

Building for all

An inclusive approach to assessing the existing and needed capacity for children with special educational needs



WILLMOTT DIXON

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Foreword

For many years, school provision for children with special educational needs and disabilities (SEND) has been sorely lacking, with it often siloed by specialist need and thus spread thinly across a wide geographical area. Stories of pupils travelling more than an hour each way to a suitable school have been commonplace, putting huge amounts of pressure on both the children and their parents, in addition to financial strain on the local authority to cover the travel costs.



Richard Bartlett
Director
London & South

This can be incredibly damaging, not only in terms of the toll taken on the child by additional travel, but also the knock-on effect of the child not being as involved in their local community, and having local friendship groups as they would have if they attended a more local school.

Alongside this, the pent-up demand for suitable school spaces for SEND children is putting additional pressure on an already creaking system. Improvements in the early diagnosis of additional needs mean that more children require specialist spaces within a local school.

These challenges have been recognised in government, with local authorities challenged to review their provision to ensure that they have enough suitable school places across their region*.

This paper presents a way local authorities can tackle this challenge through a borough-wide capacity assessment, which is furthered by technical insight into what solutions can be provided as a result of the assessment findings.

The benefits of understanding where the need is across the area ensures the pupil becomes more engaged with their community, parents don't feel the pressure of sending their child to another area for their education, and local authorities are able to reduce transportation costs at a time when councils across the country are feeling the squeeze. Pupils are also able to mix with other children with different needs, which provides a wider perspective to learning and additional friendship groups.

There are challenges with this which we will also explore, but by taking a collaborative approach with the right partner, these can be mitigated against.

We're proud to have recently been reappointed to the Department of Education's national construction framework, and alongside this we've developed a strong portfolio of SEND schools.

In this paper, we will detail the how, when and why of collaboration with insights from our expert team and partner, Bond Bryan.

*HM Government. [SEND Review. Right support, Right place, Right time](#)

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What does a capacity assessment provide?

Many SEND school development projects have the same goal – increasing capacity to ensure that pupils' needs are met closer to their homes. However, it is only through close collaboration throughout the whole process that this can be fully achieved. Preconstruction Manager, Sarah McKinnell, is in charge of pulling together the multi-disciplinary team that is supporting local authorities in appraising their existing SEND capacity, and highlighting areas for expansion and further investment to inform Local Authorities' plans.



Celebrating the opening of Willoughby Academy in Lincolnshire

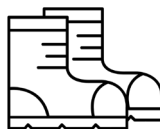


Sarah McKinnell
Preconstruction
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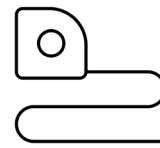
1. Outline the schools to review



2. Site visits



3. Space assessment



4. BB104 assessment



5. Recommendations report and next steps



Supporting a County Council

Willmott Dixon Construction, with their Architects Bond Bryan, were commissioned to visit 24 special schools to review existing capacity and identify potential satellite sites.

The County Council needed to know how the schools were using the spaces within their buildings and whether there was some consistency across them. The Council understood all schools would not meet Building Bulletin 104 (BB104) minimum standards; however, they were keen to understand the complex needs of the children and the school's capacity.

Unfortunately, very little drawn information was available, which meant the architects needed to generate their own plans, resulting in the assessment taking longer to complete. In addition, some schools took some time to agree access to staff and the buildings.

Following our sites visits, the following information was obtained:

- 14 schools (67%) were running over capacity by 765 pupils
- Two thirds of schools were under BB104 minimum space standards and required an additional 13,564m² of accommodation to bring them up to the minimum standard
- Three schools were not fit for purpose as Special Schools for reasons such as accessibility and lack of parking, which prevented an efficient drop off and pick up process and subsequent congestion on surrounding roads.
- 1 in 4 schools are situated on sites under the minimum BB104 external space guidance
- There are 20% more pupils being taught in satellite accommodation away from the main school.

Following our collective review, our recommendation in this instance was to boldly suggest preparing a business case for 3 new special schools in new, strategic locations.

The result of this approach would increase the council's capacity by 750 pupils (250 per site) i.e., 18% increase, providing state of the art facilities on sites big enough to accommodate all students close to their homes.

The expected capital cost @ £110k/pupil (1Q22) = £82.5m.

However, for wider assessments, alternative solutions would also be viable, such as school expansions and/or refurbishments of existing sites to deliver the recommended BB104 standards.



The customer engagement process – how Willmott Dixon collaborates on education and SEND projects

- Meetings with the local authority to ascertain needs and aims underpinned where required by specific workshops
- Based on the approach defined in the Department for Education framework
- Used to establish everything the team needs to know about the challenges
- Involvement from headteachers and/or principals, and estates team members
- Results in a rigorous, detailed approach for how the project moves forwards created by a collaborative one team approach.



Kris Wadley
Company New Business Manager



For architects, the early involvement of a contractor can sometimes be viewed negatively, but for SEND school projects, the design and build approach is absolutely the right choice to take.

“Bond Bryan has worked with Willmott Dixon in auditing 24 SEND schools for a county council; their understanding of the importance of being on the journey - right from the start - has been hugely positive and refreshing. As a team, we discovered that there were several common themes across all of the schools:

- Bulge years make it difficult to maintain separation of year groups. Unadaptable buildings restrict that separation.
- Door ironmongery was subject to damage and schools removed ironmongery and closers before replacements arrived. This impacted on the fire performance of the doors.
- Schools complained about not having enough toilets for pupils and staff, and sometimes, the location of these was an issue, which resulted in safeguarding issues.
- Vehicular movement for drop off, pick up and car parking was a safeguarding issue and caused traffic problems on the surrounding roads.

