



The Solihull Centre for Inclusive Learning

The Solihull Centre for Inclusive Learning – Building Success for the Future

Contractor:	Moss Construction
Project Manager:	Faithful+Gould
Client:	Solihull Metropolitan Borough Council
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Region:	West Midlands
Sector:	Local authority, education
Contract value:	£7.7m
Project timescales:	April 2005 to April 2006
Themes:	Sustainability, integrated teams

The Solihull Centre for Inclusive Learning was an £7.7m project that saw two special educational needs schools, Forest Oak and Merstone, relocate into a new school building on Smith's Wood School campus in Solihull. The school officially opened in June 2006 and was the first in the country to be built under the Government's Building Schools for the Future programme.

Key Benefits Achieved

- Completed on time
- Completed to budget
- Award winning scheme
- Customer service and satisfaction 98%

Together the schools cater for up to 180 pupils aged between 2 and 19 years with a broad range of learning difficulties. The scheme was project managed by Faithful+Gould, and was procured under a partnering contract with Moss Construction and Solihull Metropolitan Borough Council. The project came in on budget. At one stage the project was six weeks ahead of schedule but unfortunately this time was lost due to issues with the drying out of the anhydrate screed. Despite this issue the Centre was still delivered two weeks ahead of programme.

Procurement was carried out by Solihull Metropolitan Borough Council on a best value basis concentrating on the ability to partner and work collaboratively. The OJEU Notice was placed by the Council in February 2003 for "a Special Educational Needs facility which reflects best practice in terms of design construction and sustainability". It also stated the appointment of a partnering contractor to carry out construction works, who is of a suitable size and experience is seen as a key element in that aim. Moss Construction, a division of the Kier Group, was appointed in September 2003, using an NEC Option C contract. The project was delivered on an Agreed Target Cost basis, build price not having been considered as part of the initial tendering process. On Moss' suggestion the Council's audit department were involved in discussions and a team building meeting was set up to ensure that the department had confidence in the process.



Internal courtyard in Merstone school

Start on site was put back 12-18 months due to decisions made by the client team to alter the works. The change that had the biggest impact was influenced by the start of the Building Schools for the Future (BSF) programme in the region, with a decision made to incorporate the Centre's construction into the BSF programme. This led to a complete change of location for the Centre.

Tensions also became apparent at this stage within particular areas of the Council and so changes were made to the structure of the overall team including an agreement that Moss Construction would supply members of their design supply chain to head up and work with the Council's in house team to bring forward the design. The Council also appointed Faithful+Gould to project manage the scheme rather than carry out this role in-house.

Once these changes were made the project really was able to operate as an integrated team, with specialist design input provided by the heads and teachers of Forest Oak and Merstone. One example of this input was the teachers suggesting that corridors be widened to provide greater space for the storage of wheelchairs and specialist lifting equipment. This removed the need for such equipment to be left in classrooms, substantially reducing clutter. Design input was also made by specialist suppliers and sub-contractors which also benefited the project substantially.

The project was managed in a truly open book manner. An in-depth risk assessment procedure was carried out up front by the whole team. Risks were either designed out or, where this was not possible, a risk management process was put into place. Individual risk items were costed and these sums were removed from the overall contract sum and placed in a risk pot, only to be dipped into when individual risks occurred. The project team worked with the client and stakeholders to identify a wish list of items that were not achievable in the initial budget. Where savings were made on the project the team were able to deliver additional benefits.

Because of this, the project team were able to cope with diverting a trunk sewer running under the building, incorporating a rainwater attenuation system as a late requirement and enabled the installation of the ICT systems as part of the 1st and 2nd fix operations rather than as a retrofit after the contract, if money was available.



Staff and pupils regularly visited site

The upshot of this was that a more expensive system with improved functionality was able to be installed.

One possible knock on benefit of this co-ordinated process was that any change to the building happened in a managed sequence. The whole process could be looked at and there was time to implement the correct health and safety measures for the operation to be carried out. There were no reportable injuries on the project.

The reason the project was so successful was put down by all team members to the strength of the relationships. This allowed the project to move forwards from its difficult start to its successful finish. It was crucial initially for the main contractor to build bridges with the client's design group and integrate them with the Moss team. This extended to relationships with the two Head Teachers and other stakeholders.

The programme of work began with the creation of the car park for the Centre. This decision was taken so that there was sufficient on-site car parking provision during the construction phase, ensuring that the construction workers did not upset the local community by taking parking spaces in the surrounding streets.



Forest Oak's sensory courtyard' accessible to pupils and staff

Solihull Centre for Inclusive Learning has many environmentally sustainable design features which have rarely been combined on new build projects. The building features a sedum roof to regulate temperature throughout the year, a state-of-the-art ground source heat mat, natural lighting and ventilation. This building provides a groundbreaking example of multiple environmentally friendly features combined in one building; creating long term cost savings for the end-user, and reduced impact on the environment. It is hoped that the school will create an example for future buildings, setting a new standard. The Schools Eco Committee, made up of pupils and staff, expressed particular concerns regarding sustainability and questioned "the team" about this during the design process.

