

Saunders Boston Architects

Education (Schools) Portfolio

2018



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Architects Interior Designers Principal Designers Expert Witness

constructionline



Chartered Practice





About Us

Saunders Boston Architects design and deliver highly serviced, complex and difficult building projects serving multiple stakeholders, such as: university buildings, research laboratories, schools, public sports centres, care homes, affordable and private residential developments. We work collaboratively with building users and clients to thoroughly understand their needs, business objectives, and personal aspirations in order to fully utilize our design and project management skills to enhance their operation.

We use our knowledge and experience to investigate, analyse, suggest, guide, provide options, solve problems and anticipate changing circumstances. We aim to provide bespoke solutions that are site and client specific, with creative and elegant designs that emerge from a pragmatic and a team approach. Saunders Boston Architects help clients to grow their businesses or organisations, increase efficiencies in their operations, develop their capabilities and future-proof their facilities in positive, safe and pleasing environments.

Our projects range from under £100k to over £25m, but all receive the same level of dedication and attention to detail. Each Project is managed from inception to completion by a Director, with a second Director regularly briefed to achieve an assured overlap. Each Director is supported by an Associate Director and/or an experienced senior project architect. Technical team members and Interior Designers are brought into the project at appropriate stages to ensure that all projects are fully resourced at all times.



'exceeding client expectations'

Core Sectors

- Education
- Science/Veterinary
- Residential
- Care
- Sport & Leisure
- Commercial
- Interiors

Our Services

- Architects
- Interior Designers
- Principal Designers
- Expert Witness

Practice

- 50 + Staff
- Multiple Offices
- CAD / BIM Focused
- 5 Owner Directors

Additional Click



Our approach to BIM

BIM is a collaborative approach to not only the design of a project, but to the process of coordination, procuring, tendering, constructing, maintenance and operation of a building. True 'Building Information Modelling' looks to generate a digital representation of the physical and functional characteristics of a building project which can be used to drive efficiency. Through the evolutionary process of design and construction, the BIM informs a shared knowledge resource generating a concept and eventually a building where capital expenditure and operational expenditure have been considered.

For us at Saunders Boston the process of collaborative teamwork is nothing new. We strongly advocate the team approach on all our projects and work extremely hard to bring all our project partners together in an open forum. For us BIM is simply another tool in our armoury to assist us, and the team, throughout the process. Saunders Boston has been at the forefront of Computer Aided Design for many years operating both of the market leading 2D platforms. In more recent years, driven by the governments 'Construction 2025 strategy' and BIM targets for 2016.

We have invested in training our staff and have tested multiple BIM platforms as we look to push forward the BIM agenda whenever possible. We are currently operating Bentley AECOsim and Autodesk Revit in line with BIM Level 2 as we look to meet the government's targets.

BIM level 2 requires the sharing of multiple designers 3D models, bringing them together as a 'federated' 'IFC' model where the 'BIM Manager' undertakes a process of 'Clash Detection'. This highlights and reports to the design team (and client) where each disciplines designs are in conflict. The designers can also provide cost consultants or contractors with scheduled information allowing them more efficiently quantify and price building elements. Ultimately using 'COBie Data' in an excel format combined with a viewable form of the model will allow building users to operate a more efficient building.



BIM can offer our clients / projects multiple benefits including;

Greater Collaboration

Option Appraisal

 Greater Understanding of the Design

A Faster process

More Safety and Risk
Management

Life Cycle Asset Manager

Additional examples

Waste Reduction

TIC



Education Sector



- Nursery's
- Primary Schools
- Secondary Schools
- 6th Form
- Further Education
- Higher Education
- PRU / SEN
- Master plans
- Research Facilities
- Student Accommodation

Saunders Boston has over thirty years experience in Primary, Secondary and Tertiary Education, working with clients ranging from Local Authorities, Faith Schools, Academies, FE Colleges and Universities.

We are able to provide a range of services within this sector, primarily based around a full architectural design service from inception to completion and beyond but also including; Technical Advisory roles, Contractor (D&B) Delivery Architect, Specialist Interior / FF&E Design Services.

Our approach is to work closely with clients and teachers to provide stimulating and welcoming environments for learning.

The following section of this brochure illustrates in greater detail our philosophy and approach to designing educational facilities, our team and some highlights from our portfolio.







