

Statws/Status:

Cyhoeddus / Public

DESIGN
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CYMRU

Adroddiad Adolygu Dylunio: Design Review Report:	19 July 2007
Dyddiad Cyfarfod/Cyflwyno'r Deunydd: Meeting Date / Material Submitted:	11 July 2007
Lleoliad/Location:	Bettws School, Newport
Disgrifiad o'r Cynllun Scheme Description:	New school
Cleient/Asiant: Client/Agent:	Haydn Ames [Newport CC]
Developer/Datblygwr:	n/a
Pensaer/Architect:	HLM Architects [Chris Liddle, Phil Grant, Hank Wieringa]
Ymgynghorwyr Cynllunio: Planning Consultant:	Arup [Matt Chambers] Davis Langdon [Paul Edwards]
Awdurdod Cynllunio: Planning Authority:	Newport CC [Stephen Williams]
Statws Cynllunio: Planning Status:	Planning application submitted 9 July 2007
Y Panel Adolygu Dylunio/ Design Review Panel: Alan Francis, (cadeirydd/chair) Cindy Harris (swyddog/officer)	Lyn Owen Ed Colgan

Charlie Deng (swyddog/officer)
Carole-Anne Davies CEO

Jonathan Hines

Lead Panellist:

Jonathan Hines

Sylwedyddion/Observers:

Steve Malone, A + DS

Cyflwyniad/Presentation

This is the beginning of an ambitious educational build programme in Newport, made possible by capital receipts from land sale. A feasibility study has been carried out which identified the present site as the most suitable. The current 1960's designed buildings are no longer fit for purpose and the client wishes to see a high quality design, for an accessible and inspirational community building.

The new location of the building on the present site is designed to reinforce strong links with the community, based on an open campus approach and avoiding fencing where possible. It also allows the current buildings to be used until the new facility is completed. A semi-circular public space will be created in front of the building next to Bettws Lane, incorporating the existing layby. There will be a single entrance to the building for all pupils and members of the public and up to 1000 people will pass through at certain times of day. The aim is to create a strong sense of arrival and achieve clear separation between pedestrians and vehicles.

Behind the north-facing three-storey main facade, four fingers of accommodation extend southwards, forming sheltered outdoor courtyards. The east/west access of these wings will facilitate natural ventilation and avoid overheating. Well daylit circulation routes widen to include breakout spaces, and each wing will have its own distinctive character, colour and smell.

The local community will have access to improved sports facilities, seven days a week. A full landscape strategy will be developed and the mature trees bordering the site on Bettws Lane will be retained. Extra funding is being sought from the Welsh Assembly Government in order to achieve a BREEAM Excellent rating.

A full planning application was submitted earlier this month and the intention is to start on site in January 08 and complete by September 09. A second, outline application has also been submitted in respect of the proposed residential use on land to the west of the site, which is to be

sold off for development. The Local Authority representative identified issues of visual impact, flood zone, and lost playing fields, which are still to be resolved.

Ymateb y Panel/Panel's Response

The Panel welcomed the clear and detailed presentation material which made it easy to understand the development of the project so far. The Panel supported the overall design approach, based on strengthening links with the local community, and we thought that the building's location and form was logical and appropriate. We did question the degree of community involvement and consultation so far, which was not referred to in the documentation, and we were told that meetings had been held with community and partnership groups, as well as the school committee and headteacher. A questionnaire would seek local opinion on leisure provision.

Notwithstanding our support for the design strategy, the Panel was disappointed with the stark elevational treatment of the North facade, which we understood was partly a result of budgetary constraints. In particular, the dead ground floor frontage not only appeared unwelcoming but also missed the opportunity to provide security through natural surveillance. While we welcomed the lack of fencing at the front of the building and around the public space, we would like to see more transition space provided between inside and outside, and some outdoor shelter.

