BETTER PUBLIC BUILDING 2006

PRIME MINISTER’S AWARD
The Prime Minister’s Better Public Building Award recognises and celebrates the essential roles that great new buildings and public space play in this country.

From government offices to primary schools, from local hospitals to affordable homes, the quality of our civic built environment has a massive and direct impact on the quality of all our lives.

The Prime Minister’s Better Public Building Award is now in its sixth year and gives public recognition to great new schemes that may not shout for attention but have a real impact on the communities they serve. In the past six years there has been an incredibly diverse range of winners – libraries, an art gallery, an educational centre, and a road by-pass.

All 14 projects shortlisted for this year’s Award – from a new children’s hospital to a treetop walk – are success stories in their own right. We challenge all those involved in designing and funding new public buildings to learn from the success of these projects, and we look forward to the day when all public buildings are designed and built to the same exacting standards.

Richard Simmons Chief executive, CABE
John Oughton Chief executive, OGC

'I congratulate all the candidates on the shortlist for this year’s award. They represent, once again, a very diverse range of projects. But what they have in common is that each demonstrates a high quality of design and how this helps in the effective delivery of good public services.'

The Prime Minister, Tony Blair MP
THE AWARDS

Launched in 2001, the Prime Minister’s Better Public Building Award is an annual celebration of design and procurement excellence across the public sector. When selecting the shortlisted schemes, the judges look at design, construction, financial management, procurement method and the generation of additional social and environmental value.

Any construction project commissioned by or on behalf of central or local government or a grant aided organisation, is eligible for the award. The Prime Minister’s Award is part of the Better Public Building Initiative, which was launched in October 2000 to encourage the adoption of quality design principles in all new public sector building, regardless of size and cost.

The Prime Minister’s Better Public Building Award is jointly sponsored by CABE (Commission for Architecture and the Built Environment) and OGC (Office of Government Commerce), and is administered by the British Construction Industry Awards.

EVELINA CHILDREN’S HOSPITAL
LONDON

Hospitals are often dark, forbidding places which serve to make already anxious patients even more so, especially children. Not so at the 140-bed Evelina Children’s Hospital, where children were consulted on what they most wanted to see in the new scheme. Their answer was ‘no long scary corridors’, but the team went further in designing special features to make them feel better, quicker.

Firstly, the scheme, on a difficult site hemmed in by a road on the south bank of the Thames near to St Thomas’, uses a large conservatory at its heart that stretches along its entire 100m length and rises to four storeys in height, topped by a south-facing glazed roof bringing daylight in. Throughout the building, those storeys are distinguished by a different realm of the natural world, while the conservatory floor – dubbed The Beach – has a play area, a restaurant and a school for longer term patients.

Proof of success is tangible – vacancies for nursing staff have fallen from 30% to 20% and applications from consultants have doubled. The judges said: ‘Adaptability for future change is a feature of this striking new building, which has helped to lower nursing vacancy rates. A building that lifts the spirits.’
BROADLAND FLOOD ALLEVIATION PROJECT
NORFOLK BROADS

The Broads river system in the east of England contains some 240km of earth and sheet piled flood defences, with an average residual life of 5–10 years. They protect around 30,000ha of valuable habitat and grazing marsh, of which a quarter is designated under European law.

This three-year project is part of a 20 year flood alleviation scheme from the Environment Agency, and involved setting back defences to enable sheet piled defences that have reached the end of their useful life to be replaced with a softer, more sustainable reeded edge.

Normally such defences are being set back around 25m to provide in excess of 50 years’ residual life to the new defence. Here, however, to promote more open water, the bank was set back by a further 25-50m. The scheme succeeded thanks mainly to the collocation of contractor, designer and client so issues could be sorted out quickly and efficiently, but also reflected a long-term strategic approach. And, finally, it was helped by the formation of strong partnerships with the local community.

The judges said: ‘The irony of water presenting a problem for the Norfolk Broads was not lost on us. The thorough analysis informed an effective but sensitive response.’

client
Environment Agency

principal designer
Halcrow Group

principal contractor
Edmund Nuttall

contract value
£3.8 million

LA V E N D E R S U R E S T A R T A N D C H I L D R E N ’ S C E N T R E
M I T C H A M , S U R R E Y

This is a new, 1,000m² nursery and community building for the use of low-income families as part of the government’s Sure Start Initiative. Intended to act as a local catalyst for regeneration, it has also succeeded in creating a hub for people using adjacent facilities such as allotments, tennis courts, paddling pool and playground.

