

Design Review Report

Adamsdown Primary School,
Cardiff

DCFW Ref: 23

Meeting of 10th April 2014



Declarations of Interest

Panel members, observers and other relevant parties are required to declare *in advance* any interests they may have in relation to the Design Review Agenda items. Any such declarations are recorded here and in DCFW's central records.

Review Status

CONFIDENTIAL

Meeting date	10 th April 2014
Issue date	7 th May 2014
Scheme location	Cardiff
Scheme description	Primary School Refurb/New Build
Scheme reference number	23
Planning status	Pre-application

Declarations of Interest

None declared.

Consultations to Date

There has been consultation with the community and teaching staff at the school. This scheme was also reviewed by the Design Commission for Wales on 28th November 2013. This report should be read in conjunction with the report from the first review as it made some key observations and recommendations for design development.

The Proposals

This is a project to extend an existing primary school to accommodate Two Form Entry (2FE) with 420 places including nursery. The existing building is single-storey, built in 1978 and extended in 2011. An easement route with a mains electric cable and a level change divides the site into two halves. The playing fields to the south of the existing building provide a possible development area. A feasibility study looked at different options for extending the school. It has been decided that a new stand-alone structure on the southern half of the site is the most feasible option given the easement. This option has now been developed in more detail. Refurbishment of the existing building will now be kept to a minimum.

The team have aimed to meet BB99 standards throughout the scheme, but have made some compromises due to the limited budget of £3.9m. It is intended that the teaching spaces will meet BB99 standards.

As part of the 21st Century Schools programme, a design and build procurement route is intended, with occupation by September 2015 to accommodate the increased number of pupils.

Summary

- The Design Commission welcomes this second opportunity to review this scheme now that designs have progressed to a more detailed stage. The Commission understands that there are a number of constraints due to the budget and procurement framework. However, we are still concerned about some fundamental issues which have not been successfully resolved or addressed.
- Good design will add value, is inspirational and will respond positively to constraints. It is often the most difficult constraints that lead to innovative design solutions that perfectly fit the challenge. The Commission is concerned that the particular constraints of this scheme are viewed as wholly negative barriers, rather than challenges that can be addressed in the design process.
- A landscape strategy is urgently needed which comes from analysis of the site (which still seems to be missing and was urged in the earlier report), and responds to the practical arrangements for dropping off and collecting children. Strategic diagrams which resolve the various issues are needed. Plants offer the opportunity to soften the threatening nature of the security measures.
- More work is needed on cost management and procurement strategy. With the limited budget available, it is particularly important that money is spent where most benefit can be gained. We understand that the budgetary constraints in the public sector are significant and that Welsh Government business case requirements and timescales are challenging. However, in principle, there is sufficient budget available per square metre to enable a good quality facility.
- The team should revisit some of the fundamental elements of the scheme which offer the chance to improve the environmental performance, provide value for money, and deliver a better learning environment for children and teachers. Care should be taken regarding prioritised expenditure so that monies are targeted to the greatest value for the project. There are examples of successful schools which have been delivered in contexts similar to this which the team could visit for inspiration. St Luke's Primary School in Wolverhampton is an award winning example of such a school.
- An environmental strategy must be integrated with the rest of the design and must not be left until the end of the design process. Passive principles must be considered at an early stage, and would have the added benefit of achieving a comfortable learning environment.

- As the time for making a planning application is rapidly approaching, the Design Commission would like to see some positive input from the Development Management team.

Main Points in Detail

Analysis, Brief and Vision

The brief to which the designers are responding has been influenced by Welsh Government deliverables, discussions with school staff and the requirements of BB99. The brief is purely functional in nature and lacks any aspiration to provide delight or inspirational spaces for children to learn in. The scheme would benefit from an overarching vision which encompasses more than the functional requirements.

In the previous review, the Design Commission recommended that a detailed, site specific brief was prepared, which drew on thorough analysis of the existing building, site and context. We recommended that a methodical feasibility study of the options was carried out, and that this exercise should test the options against the analysis and detailed brief. Evidence of this detailed process was not presented at this review. It is still not clear whether analysis of the site, wider context, and movement of people has had any influence on preparation of a detailed brief or any design decisions. We encourage the team to refer to our report issued on 18th December 2013, which gives detailed recommendations for analysis, feasibility study and preparing a brief.

There is much research that suggests that the environment within school buildings has an impact on children's behaviour and learning. The team should draw more heavily on such research to inform their design evolution. At the request of the teachers, each classroom would have a breakout space. However, there may be other pedagogical issues which the brief could address. These appear not to have been fully explored.

Although the school hall has been sized to meet BB99 standards, the team should use drawings to test whether it accommodates a sufficient number of children and adults in the different scenarios the school may wish to use it for (lunch, assembly, school play, indoor sports, after-hours clubs, exams, community hire etc).

Procurement and Cost Management

At the moment, procurement constraints and cost management methods appear to be creating barriers to good design. We understand the pressures of constrained public sector budgets and timescales. However taking into account the cost per square metre (which was approximately expressed at the meeting as c£2/2.5K), we consider it possible to deliver a good quality building and landscape within the budget.

