

12/01153/FUL

Appendix 3

In terms of the SEN/BREEAM excellent issue I note the following:

In terms of Special School design I am considered an expert having personally been involved in something like twenty separate Special School building projects over the past few years. I also contributed to building bulletin 102 and have spoken at a number of conferences on this specialist subject.

All our Special Schools have achieved a VERY GOOD BREEAM rating since BREEAM was first introduced with one exception. The exception, The Avenue School in Reading, only achieved EXCELLENT by:

- Accessing a local authority sustainability fund of approximately £750k
- Being a mixed use development with one floor School against two floors of office/conference centre
- Being assessed under a bespoke BREEAM
- Being assessed some years ago under a previous, less onerous BREEAM
- By just scraping a pass at EXCELLENT

The Rosewood SEN is one of the highest scoring BREEAMs against these comparators, despite being assessed under a later, far more onerous regime.

The problem with Special Schools and there generally low marks when compared to mainstream Schools revolves around their highly individual user groups and the way they interact with the building. Although not an exhaustive list, examples include:

- Susceptibility to illness including pneumonia requiring particular high energy temperature regimes
- Lower scores on transport due the special arrangements required
- Highly durable finishes that often have higher embodied energy
- Deep plan spaces to reduce movement which leads to the loss of daylighting credits
- Specialist lighting for the partially sighted which does not always score highly
- High levels of peripatetic care requiring increased parking
- Specialist teachers who tend to come from a far wider catchment area and who therefore tend to drive
- High water usage due to the specialist hygiene requirements
- The difficulty in fully consulting the user groups

Our proposal for Rosewood Special School achieves a high 'VERY GOOD' with a score of XX against a target of XX for excellent. This high score has only been achieved by the entire design team trying hard to achieve the highest score possible.

We also note that this is a very sustainable scheme (not always the same as a high BREEAM score) by its use of a contaminated brown field site in an urban area.

If required Mangala can adapt this into a report form and issue more formally. If you require additional information to satisfy your concerns please advise.

Thank you

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CS20 – Sustainability Statement

Rosewood School
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1.0 Foreword

A planning application for an extension to Rosewood Free School, a special needs school for pupils with profound and multiple learning difficulties (PMLD) was submitted in August 2012. Southampton City council have a core strategy policy, CS20 (Climate Change), which came into force in 2012. The policy states that all new build non-residential over 500m² should meet BREEAM excellent.

Prior to the planning application, a pre-application consultation was held. SCC advised that BREEAM Excellent should be achieved, but it was acknowledged that this was going to be difficult to achieve this score. Hunters, the architects for the Rosewood extension, have had three schools in the city of Southampton, Bannister, Moorlands and Wordsworth (BMW), approved in 2012 since CS20 came into force. None of the three projects achieved BREEAM excellent, all achieved BREEAM Very Good.

The BMW schools and Rosewood have similar funding constraints. The Educational Funding Agency (EFA) only allow for funding to provide a BREEAM Very Good level for educational projects. Significant additional

funds are required to upgrade a scheme from BREEAM Very Good to BREEAM Excellent.

The planning application was submitted with a BREEAM assessment estimator showing a Very Good BREEAM rating, not Excellent, on the basis that Rosewood would be assessed by the same criteria as the BMW schools.

The funding received for the Rosewood extension is a fixed capital sum. If BREEAM excellent is required, the EFA have indicated that additional funds required will come directly from the fixed allowance resulting in a loss of facilities for vulnerable and highly dependent children.

1.1 Educational Justification for the Rosewood Extension

“Prior to the free school application being successful and funding realised for expanding, we were in the position of having to inform both pre-school and school age children that we were full. We know of a number of parents who have had to seek alternatives to their preference of Rosewood, their local provision, due to our previous ceiling. Southampton LA is currently revisiting Special School placement figures and recognises that all of their Special Schools are reaching capacity. Each school has its unique character and Rosewood has served as part of the continuum of education for a number of years. We have good relationships with these schools and have worked with them on Curriculum development and training.

