

Olympic Delivery Authority

Design

June 2009

*designing for legacy*



## FOREWORD

In 2012 the eyes of the world will be on us. It will be a opportunity to show everything that is great about London and the UK. That includes the quality and inventiveness of British architecture, design, construction and engineering.

Over the past 18 months we have published the designs for all the main venues, infrastructure and the parklands. They combine design flair with functionality. From the outset, they have all been designed with legacy in mind. We want the Olympic Park to make an architectural statement in 2012. However, we also want the Park to have a real sense of place after the Games, for local people to be proud of their new 'quarter' in London and for the venues and the Park to be as accessible as possible.

Design, innovation and creativity lie at the heart of the project. Our approach has been to ensure that design is central at every stage – from planning and procurement through to construction. We are fortunate to be working with so many world class architectural and design teams. As construction accelerates across the Park their designs are starting to redefine the area and the east London skyline. We have also valued enormously the contribution made by a range of different stakeholders from community groups through to statutory bodies, notably our partners in the design community including the Commission for Architecture and the Built Environment, the Royal Institute of British Architects, the Landscape Institute, the local Boroughs, the Greater London Authority, the London Development Agency and Design for London. Their input has been invaluable in helping shape the final designs.

There is still a huge amount to do in turning the designs into reality but the foundations for success are now in place. We are confident that we will provide a stunning backdrop to the Games and a design legacy for east London that will endure long after the Olympic and Paralympic Torches have been extinguished.

David Higgins  
Chief Executive  
Olympic Delivery Authority

Sir Nicholas Serota  
Board Member  
Olympic Delivery Authority

# *Olympic Stadium*

The Olympic Stadium bowl consists of a lower tier of 25,000 permanent seats, set into the landscape with an upper tier of 55,000 temporary seats.

A sunken bowl built into the ground will contain the field of play and lower permanent seating. It has been designed to bring spectators as close as possible to the action.