A rational and holistic approach to cost management is required, which looks at where money can best be spent to achieve most benefit. Opportunities to add significant value at little cost are being overlooked, whilst expensive materials (for instance coloured glazed brick) are being proposed. A cost plan should look at running and maintenance costs, as well as capital expenditure.

The way value is measured is important and it is crucial that the brief sets out the aims of the project clearly, so that designs can be measured against it. Detailed analysis and a clear brief will help the team to make and justify design decisions which maximise value.

If the procurement framework is making good quality design impossible, the team must make a strong case for working outside of it, demonstrating how better value can be achieved through an alternative procurement method.

Landscape and Movement Strategy

Design of the grounds will be just as important to achieving a good quality school as design of the buildings. A Landscape strategy is urgently needed. It should be informed by analysis of the site and context, and by understanding of the arrival, drop-off and pick-up arrangements at the school. Despite the Design Commission's previous Design Review Report highlighting the importance, a proper analysis of these issues still appears to be lacking.

The architectural and landscape designers must have a good understanding of how the various entrances to the site and the building are intended to be used and they must work together to integrate the landscape design with the building design. There is a desire to create a link between the existing and proposed buildings. This element in particular will affect both building and landscape design.

Having a clear strategy for the landscape design would set parameters and a conceptual structure for integrating the various elements which are desired or required. At present, many of the landscape elements appear to be randomly sited and are not working in concert.

The landscape strategy should also consider maintenance of the grounds.

Security Issues

It is acknowledged that the school experiences security challenges, and that new proposals must address these.

The current proposals show large amounts of fencing and other security measures. These defensive measures risk making the school feel institutional and threatening and may have the opposite effect to that intended – they may actually present an invitation to challenge. The team must consider the experiences of the small children who will grow up in the environment they are designing. All options for softening the impact of the security measures should be carefully explored, including soft landscape design. The school should feel like a safe and welcoming place.

As an alternative to 'fortifying' the school grounds, there may be benefits in taking a more inclusive approach and involving the local community in designing and maintaining the landscape. This would demonstrate that the space is cared for and give the opportunity for local people to take some ownership and responsibility for the space.

Out of hours use of the school's facilities would also provide better security and help to establish a view of it as a wider community asset. Provision for this should be considered before layouts are fixed, as it may influence dimensions of the hall and the

movement/access strategy. As stated in our previous report, the school should be considered as part of the wider townscape and community.

Environmental Strategy, User Comfort and Delight

It is not yet clear how the proposal will meet BREEAM standards. An environment and energy strategy is urgently needed. This must be integrated with design of the form and layout, materials specification and landscape design. It must not be left until the end of the design process as this would be unnecessarily costly and would compromise other design aspirations. The circulation, hall, kitchen and WCs should be included in the strategy, as well as the classroom spaces.

Providing they are incorporated at an early enough stage in the design process, passive strategies offer multiple benefits. They are cheaper to build in than mechanical devices, they tend to create a more comfortable, natural environment inside buildings, and they reduce energy demand and running costs.

Energy generation might also be considered. For example, the building is likely to have a large roof area which could incorporate photovoltaic material.

Alongside development of passive design strategies, the team should consider what the spaces they are designing are like to experience. Daylight, sunlight, views, temperature, ventilation, room proportions and orientation all contribute to the way a space feels. The same methods can be used to design for low-energy and delight, in order to create a space commensurate with its intended function as a place for stimulating the curiosity, creativity and engagement that accompany and facilitate learning.

Comisiwn Dylunio Cymru Design Commission for Wales is the trading name of DCFW LIMITED, a Private Limited Company established under the Companies Act 1985 and 2006, Company No: 04391072 incorporated in England and Wales as a wholly controlled subsidiary of the Welsh Government. Registered office: 4th Floor, Cambrian Buildings, Mount Stuart Square, Cardiff CF10 5FL T: 029 2045 1964 E connect@dcfw.org. The comment recorded in this report, arising from formal Design Review through our Design Review Service, is provided in the public interest for the consideration of local planning authorities as a material consideration, and other users of the Design Review Service. It is not and should not be considered 'advice' and no third party is bound or required to act upon it. The Design Review Service is delivered in line with DCFW's published protocols, code of conduct and complaints procedure, which should be read and considered by users of the service.

A Welsh language copy of this report is available upon request.

Attendees

Agent/Client/Developer: Rachel Smith, Cardiff Council

Michael Walsh, Cardiff Council

Architectural/Urban Designer:

Gari Evans, Cardiff Council
Mike Gwyther-Jones, Cardiff Council
Mark Lawton (Landscape), Cardiff Council

Local Authority:

Lawrence Dowdall, Planning, Cardiff Council

Design Review Panel:

Chair

Carole-Anne Davies, Chief Executive, DCFW

Lead Panellist

Toby Adam

Phil Roberts

Amanda Spence, Design Advisor, DCFW

Observing:

Susan Toner, Public Health Wales