National statistics and research show an increasing population of children with PMLD¹. We are also responding to research on the benefits of early intervention both for the child and their family. We currently work very closely with Wordsworth House an NHS assessment centre and are made aware of the numbers of children who would benefit from early placement. Particular to our school is the ability to cater for the range of associated medical difficulties this pupil population often has and we would look to develop a sustainable model that could continue to provide high class Health and Education provision on one site.“

Jenny Boyd, Head Teacher, Rosewood School 1

1 Educational Justification as submitted in the planning Design and Access Statement

2.0 Summary of Approach to Sustainability and Carbon Reduction

The design team have taken an innovative and integrated approach to sustainability from the outset. The architectural solution by Hunters has been developed in collaboration with Ramboll Environmental Engineers since the project's inception to ensure that the building will be as energy efficient as possible within the constraints and funding.

As a result of the applied technical expertise and efforts of the Design team, the resulting design is believed to be highly sustainable, and energy efficient.

2.1 Passive Sustainable Measures:

The first stop when designing a sustainable development is the introduction of passive sustainable measures. These are sustainable design factors which are inherently built into the project, and do not rely on complex technology which is subject to inefficiency and unreliability. The passive technologies built into Rosewood will include:

- Site Selection** – re-use of an existing brownfield site adjacent to an existing facility, ex-landfill. This land re-use comes at a premium cost, with deep pile foundations and contamination control measures

- Best Orientation** - Classrooms north facing for thermal stability.

- Daylighting** - Clerestory roof lights have been included in the design to introduce excellent levels of daylight to what would otherwise be artificially lit deep plan spaces. (SEN Schools have are inherently difficult to achieve good daylight levels due to the necessity to condense the footprint of the building to reduce circulation distances.)

- Thermal Stability**

- The building will be highly insulated with U-values improved upon building regulations part L2A requirements by 15%

- Use of exposed thermal mass to reduce temperature swings and peaks, reduce the need for heating and cooling

- **Natural Ventilation**

- The building will be naturally ventilated to all but hygiene areas which have a specific requirement for mechanical ventilation.

- No air conditioning. Note: Air conditioning is installed in the existing building. This has been designed out of the proposed building as a result of the thermal stability measures and night-time cooling.

- **Avoiding the loss of trees and habitats where possible.** Loss of trees has been avoided wherever possible. The site is restricted, and as such some trees of low ecological value will be sacrificed. Trees to be removed will be compensated for with tree planting as per SCC planners requirements.

2.2 Active Sustainability Measures:

Active sustainability measures have been designed into the project to further enhance the building's performance. Rosewood will utilize the following active technologies:

- **Photo-voltaic panels**

- 25% Carbon reduction is estimated, to be achieved through the installation of P.V. panels

on the flat roof of the new building

Low energy heating

- Specification of high efficiency gas boilers
- High efficiency underfloor heating
- Heat recovery units to mechanical ventilation

Low energy lighting

- Specification of high efficiency fittings and luminaires throughout
- Lighting to be switched off by PIR motion detectors when spaces are un-occupied

Night-time Cooling

- Vents will automatically open in the classroom facades to allow the high-thermal mass of the building to store 'coolth' during the night-time, which will have the effect of more stable temperatures during the day-time reducing the need for summertime cooling.
- document

3.0 Justification for targeting BREEAM Very Good:

BREEAM credits lost due to project specific requirements

BREEAM is a measure of sustainability and good practice in construction, however, it is effectively a 'box ticking exercise' which treats all projects of a category as equal. Rosewood is a highly specific project with specific requirements. The functional requirements cannot be compared to other buildings in its BREEAM category.