Set within a stretch of open parkland bounded by the busy London Road, the building is on an existing site which had become prey to vandals.

The new building is modular to allow for off-site fabrication and speedy assembly and flexible to meet the needs of children, parents and the local community. Accommodating 90 children including babies, plus community facilities including a café and multi-purpose rooms, it is conceived as a ‘pavilion in the park.’

Materials used include timber – a Douglas fir that will weather to an elegant silver – while a concern with sustainability resulted in the building’s orientation for daylight penetration and ventilation. The building has no mechanical heating or cooling.

The judges said: ‘Speed of construction, environmental awareness and sustainability issues were successfully addressed through the design of a ‘pavilion in the park.’

client
London Borough of Merton

principal designer
John McAslan and Partners

contractor
Durkan Pudelek

principal engineer
Arup

contract value
£1.8 million
THE NATIONAL ASSEMBLY FOR WALES
CARDIFF

The National Assembly for Wales needed a brand new building and a visible symbol of the new-look principality. The scheme, on a brownfield site in Cardiff, has three levels with a public café and gallery overlooking a debating chamber and committee rooms.

As a public building, certainty over cost was an important consideration, but so too was the ability to provide a robust and sustainable building for Wales with a minimum 100 year life.

Environmental elements include the selection of timber, slate and stone, along with low energy systems which aim to halve energy usage. Twenty seven 100m deep boreholes in the ground help with cooling and heating through earth heat exchangers. This, coupled with a rotating wind cowl which ventilates the chamber via a funnel hanging from the roof, enabled the building to achieve Wales’ highest ever BREEAM environmental rating.

An iconic building, capable of standing up both to the political debates inside and Cardiff’s challenging marine environment outside, was delivered on time and to budget.

The judges said: ‘This significant landmark was achieved after a troubled early gestation, and has achieved high levels of client satisfaction and public acclaim, not least for its environmental attributes.’

client
National Assembly for Wales
principal designer
Richard Rogers Partnership
principal contractor
Taylor Woodrow Construction
principal engineer
Arup
contract value
£39.5 million excluding fees

SALCEY TREETOP WALK
SALCEY FOREST, NORTHAMPTONSHIRE

Inspired by the government’s drive towards health projects for young people, Forestry Commission business unit Forestry Civil Engineering has created a treetop walk for people of all abilities.

The scheme – free to all and open all year – is a walkway which starts at ground level and rises 15m above the ground via a number of carefully designed timber bridges. These 24m span bridges rise at a 1 in 12 slope and are made from off-the-shelf aerial mast towers to form bridge beams. They had to be designed carefully in order to give them a little tolerance but maximum safety levels.

Steel was used for the towers, which are triangular to enable spans to exit in different directions and aid general stability. The result is a deliberately wobbly bridge, something the many thousands of children who have used it so far love.

The designers brought the scheme in on time and under its £700,000 budget including fees, allowing contingency to build a spectacular entrance bridge.

The judges said: ‘An intriguing project for the Forestry Commission which allows people of all ages to enjoy the forest environment at a height of 15 metres.’

client
Forestry Commission
principal designer
Forestry Civil Engineering
principal contractor
Pauley Construction
principal engineer
Forestry Civil Engineering
contract value
£700,000
CITY OF LONDON ACADEMY
LONDON

Opened by the prime minister, the City of London Academy is a demonstration of how working in partnership can produce excellent results.

The scheme is for a secondary education building for 1,200 pupils as part of the government’s Academies programme. As such, the project also has facilities for community use.

The site, provided by Southwark Council, was challenging because it was split in two by a busy road. The design team has produced a compact building featuring a light and airy atrium at its heart providing daylight and natural ventilation.

Effective and decisive project management enabled £2 million to be saved by using alternative cladding in the sports hall and all waste went to recycling bins rather than rubbish skips.

Delays were also minimised, and other benefits have been just as easy to measure. In 2005, 1,300 pupils applied for 180 places and the City of London Corporation client has been so pleased at the outcome, it has agreed to sponsor two more academies. It has resolved to use the same broad principles and partnership system.

The judges said: ‘Partnering between contractor and design team produced a strong building which benefited from nearly two years of preparation.’

JAMESTOWN VIADUCT
INVERKEITHING, FIFE

This listed 19th century structure required strengthening to take loads of some 27 million tonnes per year.

The rail viaduct, situated on the north side of the Forth estuary, carries one of the most heavily used railway lines in Scotland, forming a vital artery in Network Rail’s east coast railway system, with up to 200 train movements per day.