The Panel pointed out that in fact an east/west orientation is not conducive to preventing overheating. We were informed that a shading exercise is underway, and we advised that those results should inform the design. We accepted that the shallow plan would allow for good cross ventilation, but we were surprised by the assertion of the M&E consultant that predicted heat gain was within acceptable levels. This was claimed to be because of the size of the rear ventilation stack, and further questioning revealed relatively low daylight levels [3%] due to reduced glazing. The Panel stated that 4% daylighting in all teaching and working areas would be necessary to achieve BREEAM Excellent. While we recognised the difficulty in getting the right balance between daylight, overheating and ventilation, we thought that an acceptable solution to this had not yet been achieved.

The Panel was pleased to see a commitment to achieve BREEAM Excellent, given the necessary funding, but we advised that the sustainability measures identified, such as green roofs and CHP, be taken further and used to reduce the overall carbon footprint of the building. We thought that the small separate areas of green roof would not be cost efficient and that the environmental benefits of green roofs should be maximised by using the whole roof area. Similarly a CHP used only for the

swimming pool would be a missed opportunity in terms of delivering carbon savings for the whole building. We urged the team to consider including a biomass heating system which would be even more efficient if it also served the adjacent housing development. The implications for delivery and storage of wood fuel would need to be considered as soon as possible. The inclusion of solar thermal panels should be evaluated.

The Panel would like to see the preparation of a design brief to deal with the interface between the school and residential sites. Housing could perform a useful surveillance role, and this would coincide with orientation for the best views across the playing fields. We thought that the Local Authority should also consider the potential impact of noise and light pollution on the residential properties.

The Panel noted that a good background landscape strategy had been provided but we would have liked to see this more developed and detailed for a full planning application.

We were told that most pupils currently arrive at school on foot [98%] and an improved pathway system between Malpas and Bettws should encourage this to continue. There is little cycle use, but there will be adequate cycle storage to satisfy the BREEAM requirement. The existing drop-off point for service buses will be incorporated into the treatment of the public realm, and there will be no specific drop-off point for cars. A small amount of community car parking is provided to the west of the site, separate from the staff parking.

The Panel was informed that the pupils arriving at the school were not the school's responsibility until they had entered the school building, but that they could enter at any time. We thought that there may be congestion problems around the single main entrance at peak times, and suggested that the design team run through various scenarios and patterns of arrival, to ensure that risk of congestion was minimised.

We were concerned that the proposed piazza would be in continual shadow for most of the year. This would have significant implications for usage and landscape. The design team agreed to look at a change in building angle and symmetry to give better solar access.

The Panel advised that fully inclusive design should be given equal priority to enable the provision of full services to all users.

The school currently accommodates 1150 students from 11-18 years old. The new proposal will accommodate a similar number and age range, and although school rolls are forecast to fall, there is room for future expansion at the ends of the wings.

Crynodeb/Summary

The Panel welcomed the quality of the presentation and supported the basic design approach leading to the building's location and form. We consider this proposal to be an acceptable response to the site and the brief, but we think some major revisions are necessary. In particular:

- The building should be re-oriented to maximise solar access into the piazza and ensure a usable public space.
- More active ground floor space should be included on the main facade to soften the elevation and provide natural security.
- We would like to see more transition spaces and shelter between internal and external areas
- We support the single main entrance to encourage a sense of community ownership, but we think there may be a risk of congestion here, and pinch points elsewhere in the floor plan
- The issue of responsibility for students congregating at the front of the building should be clarified
- We think that the east/west oriented wings will be prone to overheating and we think this should be resolved without reducing optimum daylight levels.
- We welcome the aspiration to BREEAM Excellent and we think the team should be more ambitious in the pursuit of high environmental standards. Many of the sustainability measures proposed should be extended to include the building as a whole, as well as the adjacent site, to maximise carbon savings.
- The landscape strategy needs to be developed urgently, in tandem with the design, and detailed proposals should form part of the planning application.
- We would like to see the Local Authority prepare or commission a design brief to deal with the interface between the school and residential sites
- High quality, durable, sustainable materials should be specified for internal and external finishes. Demolition materials should be recycled as far as possible.

Diwedd/End

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