Education Sector

'exceeding client expectations'

Project	Client	Value	Nursery / Early Years	Primary Schools	Secondary Schools	6 th Form	Refurbishment	Extension	New Build
Waterbeach Primary School	Cambridgeshire County Council	£3.0M	\checkmark	\checkmark			\checkmark	\checkmark	
Buxhall Farm Primary School, Histon	Cambridgeshire County Council	£9.0M	\checkmark	\checkmark					\checkmark
Wyton on the Hill, Primary School	Cambridgeshire County Council	£9.0m	\checkmark	\checkmark					\checkmark
Melbourne Primary School	Cambridgeshire County Council	£4.8m	\checkmark	\checkmark			\checkmark	\checkmark	
Sawtry Pre-school School	Cambridgeshire County Council	£1m	\checkmark						\checkmark
Queens College	Queens College Nursery	£1.2m	\checkmark					\checkmark	
Unity College (Academy)	Peterborough Diocese	£25m			\checkmark	\checkmark			\checkmark
Kings Cathedral School	Peterborough Diocese	£7m			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Fawcett Primary School	Cambridgeshire County Council	£3.5m	\checkmark	\checkmark			\checkmark		\checkmark
St John Primary School	Cambridgeshire County Council	£3.5		\checkmark	\checkmark			\checkmark	
Coton CofE Primary School	Cambridgeshire County Council	£0.8m		\checkmark			\checkmark	\checkmark	
Longsands School (Academy)	Longsands Learning Partnership	£1.3m			\checkmark	\checkmark			\checkmark
Fulbourn Primary School	Cambridgeshire County Council	£4.5m	\checkmark	\checkmark			\checkmark		\checkmark

Additional Click examples To v



Nathan Swift Director

BSc, BArch. RIBA



Nathan joined us in 2002 after graduating from University he became an Associate in 2010 and Director in 2014. Nathan has been involved in a wide range of projects across the company's portfolio with experience in both new and refurbishment schemes. In recent years Nathan has gained a particular specialism within Education and Sports & Leisure.





Why Nathan is right for your project

Nathan looks to take a very hands on approach with all his projects usually acting as the 'Project Architect' and will bring his experiences of working directly with; developers, design & build contractors, education institutions, local authorities, and project managers. Nathan also heads up our BIM taking a keen interest in this developing technology which will shape the future of our industry. Nathan's projects have been recognised by the RIBA, RICS, SCALA and LABC.

Education Sector Experience;

Unity College Secondary School – £25m new secondary school in Northampton in the Diocese of Peterborough. The school created; all KS3 teaching spaces, 6th Form, an Auditorium, Library, Special Education Needs and Sports.

Wyton on the Hill Primary School – Built by RG Carter this £9m new build 1.5 FE school includes 2 reception classrooms, three KS1 classrooms, 6 KS2 classrooms, admin, hall, studio, communal learning and a 40 place preschool.

Sawtry Infant, Junior and Pre-schools – Alongside Kier Construction through the LGSS framework is a multi-phased development, creating a new 2 class base pre-school, and 6 new classrooms, and an extension to the school hall. **Melbourn Primary School** – A £4m development that will increase the existing 1.5FE school to 2FE. The scheme creates four new class bases, a new pre-school, additional group rooms and extends the existing studio.

ARU Science Centre - £25m build on the Cambridge Campus offers a range of science based learning, including; psychology, ICT & Biomedical Science. At the heart is a 300 seat lecture theatre and 200 place 'Super Lab'.

Roundwood Youth Education Centre - £5m SCALA award winning scheme funded by DofE and MyPlace this scheme offers a range of vocational teaching including; Catering, Health & Beauty, Performance Arts and DofE. "From the very first meeting, Nathan impressed us with his enthusiasm for working collaboratively and determination to ensure that our priorities as clients were met. There was a refreshing liveliness in his approach that was later complimented through attention to detail" **Robert Whatmough, Executive Principal at Longsands Academy**





Andrew Critoph Associate Director MCIAT



Andy is currently in his second period of employment with Saunders Boston, sandwiching periods of employment within the University of Cambridge Estate Management and Cambridgeshire County Council's in-house Design Team, where he worked on Primary, Secondary and Special Schools projects within Cambridgeshire.





Why Andy is right for your project

Through his time working on numerous Education projects, Andy has developed an understanding of the processes involved developing and delivering projects to meet the Local Authorities and School's expectations. Andy typically provides the 'project lead' and day to day contact throughout the life of the project, a role he has undertaken on a number of Education projects as well as projects in the University and Leisure Sectors.