The scheme was designed to require only an eight day closure. This was done through changing the way the bridge acts under load, adding an in-situ reinforced concrete slab. This works with the existing steel truss girders and new steel work beneath, creating a composite structure from what had been a simply supported truss arrangement.

Over the eight days, around 20,000 man hours were worked across the team. The scheme included lifting the track, replacing a waterproofing system, reinforcement of the deck with 120 tonnes of steel and 600m³ of high strength concrete, and 8,600 welded shear connections. All whilst preserving the bridge’s distinctive original structural form.

The judges said: ‘This showed civil engineering delivery of a high standard where extremely tight deadlines prompted a highly disciplined team response.’

client
Network Rail

principal designer
Corus

principal contractor
Mowlem

contract value
£4 million

client
City of London Corporation

principal designer
Studio E Architects

principal contractor
Willmott Dixon

principal engineer
Dewhurst Macarlane

contract value
£23.5 million
WATER ACTIVITIES CENTRE, WHITLINGHAM COUNTRY PARK
TROWSE, NORFOLK

The Centre came about following an informal dialogue between the client, Norfolk County Council, and architect Snell Associates to determine what was needed. A design emerged which was a ‘stage set for sailing’ with a form the architects describe as a ‘bird-like’ roof over accommodation for community and teaching facilities.

Using timber and fabric, the building is raised off ground level like a ship’s deck and is inspired by traditional Norfolk seaside chalets and boat building craft and construction methods. Inside, a central community space suitable for teaching and social events leads off to eight timber cabins which accommodate changing, storage, administration and maintenance facilities.

Finally, the 36m span roof, like a bird resting with its outstretched wings next to the water’s edge, is made of Teflon, providing an all-weather covering including shading in summer.

Since it opened, the Centre has been well received by Norfolk schoolchildren and adults alike, offering value for money, creativity, innovation and sustainable construction on a highly sensitive site.

The judges said: ‘A prefabricated fabric roof stretches across a ‘village’ of timber cabins used for different purposes at different times of the year. An unusual and delightful project.’

STEWART STOCKMAN BUILDING
ADDLESTONE, SURREY

This new building – of national importance in animal disease monitoring and veterinary research for government and commercial agencies – has been developed with flexibility in mind.

The client required a contemporary research environment to accommodate its Serology and Bacteriology departments with laboratories, offices and conference facilities. But it also wanted one which could enable its users to enjoy chance meetings and social interaction. So the design team incorporated refreshment spaces and generous levels of glazing in the concrete-framed structure to aid natural light and views, along with transparency and a feeling of spaciousness.

A commitment to sustainability and environmental measures has resulted in screens to counter solar gain as well as a new energy centre, building orientation to reduce noise from the nearby motorway and timber from managed, sustainable sources.

A proportion of the laboratories can be recommissioned at short notice to the highest containment level when required – a UK first which provides efficient use of such expensive space in a cost-effective way.

The judges said: ‘The approach of a well-integrated project team was applauded in relation to a complex research facility.’

STEWART STOCKMAN BUILDING
ADDLESTONE, SURREY

client
DEFRA

principal designer
Wilson Mason & Partners

principal contractor
Shepherd Construction

principal engineer
Gifford

contract value
£33.5 million

WATER ACTIVITIES CENTRE, WHITLINGHAM COUNTRY PARK
TROWSE, NORFOLK

client
Norfolk County Council

principal designer
Snell Associates

principal contractor
Jackson Building Services

principal engineer
Buro Happold

contract value
£1.6 million
JOHN PERRY CHILDREN’S CENTRE
DAGENHAM, ESSEX

The London Borough of Barking and Dagenham wanted an enlarged school building for primary pupils to meet a pressing need in the area. The project involved the construction of a purpose-built nursery for local children with the capacity for a further Children’s Centre in the future. The design, drawn up after listening to the needs, aspirations and logistical problems of the client, creates a protected garden environment.

For this reason, glazing and clear plastic was used throughout. The larger Children’s Centre has a courtyard at its heart, radiating light throughout the building and providing a visual buffer between the public functions and private, protected world for the children.

The judges said: ‘The Centre shows how collaborative working, and rethinking how a school and children’s centre could work together, can produce a refreshing local landmark.’

PADDINGTON BRIDGE PROJECT
LONDON

The Paddington Bridge project constituted a tough technical and managerial challenge. On the one hand, a new bridge was required to replace an old structure on Bishop’s Bridge Road to the north of Paddington station, forming an important road link. But on the other, a series of logistical problems meant an ingenious solution had to be found.