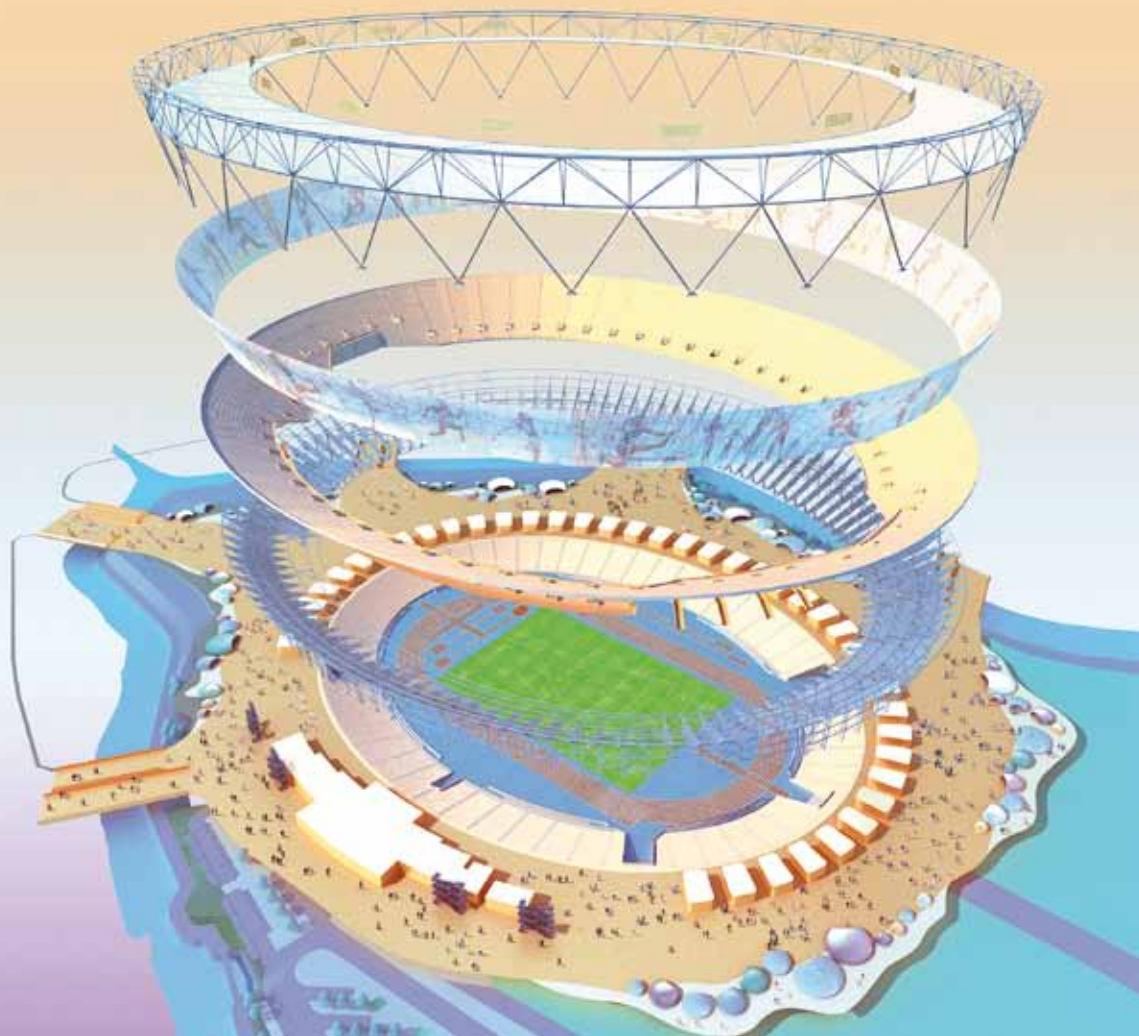
*innovative*



# Olympic Stadium

Spectator access to the bowl is via a series of entrances set radially around the perimeter of the Stadium. A steel compression ring is supported on external steel columns, with cables tensioned around an inner ring to support a fabric membrane roof cover.

After the Games the temporary seats will be removed leaving a 25,000-seat bowl set in the Park landscape.



## *Velodrome*

The Velodrome for the London 2012 Games has been designed to create the fastest track and the best possible crowd atmosphere.

The 6,000-seat Velodrome will host the indoor Olympic and Paralympic track cycling events in 2012 as well as a BMX circuit for Olympic events.

The roof design is based on a very lightweight double curving cable net structure. The roof has been designed to reflect the geometry of the cycling track.

*sustainable*



## *Velodrome*

An abundant use of daylight, through strategically positioned rooflights will reduce the need for artificial lighting and allow natural ventilation.

Water saving fittings built into the design will allow for rainwater reuse in the building, helping reduce water consumption.

After the Games a road cycle circuit will be added to create a legacy VeloPark that will combine cycling facilities across all disciplines in one 'cycling hub'.

*community*



## *Handball Arena*

The London 2012 Handball Arena has been designed to be simple, efficient and flexible.

The Handball Arena features external copper cladding to give it a distinctive appearance that will develop a rich natural colour as it ages. The concourse level features glazing which encircles the building, enabling visitors to the Olympic Park to view sport taking place inside, and illuminating the venue when lit at night. The venue also has a vibrant and multi-coloured interior, with retractable seating to create a flexible space and 100 light pipes in the ceiling to allow natural light into the venue.

*adaptable*



## *Aquatics Centre*

The Aquatics Centre will be the 'gateway' to the Olympic Park during the London 2012 Games. In legacy it will provide elite and community facilities including two 50m swimming pools and a diving pool.

The design of the wavelike roof will be one of the iconic images of the London 2012 Games and provide an inspirational architectural legacy. It will also showcase the world class design, engineering and construction involved in delivering the 2012 venues.

*design*



## *Aquatics Centre*

The venue will have a capacity of 17,500 seats during the Games reducing to a maximum of 2,500 in legacy when the temporary seating is removed and the final legacy form is completed.



*quality*

## *Basketball Arena*

The Basketball Arena will be a showcase temporary venue in the Olympic Park. It will be reused after the Games in line with our principle to only build facilities where we are confident a long term legacy can be secured.