Education Sector Experience;

Fawcett Primary School – Following significant population growth in the Trumpington area of Cambridge the project improved and extended this existing school to create a 2 FE school with Children's Centre.

Coton Cof E Primary School – This £0.8m scheme created a new group room, pre-school and year 1 classrooms. The scheme involved close collaboration with various stakeholders and governors alongside the D&B Contractor.

Sawtry Infant, Junior and Pre-schools – Alongside Kier Construction through the LGSS framework is a multi-phased development, creating a new 2 class base pre-school, 6 new classrooms, and an extension to the school hall. **Melbourn Primary School** – A £4m development that will increase the existing 1.5FE school to 2 FE. The scheme creates four new class bases, a new pre-school, additional group rooms and extends the existing studio.

St John's Primary School – £3.5m extension comprised 8 new classrooms, ICT, Library, group spaces, a new entrance and staff accommodation. Built by Kier construction the scheme achieved BREAM Very Good.

Waterbeach - kkkkk





Adam Garner Associate Director BArch, Dip Arch. RIBA



Adam joined us in 2013 bringing with him extensive educational experience. Involved in the design of a wide range of projects, with interests in sustainable design, planning and management of spaces within the built environment. Holding the philosophy that designers do not tell people how to work and live, but how to find new ways to organise space that encourages interaction and creativity.





Education Sector Experience;

Buxhall Farm Primary School – Working with Cambridge County Council, PMAT and RG Carters on the design for a new £7.5m 2FE Primary and Pre- School in a sensitive Green Belt location.

Wyton on the Hill Primary School – Built by RG Carter this £9m new build 1.5 FE school includes 2 reception classrooms, three KS1 classrooms, 6 KS2 classrooms, admin, hall, studio, communal learning and a 40 place preschool.

TrumpingtonMeadowsPrimarySchool-Extensivecommunity and stakeholder consultationhas resulted in anadaptable, inclusive and visionary design for a new £9.7m 2FE Primary School, Preschool and Community Centre

Why Adam is right for your project

Highly driven with a keen eye for detail, Adam is rooted in the thick of his projects, taking a hands on approach translating and tailoring the vision into the built form. Well versed in modern methods of construction and as an active school governor, he brings his expertise in understanding the complexities of setting up a school and the demanding nature of the industry.

Queen Emma Primary School – An inspirational new £9m 2FE school true to Cambridgeshire's Vision for Education. The project has achieved a BREEAM rating of Excellent, the first CCC primary to achieve such an award.

Bewick Bridge Primary School – A £3.4m timber framed 1FE extension designed to provide a new identity by providing a dynamic, flexible central activity and social hub, of which classrooms are accessed and viewed...

Burrough Green Primary School – Set in the grounds of an ancient schedule monument and encompassing a grade II listed building the project provides a bold statement for a new 120 place school.





Buxhall Farm Primary School

Cambridgeshire

Client: Cambridgeshire County Council / RG Carter Value: £7.2m Status: RIBA Stage 3







- 52 Place Pre-school
- 2 Reception Classrooms
- 4 KS1 Classrooms
- 8 KS2 Classrooms
- Admin, Hall and Studio
- Communal learning resource space

Project Details

Saunders Boston Architects have been appointed to provide full architectural design and lead consultant services working alongside D&B Contractor RG Carter.

Located within the Green Belt of a Rural Cambridgeshire Village we have aspired to design an inspirational modern building that will meet the educational needs of the Cambridge Primary Education Trust, both today and in the future that draws inspiration from the rural Fenland setting. Our design has evolved through an analytical approach and understanding of the brief, context and constraints. Reflecting the scale and form of the surrounding houses, the linear pitched 2 storey school takes its lead from the development of regional farmstead barns. The building and wider site express the ambitions of each of the Academy Trust, being inclusive, sharing, and interdependent where the shared aim of the academy is to provide outstanding education for all their pupils by offering a broad and balanced curriculum whilst remaining embedded in the local community.

With on-site operations due to commence summer 2019 the school will be open for the new academic year in 2020..





Wyton on the Hill Primary School

Cambridgeshire

Client: Cambridgeshire County Council / RG Carter Value: £9m Status: On-site



- 40 Place Pre-school
- 2 Reception Classrooms
- 3 KS1 Classrooms
- 6 KS2 Classrooms
- Admin, Hall Studio
- Communal learning resource space

Project Details

Saunders Boston Architects have been appointed to provide full architectural design and lead consultant services working alongside Design & Build Contractor RG Carter.