The specialist requirements imposed by the Rosewood project brief results in the loss of BREEAM credits for the following reasons:

□ **Use of energy and Resources**

- The school requires a highly controlled environment - Pupils at Rosewood are PMLD Special needs pupils with a high susceptibility to illness and life limiting conditions. Safety and wellbeing of these pupils is absolute priority when designing the facility. Instability in temperature can cause seizures and as such the school has particularly high energy demands.
- Specialist lighting requirements for visually impaired have a higher than usual energy requirement
- High water usage due to specialist hygiene requirements.
- Use of specialised finishes which are not necessarily BREEAM compliant

□ **Transport**

- Children are transported to the school by specialist, wheelchair adapted mini-busses.
- High numbers of peripatetic staff are required to provide specialist nursing and therapy
- Specialist teachers come from a broad catchment area.

BREEAM credits lost due to site selection

BREEAM credits can be gained and lost due to site selection. In the case of Rosewood, the re-use of a brownfield site only scores 1 credit. This credit is lost many times over elsewhere in the BREEAM checklist due to air quality, ecology and constraints imposed by site contamination. If the building were built on a greenfield site, with high air-quality, no presence of contamination and greater opportunities for bio-diversity, the project would score more highly.

Unjustifiable BREEAM credits lost

Many of the BREEAM points are of little or no value to Rosewood due to the size and nature of the new building. For instance, many credits can be won by sub-metering different areas of the building. For a building of >5000sq.m with multiple occupiers these credits have value, but for the Rosewood extension, a building <900sq.m and a single occupier, these credits have no value. Spending additional funds on installing unnecessary metering cannot be justified when there is an urgent need for highly costly and specialised school equipment.



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Steve Lawrence
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19 November 2012

Dear Mr Lawrence,

Rosewood School – Planning Application and BREEAM

I am the Education Funding Agency's (EFA) Project Director for Rosewood School. The EFA is responsible for funding the school's extension and I am writing with regard to the school's planning application and BREEAM. I understand that Southampton City Council requires for the school's extension to have a BREEAM Excellent rating. However, I believe there are exceptional education needs in this case and therefore why EFA supports a BREEAM Very Good rating.

Rosewood School is working at maximum capacity under its current building arrangements and is heavily oversubscribed. The school was built for 30 and it now has 42 children. The accommodation of extra pupils has compromised the education as space is so limited. The equipment needs of the pupils is significant; each pupil has four pieces of mobility equipment in addition to positional equipment. The school's therapy has had to be rehoused in a cupboard which is limiting therapy and the medical clinics the school needs to host in order to meet the children's needs. There are a number of children seeking places at the school and the school is already considering pupils for placement in September 2013 in the school's Further Education classes. Without the extra places the extension would provide, these pupils would need to travel great distances to out of county placements.

The school is in a position of having to inform both pre-school and school age children that it is full. A number of parents have had to seek alternatives to their preference of Rosewood, their local provision, due to the school's current lack of accommodation.

National statistics and research show an increasing population of children with PMLD (profound and multiple learning disabilities) as detailed in the Specialist Schools and Academies Trust report, available at: http://complexld.ssatrust.org.uk/uploads/CLDD_project_report_final.pdf). More children are being born with very complex needs and they are surviving much longer. For example, between 2004 and 2009, the total number of children with severe learning disabilities (SLD) increased by 5.1%, and the total number of those with Profound and multiple learning disabilities (PMLD) rose by an average of 29.7%. Rosewood School is responding to research on the benefits of early intervention both for the child and their family. The school currently works very closely with Wordsworth House an NHS assessment centre in Southampton and is made aware of the numbers of children who would benefit from early placement. Particular to Rosewood School is its ability to cater for the range of associated medical difficulties this pupil population often has and it wants to develop a sustainable model that could continue to provide high class Health and Education provision on one site.

The need for Rosewood School to extend is well known. Southampton City Council has supported the school's change in designation from Non-Maintained to Free School which opened in September. The EFA has confirmed the capital funding to enable the school to extend pupil places to 60 in September 2013. This is a huge opportunity to make sure that Southampton can provide for this group of very vulnerable children with extremely complex needs, and therefore there are exceptional education needs for only requiring a BREEAM Very Good rating.

Yours sincerely,

Mark Bradshaw
Project Director, Free Schools, EFA

Cc (by email):
Jenny Boyd, Rosewood School
Nick Levett, Turner & Townsend