The bridge crosses 14 Network Rail operated and Hammersmith and City railway lines, a development site and the Grand Union Canal. So the development team proposed a deft solution – they lifted the existing bowstring bridge, built most of the bridge away from the railway and then launched the new bridge underneath the bowstring.

Finally, the bowstring was lowered and transported across the new bridge and dismantled, again away from the railway.

A further complication, however, arose when it was identified that the existing canal bridge was constructed by Brunel, meaning careful dismantling and close working with English Heritage. Overall, the team achieved its goal, reaping savings through combining temporary and permanent works foundations and even beating the target price through teamwork, value engineering and responsible contractor selection.

The judges said: ‘This was an ingenious solution to a project fraught with potential logistic pitfalls. The result is highly satisfactory.’

client
Westminster City Council

principal designer
Cass Hayward and Scott Wilson

Railways
principal contractor
Hochtief (UK) Construction

contract value
£28 million

client
London Borough of Barking and Dagenham

principal designer
DSDHA

principal contractor
Lakehouse

principal engineer
Price & Myers

contract value
£1.2 million
M25 JUNCTIONS 12–15 WIDENING AND M25 SPUR ROAD
LONDON

This project entailed the successful widening of Europe’s busiest motorway whilst maintaining traffic flow.

The scheme, which included new railway bridges and a new interchange serving Heathrow’s new Terminal 5, minimised disturbance to traffic and local communities.

On the safety side, a million man hours passed without an accident; on sustainability, 90 per cent of material generated by the project was re-used, and in terms of innovation, the project involved pre-cast, pre-assembled modules which reduced complexity on site to enhance safety, quality and programme performance.

Part of the success was down to continual monitoring, with a project board representing all stakeholders reviewing progress bi-monthly. It was in that sense ‘owned’ by the teams.

The value of partnering was shown when an early setback meant the job ran nine weeks behind schedule but was delivered three weeks early, and to a fixed price. Community benefits included a low noise wearing surface, less congestion from improved junctions and reduced dust, water and light pollution.

The judges said: ‘Teamwork was the hallmark of a difficult project which was completed on time and to budget, with an impressive safety record.’

client
Highways Agency/Balfour Beatty Civil Engineering

principal designer
WSP

principal contractor
Balfour Beatty Civil Engineering

principal engineer
Atkins

contract value
£147 million

THE HUB
REGENT’S PARK, LONDON

The Hub provides a place to meet, to watch, and most importantly, play sport. Built in Regent’s Park in central London to replace outdated facilities, the building comprises a transparent circular café and viewing terraces which look out on renovated football and cricket pitches all around it.

A large proportion of the building is buried in the park landscape, helping its environmental performance, while beneath the sloping grass mound there is enough space for 300 people to get changed ready to play, along with toilet facilities which are open to the wider public. There are also changing facilities for referees and people with disabilities, plus spaces for alternative forms of exercise like yoga and tai chi.

The café with panoramic views is available for hire. All beneath an innovative roof structure which uses the principles of a bicycle wheel. Developed through meetings with myriad sports and local authority representatives, the Hub has successfully attracted the local community, businesses and targeted groups, such as the London Sports Forum for Disabled People and Paddington Development Trust, to use the park for outdoor sport once more.

The judges said: ‘This is an elegant design, well-delivered, which is largely semi-buried in the park landscape, thereby giving excellent environmental credentials.’

client
The Royal Parks

principal designer
David Morley Architects

principal contractor
Verry Construction

principal engineer
Price & Myers

contract value
£2.9 million
The task was to replace a bold, iconic, but terminally decaying concrete bridge for the A92 principal public road over the South Esk River in Montrose. It was made harder by the site being adjacent to an environmentally sensitive, protected tidal basin with an extreme tidal range.

The scheme involved a three-span concrete and steel bridge with a distinctive cope and pronounced curvature. Innovations included transporting and placing structural steelwork by marine crane barge, reducing congestion, and a deck designed to use almost no scaffolding.

A 160m long temporary bridge was installed to allow demolition of the old one, which was dismantled in three single lifts using a heavy lift barge, and then placed on the quayside for breaking up and recycling. After this, two new piers were built in the river bed. Steelwork fabricated in a Belfast shipyard was brought to site by crane barge, and lifted directly onto bearings, thereby avoiding road disruption.

The judges said: 'This replacement bridge project had to be robust yet sensitive to a valued natural environment. The delivery of the project was impressive and the resulting design of an appropriate elegance.'
Visit www.betterpublicbuilding.org.uk to find out more and pre-register your scheme for the 2007 awards.