Following an extensive condition survey and area assessment the County Council elected to develop a New Build 1.5FE (330 Place) Primary School plus (40 Place) Pre-school adjacent to the existing school, which will remain fully operational until the new school is complete. The New school will allow for a further 0.5 FE intake to respond to the additional 4500 homes due to be developed at RAF Wyton.

The new school has been designed around a focal communal learning resource space that links the teaching spaces with the main hall, studio and pre-school. The new school looks to comply with the BB103 standards.

A two-storey solution was preferred to maximise the land footprint of the site that involves a land swap agreement with the MOD allowing the existing school to remain operational during the build. With on-site operations due to commence summer 2017 the school will be open for the new academic year in 2018.





Sawtry Infant, Junior School & Pre-school

Cambridge

Client: Cambridgeshire County Council Value: £5.0m Status: Pre-school – complete, Infant & Junior School - Planning





- Four 2 Story (6 Classroom) block
- New Pre-school
- New school hall and kitchen
- Improvements to spaces

Project Details

Saunders Boston Architects are providing full architectural design and lead consultant services working alongside Design & Build Contractor Kier Construction. Sawtry are currently one of only a few remaining separate Junior and Primary Schools within the County. As part of our work we have looked at ways of bringing the two schools together whilst ensuring both can continue to operate independently. The scheme currently under consideration for planning includes the construction of a new 2 storey (6 classroom) building alongside a new shared hall, new Preschool and internal alterations which will ultimately create a 2FE school.

Architecturally the developer looks to respond to the character of the site and the various languages currently active. The new hall will be located centrally between the two schools and responds to both through the combination of cladding and brickwork with a parapet and flat roof.

The new two storey element sits deeper within the site and has a more contemporary feel with a low mono-pitch roof and similar cladding / brickwork. The Pre-school will sit alongside the main school with its own dedicated access again following a more contemporary feel.

'exceeding client expectations'



Additional Clic examples To



Queens College Nursery

Cambridge

Client: Queens College Cambridge Value: £1.2m Status: Complete



- 25 Place Nursery
 - Separate Post Graduate Accommodation
 - External Play/Landscape
 - Breathe Life back into the existing building



Project Details

The project brief was to relocate the existing cramped nursery from its constrained location on the main Queens' College Silver Street site. It was moved to an existing concrete framed building to the east of the Lodge Cottage Owlstone Croft site in Newnham Croft, Cambridge.

The building to be refurbished had been unoccupied for approximately 20 years and suffered from a combination of lack of maintenance and exposure to the elements. This resulted in a failing brick façade and a damp interior. The solid 1950s concrete construction, which was used as a training building, had remained structurally sound. This building was not noted as "significant" in planning terms but was within the conservation area.

A nursery was created on the ground floor of this building. New car parking and cycle parking was also provided. At first floor level, it provided post graduate en-suite Student Bedrooms with a communal kitchen / dining space. Each function has its' own independent entrance. The key ethos of the nursery is to 'play and learn through their natural environment' therefore the building has been designed to maximise the relationship and the opportunity to interact with the outdoors





Fawcett Primary School

Cambridge

Client: Cambridgeshire County Council / Kier Value: £3.5m Status: Complete



- Four New Key Stage 2 Classrooms
- New Entrance & School Admin
- Children Centre
- Pre-school
- Nursery
- Improvements to Existing Class Rooms

Project Details

Saunders Boston Architects provided full architectural design and lead consultant services working alongside Design & Build Contractor Kier Construction at Fawcett Primary School. The school, part of the Trumpington Federation, is an established Primary school in Trumpington Cambridge.

The on-going development of the land surrounding the school, known as Clay Farm (Great Kneighton), has seen a significant demand for additional school places within the Trumpington area. The project provides additional teaching accommodation (0.5 FE), increasing the school capacity to a 2FE, 420 place primary school,

while also providing a new school 'frontage' responding to Clay Farm. In addition to the new teaching accommodation, dual principle feature entrances, a new children's centre and new early years setting are also provided.

The architectural form partially reflects the flat roofed housing developments of Clay Farm, incorporating high parapets, creating 'clean, crisp' cladding lines, and 'box' forms. This distinction from the remainder of the school ensures the entrances are highly visible and easily identifiable from all the existing Fawcett School site access points as well as the new Clay Farm access.