“As architects specialising in the design and delivery of SEND schools, we have learnt that, from a design perspective, a joined-up approach is essential where all stakeholders fully understand the needs of the school. The design should holistically consider the building, the landscape and its interior. Creating a safe and secure environment - that considers vehicular movement, pick-up and drop-off that is completely separated from pedestrian routes - is critical for safeguarding. The building itself should be as flexible as possible to adapt to future needs: it should have robust materials and simple wayfinding with an interior design to create a truly inspirational learning environment.

“Good architecture is about designing a building that meets the diverse needs of the pupils and staff. This is more important than

ever when it comes to SEND schools. With something as critical as this, there simply cannot be architecture for architecture's sake – it is about providing an inclusive design that delivers to suit the need of every child.”

Inclusive design for SEND schools

Really consider robustness.

The robustness of the doors and ironmongery to prevent damage. Ironmongery strategy drawings are key to assess and review movement, access, fire and security requirements

Flexibility and adaptability are key to accommodate a possible future increase in capacity and pupils joining the school having been diagnosed later in their life.

Small things make a huge difference. Ensure that the sanitary provision is in the right location in terms of age group and meets the needs of students and staff; consider safe-guarding, tamper-proof fittings, anti-ligature and mixed gender requirements along with accessible changing arrangements.

Don't underestimate the dining experience and the importance of food. The location of the kitchen can create unwanted smells for those with sensory issues whilst, for those that are hungry it is an essential part of their day. It's part of the informal curriculum for bringing pupils and staff together to support appropriate behaviour, informal conversation and life skills.

Finding a balance in room temperature fluctuations.

This needs to be kept to a minimum as children's behaviour can be affected if they are too cold or too hot. It is important to select the right type of heat emitter for the classrooms to ensure that the room temperature responds quickly. We have found that using ceiling mounted radiant panels or low surface temperature radiators is a much better solution than underfloor heating.



Jay Powell
Associate

Summary

When you speak to parents, teachers and local authorities, there is no question that increased capacity for the provision of SEND is imperative.



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Director
London & South



On 29 March 2022, the Government published the SEND Review: Right support, right place, right time, a consultation on the special educational needs and disabilities (SEND) and alternative provision system in England. The consultation sets out proposed reforms to the SEND and alternative provision (AP) system that seek to address three key challenges:

- poor outcomes for children and young people with SEND or in alternative provision
- navigating the SEND system and alternative provision is not a positive experience for children, young people, and their families and;
- despite unprecedented investment, the system is not delivering value for money for children, young people, and families.

“Delivering on these objectives can prove challenging if you don’t approach the project with an open mind for collaboration.

“What has proven key from Willmott Dixon’s experience is that the earlier this engagement, collaboration and subsequent assessments happen, the better the chance of delivering the desired outcomes for our customers.

“The financial question is going to remain one that is tricky to address. The harsh reality is that the economic equation of cost per pupil is significantly higher for SEND schools and that isn’t likely to change any time soon. Therefore, the key is delivering true value for money in terms of addressing the need in a region and ensuring that the end users are getting the best possible facility for the local authority’s outlay.

“The passion for getting it right first time is critical. When we see some of the difficulties that some of the children in SEND schools live with, and the challenges that are posed to the staff in delivering the best education possible, it provides a real sense of purpose to our approach, and we are incredibly proud of our achievements in the sector. On the page opposite you will find a case study example of this in action, as we support our customers to deliver a combination of ambitions on just one project.

“We’d love to talk with you in more detail about our approach to capacity assessments in SEND schools, so if you’d like to know more, please don’t hesitate to get in touch with any of us on back page.”

CASE STUDY

Solutions for the future

Creating a SEND net-zero carbon school



Silverwood school

Project highlights:

- 350 SEND school places for early years, primary, secondary and post 16
- Leaving a biodiversity net gain of 14%
- Maximising natural daylighting and ventilation to create an airy feel
- Creating a 'school within a school'

Willmott Dixon is well underway to delivering a net-zero carbon school – Silverwood School – which will create 350 SEND school places for early years, primary, secondary and post-16.

The project will create a 'school within a school', with a community of small teaching clusters that will provide a range of specialist teaching spaces, therapeutic support, and quiet dining. Each cluster will be designed to offer plenty of space to move around while maximising natural daylighting and ventilation to create an airy feel.

Also planned is a hydrotherapy pool, a new all-weather sport pitch, new playing fields, landscaping, and ecological enhancements resulting in a biodiversity net gain of 14%.


To achieve net-zero carbon in operation, the buildings will utilise biomass boilers and incorporate a large array of photovoltaic (PV)


solar panels that harness renewable energy. The school will also use Willmott Dixon's Energy Synergy™ service, which models energy performance target data against actual 'in-use' performance for three years, ensuring energy use targets set out at design stage are met when operational.

Extensive ecological enhancements will be delivered, including improved natural grassland to increase the foraging resource for bats and other species, while hedgerows will be increased by more than 200% as part of an overall biodiversity net gain of 14%.

Get in touch

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