footings. This was just the latest in a string of school projects for the experienced Chartered Building Contractor. "Our team – from top to bottom – understands the critical importance of effective site management on such contracts," says Martin Buckthorpe, who had Directorial responsibility throughout. "At Swanley Village, we had to plan deliveries around pupil drop off and pick up times, guarantee clear access to St Paul's Church across the school grounds, work around children crossing the main access drive, and – perhaps the hardest part – reduce noise to a minimum during lessons."

The contractor worked around torrential autumn rain that held up the construction phase. This meant the finishing – particularly wet trades – had to run like clockwork and fit within the Christmas period, when the children were not in school. Crucially, they met a finish plastering date of 20th December, allowing the plaster to dry out before the under floor heating came into service just after the New Year break. Only then could floor finishes be laid and painting completed.

Surrounded by open fields, the exterior design of the new reception classroom has an essentially rural feel. "With the high pitch roof, it feels part of the landscape," says Martin Buckthorpe. "The architect's brief specified that we either match or reproduce the 19th century brickwork, including the blue band courses, to echo the design of the old School Hall as closely as possible. The Bath stone window surrounds and finials on the roofline pick up that theme, too. But at the same time, we had to conform to 21st century planning regulations and incorporate modern windows and doors, and a raft of health and safety features."

For architect Terence Symmons, the trick was "to integrate the new classroom into that very specific locality, so that it looks like it was always there, despite being very modern. My aim was to give the children a space not dissimilar to what they were used to. So the new classroom incorporates a high ceiling with exposed feature trusses to create a barn like feel. I wanted to introduce as much light as possible, with large roof lights. And because the new building was aligned with the Church, I specified full height, double glazed windows at each end. In a conversation with the Reception Class teacher, she had said: 'I think it should be like a playhouse' and so that is why I introduced a circular window. Almost all the windows are positioned at a very low level (not adult height), so that the children can see out. The result is a lovely volume of space and a wonderful light." ►

The architect specified underfloor heating "because young children can spend a lot of time on the floor". His lighting scheme moves right away from fluorescent lights and means that the pupils can experience different moods of lighting in the main teaching area: for playing, or teaching or learning. In the cloakroom, transfers of sandcastles and fishes decorate the cubicle doors and each basin is a slightly different colour – again designed to make the space welcoming to young children.

And there are more child friendly touches: outside, Terence Symmons has designed a glass roof over the entrance, so that the children can go out to play and get fresh air even when it is wet. And the garden created at the back of the classroom has an area for the children to grow plants and seeds.

"When you stand and look out from the new reception classroom to the gardens beyond, you can't help thinking what a wonderful experience it must be to learn here as a child," reflects Martin Buckthorpe. "It is open and airy and so very spacious – the feeling inside is fantastic." One unexpected reaction came when Sarah Austin, the Reception Class teacher, was so overjoyed as she first entered the new classroom that she cried. Her young pupils were similarly enthusiastic – but without the tears!

Converting the old School Hall – now obsolete as a classroom – completed phase one. Providing a new secretary's office out of the old cloakroom meant inserting a new window to perfectly match the 19th century originals. "The DJA bricklayers made an excellent job of that – indeed, across the entire project they were particularly skilled at matching the brickwork and pointing," confirms Terence Symmons. "We created a sample board that featured three or four different types of pointing to match colour, and they succeeded every time. Although they had to overcome considerable difficulties in building the circular window and the brick bands surrounding it, their bricklayers were quite outstanding.

"Across the board, the David Johns construction team performed very well. They co-operated extremely effectively with me over the designs and simultaneously liaised with the school to manage the site access in line with the teachers' and parents' needs," he continues. "Although they lost time on the groundwork because of bad weather, they managed to catch up and delivered the job on time and on budget."

Throughout the 29-week programme, David Johns Associates worked closely with Parsons Brinckerhoff to produce what Kent now recognises as the best Reception Classroom in the area. ►



▲ The architect introduced as much light as possible, with large roof lights.



▲ DJA fitted full height, double glazed windows, to give a view of St Paul's Church.

Cover DJA had to conform to 21st planning regulations, with modern windows and doors, plus health and safety features, in what Kent County Council regards as the best Reception Classroom in the area.

◀ The brief specified that David Johns Associates match the 19th century brickwork, Bath stone window surrounds and roof finials, to echo the design of the Victorian School Hall.

The County Council gave top marks to the entire project team. "Although we made that substantial initial saving by negotiating with various suppliers," adds Terence Symmons, "there was ultimately no sacrifice of quality and we achieved everything originally specified in the scheme. A lot of that is down to the commitment of DJA. We were so happy with the contractor's performance that before phase one completed, I got agreement from Kent County Council to negotiate a very fair price for David Johns to stay on site for the second phase. They started work on that in July 2006."

Headmaster, Desmond Watson, confirms that the new Reception Classroom is already proving a considerable draw when attracting new pupils to St Paul's from a wider catchment area. He is particularly pleased that the DJA team has been contracted for phase two, to construct the two further 700 square feet classrooms with toilets, together with a main entrance to the school. "We have developed an excellent working relating with David Johns Associates," he confirms. "They have been most professional at every stage and a pleasure to work with. My colleagues and I couldn't be more pleased with the results." ■



▲ The new reception classroom incorporates a high ceiling with exposed feature trusses to create a barn like feel.

▼ Almost all the windows are positioned at a very low level, so that the children can see out.

▼ DJA made an excellent job of the feature brickwork and reconstituted stonework.



Project team

Client: Kent County Council

Contract Value: £259k (phase one)

Contract Duration: 29 weeks (phase one)

Architect: Parsons Brinckerhoff/Terence Symmons

Quantity Surveyor: Parsons Brinckerhoff

Electrical/Mechanical Engineer: Parsons Brinckerhoff

Structural Engineer: White Young Green

Further information about this and other projects can be seen on the David Johns website: www.davidjohns.co.uk

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