"We always found Saunders Boston to be helpful and flexible with the various changes we wanted throughout the project and very easy to work with".

Graham Ingrey, Federation Business Manager





St John's Primary School

Huntingdon

Client: Cambridgeshire County Council Value: £3.5m Status: Complete



- Classrooms
- ICT & Library
- Group Spaces
- Staff Accommodation

Project Details

Saunders Boston were appointed as lead consultants on this Design & Build project to design an extension for an additional form of entry to an existing Primary School in Huntingdon.

The extension comprised of 8 classrooms, ICT & Library, Group Spaces, new Entrance and ancillary Staff Accommodation combined with extensive external works.

The two storey extension was constructed using a steel frame, combined with traditional masonry. It was clad in a mixture of facing brickwork, panelised cladding, and render with a low pitched metal roof.

Architecturally the building responds subtly to its surroundings. The low mono-pitch roof helps to reduce the overall massing of the building whilst the combination of cladding and brickwork gives a natural yet contemporary feel to the design.

The scheme was designed with a mixed mode ventilation strategy and will achieve a BREEAM rating of Very Good







Unity College Secondary School

Northampton

Client: Diocese of Peterborough Value: £25m Status: Complete





- All KS3 Teaching Spaces
- 6Th Form Teaching
- Administration
- Auditorium / Library
- Special Education Needs
- Sports Facilities

Project Details

The project was delivered under the Building Schools for the Future programme, and included a provision of approx 12,000m2 of new buildings in three phases. All phases have now been completed and are in use. The school was formally opened by the Lord Archbishop of York, John Sentamu.

The project completely rebuilt 'Trinity Upper School' to become 'Unity Collage Secondary School' as part of Northamptonshire's move from a three tier to a two tier education system. The development at Unity College saw the introduction of an innovative system of natural ventilation. The system, developed by a new company called E Stacks Ltd, which is an offshoot of the BP Institute at Cambridge University, relies on the natural convection currents to mix the air within a building with fresh air induced from outside.

One of the primary limiting factors affecting ventilation systems in schools is the noise generated by fans and air movement through louvers "Throughout discussions the staff of Saunders Boston have been supportive and have attempted to meet very exacting requirements" Dr Stephen Partridge Director of Education, Diocese of Peterborough





Kings (The Cathedral) School

Peterborough

Client: Diocese of Peterborough Value: £7m Status: Complete



- Humanities Block
 - Science Block
 - 6Th Form Teaching
 - 'Victorian Block' Teaching & Admin
 - Auditorium

Project Details

Saunders Boston was appointed as Architect and Project Manager following a personal recommendation from the Diocesan Director of Education. In total, works at the Church of England secondary school (home to approximately 1,000 pupils) equated to £7m worth of newbuild and refurbishment.

The development forms part of the schools capital improvement programme and comprises a major new Humanities classroom building as well as provision of external hard surface sports pitches and refurbishment to the existing school science facilities.

A key aspect of the scheme was realizing the school's aspiration to create better teaching and learning environments.

Saunders Boston went on to design a new-build Sixth Form Centre and Languages teaching centre to facilitate the requirements of the curriculum and replace the existing, outdated and inadequate classroom spaces.

The scheme incorporates strategies for both natural ventilation and energy saving that removes the need for costly mechanical ventilation and cooling systems







Coton CofE Primary School

Cambridge

Client: Cambridgeshire County Council Value: £0.8m Status: Complete



New Pre-school

- New Year 1 class and group rooms
- External Play/Landscape
- Afterschool club

Project Details

Coton is a village, west of Cambridge, promoting the village culture and a clear sense of community, which is apparent from visiting the school. The brief was driven by a changing demographic which resulted in a fluctuating Published Admission Number (PAN) and in response to this Saunders Boston were procured to provide lead designer and landscaping design services by Kier Construction.

The brief was to provide a new Reception/Year 1 Classroom, additional group room space and a replacement pre-school facility which was also to house the after-school club. The final scheme provided a new single extension to the east of the existing school on the site of the original playground, moving the playground up to the north of the school buildings, partially within the greenbelt area. A link corridor between existing and new buildings provided the level transition with steps and low riser lift.

Architecturally, the finished buildings comprise of facing brickwork with high level render to blend in with the existing school buildings, and a shallow mono-pitched roof, ensuring simple form and the scale of the facility is kept to a minimum.





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