Furthermore, no spoil was removed from site but was instead used to level a re-laid football pitch, under which the horizontal heat exchange pipework for the geothermal heating system was installed. 82% of site waste was reused or recycled following segregation on-site. To further reduce waste Moss exerted pressure on their suppliers to minimise packaging on their products to site and then ensured that it was separated and flattened prior to placing into skips prior to removal from site. A manual can crusher was set up on site but this was not a successful installation, one to go back onto the design board!

All classrooms were designed to be lit naturally, using high level windows and light tubes, reducing the energy use of the facility. Two internal courtyards were also included in the design to create another natural light source. These courtyards double as open air play areas, with an area in one covered to enable the children to play 'outside' even during inclement weather. Two light and sound stimulation areas have been built into the facility to aid learning through play and experience.

The nature of the schools also required that a vast number of toilets be included in the design and that these were linked directly to the classrooms. In addition, a number of private shower areas were incorporated to wash off the pupils, were an accident to happen, whilst retaining their dignity.

The schools were designed so that the class bases for the older pupils in both schools were upstairs, separated from those for the younger pupils, in order to create a sense of transition and progression with age.

The upstairs contains facilities to teach Merstone's sixth form pupils about cooking and life skills to prepare them for increasing independence in young adulthood.



The head teachers and pupils, joined by representatives of SMBC and Moss to present Jim Knight (MP & Minister of State for Schools and Learners) with a memento of his visit to open the schools

The Head Teachers of Forest Oak and Merstone both attended design team and site progress meetings and the ongoing input of their specialist knowledge was invaluable. Their contribution was key to the success of the project.

It was recognised early on that a great deal of effort would be needed to ensure that the construction work did not have a negative impact on the children. Those at Forest Oak with moderate learning difficulties were kept informed about the work on an ongoing basis. Special consideration was given to making sure that these students understood the health and safety implications of having construction work taking place on the site. There were other considerations required for those with more severe learning difficulties such as autism, with there being a potential for children to become distressed by the break in continuity. The project team tried as much as possible to ensure that the construction work itself became part of these students' normal regime.

The Moss project manager and his team were regular faces at school assemblies and public consultations and organised site visits for pupils, allowing the children to have a significant input into the project. Design competitions were arranged, giving the children the opportunity to get involved in the project. The children's input and visits allowed them to become comfortable with their new school building so that the move to their new school was not stressful. It also allowed them to gain a greater understanding of construction and put into action the sustainability issues they were learning and discussing at school.

The two schools are built in the grounds of an existing secondary school, Smith's Wood, and links between the Centre and this school have been formed, having enormous social and educational benefits. Where appropriate, students from all three schools benefit from attending classes in one of the other schools to suit their individual needs. In addition dance students from Smith's Wood have performed with the students at the Centre. An Inter School Council is developing between pupils on the three schools to build the "learning community".

Real efforts were made to engage the local community, many of whom were resistant to the scheme at the outset with there being a perception that the investment in the Centre, in a run down area of Solihull, could have been better spent elsewhere. This culminated in an arson attack on three machines and caused full-time security being employed for the site. However, over time these perceptions were managed and altered through the use of a number of stakeholder management techniques, one of the most successful of which was a local community newsletter.



Aerial view of completed centre

Lessons Learned

There is a need to be ruthless about people that don't believe in the ethos and, if necessary, one should remove them from the project.

"The project was the first Building Schools for the Future Project undertaken in the country and vital lessons have been learnt for future BSF projects. Working under a partnering agreement has proved to be successful and has provided me and others with the belief that this method of procurement, allowing an open working arrangement and the opportunity to arrive at the best value solution with a collaborative approach to problem solving is the way forward for the construction industry. The project has contributed significantly to the education and well-being of special needs children in Solihull. The purpose built facility provides a creative learning environment for the children and is a considerable improvement on the previous facilities. This will be a leading educational facility for years to come."

Stephen Crichton, Senior Project Manager – Faithful+Gould

"Solihull has exceptional people caring for and supporting exceptional children of all needs. The new campus for Forest Oak and Merstone schools provides suitably exceptional facilities for them. I am proud of the hard work of both schools, and look forward to seeing these new facilities help them build a shared future of success for every child in Solihull."

Councillor Ken Meeson, Cabinet Member for Education and Children, Solihull Metropolitan Borough Council

"The Solihull Centre for Inclusive Learning is a remarkable building designed with sustainability and the environment in mind to accommodate two special needs schools allowing them to integrate while maintaining their independence. It was a unique development delivered on time under difficult circumstances by an enthusiastic proactive team made up of representatives from the contractors, architects, clients and, most importantly, the end users led by a highly motivated project manager."

John Williams, Building Control Officer, Solihull Metropolitan

"The Moss team supported the school very effectively through the design and build process. The quality of staff and their excellent communication skills have been evident throughout the process. The project was extremely well led by Jason and I believe the end result is an excellent building fit for this and future generations of staff and pupils. I take pride in being part of the team that delivered this scheme and thank Moss for their highly professional and personal approach to the project."
Amanda Mordey, Head Teacher, Merstone School



Pupils visiting the site and inspecting their living roof covering



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