The venue has 12,000 seats for the Basketball preliminaries and quarter finals; it will also hold the Handball semi-finals and finals. In addition it will act as the holding point for athletes before they make their way to the Opening and Closing Ceremonies.

After the Games, two thirds of the materials and elements of the Arena can be reused or recycled potentially allowing other parts of the UK to benefit from London 2012.

*reusable*



## IBC/MPC

The International Broadcast Centre (IBC)/Main Press Centre (MPC) will support around 20,000 broadcasters, photographers and journalists communicating the Games to an audience of four billion people worldwide.

The IBC/MPC combines an innovative mixture of permanent and temporary elements during the Games and has been designed to be flexible to accommodate a range of potential legacy tenants and uses.

The MPC will meet demanding green standards in legacy through innovations including the use of recycled non-drinking water and a 'brown roof'.

*legacy*



## *Olympic Village*

The Olympic Village, which lies adjacent to the Olympic Park and Stratford City, will accommodate 17,000 athletes and officials during the Olympic Games and 6,000 during the Paralympic Games. Covering 91 acres, it will leave the legacy of just under 3,000 new homes, parks, and community facilities which will form the first phase of a far wider regeneration and development of the whole Olympic Park.

During the Games, the development will include 11 residential blocks each consisting of five to seven buildings creating a private communal garden at the heart of each block.

*inclusion*



## *Olympic Village*

The overall design places significant emphasis on the relationship between the buildings and the streets and spaces around them, so that from the outset the athletes and later the future residents benefit from a high quality public realm at the heart of the Olympic Park.

The plan reinterprets London's tradition of building homes around communal squares and courtyards. The character and quality of the Village is enhanced by the involvement of a range of architecture practices, each designing one or more of the individual buildings.

*legacy*



## *Olympic Village*

The Village will comprise shops, restaurants, medical, media and leisure facilities, large areas of open space and a water feature. At the heart of the community facilities to be left in legacy will be Chobham Academy – a world-class new education campus. The Academy is scheduled to open in September 2013. During the Games, the Village will also include an 'International Zone' where athletes can meet with friends and family.



*education*

# The Greenway

The Greenway is a walkway that crosses the South of the Olympic Park. It is being upgraded between West Ham and the Park as this forms one of the main pedestrian access routes into the Park during the Games.

The design retains the 'wild' natural quality which characterises The Greenway and introduces recycled lamp-posts, gates and street furniture to announce principal entrances.

Reclaimed materials such as cobbles and bricks are being used as part of the seating, signage and viewing points along the route. The reused materials will be used in an unexpected way in order to make the Greenway memorable.



## *Parklands*

The Olympic Park will deliver vital green infrastructure for the new community that will live, work and play in and around the Olympic Park after 2012.

Former industrial land, much of it contaminated through years of industrial neglect, is being transformed to create 100 hectares of parklands that will provide a colourful setting and a festival atmosphere for the London 2012 Games and beyond.

Inspired by the Victorian and post-war pleasure and festival gardens, visitors to the Olympic Park during the Games will enjoy broad sweeping lawns and footpaths leading down to riverbanks.

*diverse*



## *Parklands*

There will be ample seating and public spaces throughout the Park with live screens showing the sporting action.

The parklands, designed for people and wildlife, will provide the setting for the London 2012 legacy sports facilities.

The southern part of the Park will continue the festival atmosphere of the Games, with riverside gardens, markets, events, cafes and bars. The northern parklands will provide a more open, ecological landscape of wetlands, woodlands and bio-diverse lawns and habitats for hundreds of existing and rare species from kingfishers to otters.

*legacy*



## *Bridges*

More than 30 bridges of many and varied designs will be built in and around the Olympic Park to create new connections across the site, turning one of the least accessible parts of London into an area of great connectivity. We are committed to making the Park as accessible as possible.

The central footbridge features a single bridge structure with temporary elements in Games-time that will be transformed in legacy to leave two footbridges linked by a central blade-like walkway, linking the river tow paths and the upper concourse in the Olympic Park.

*accessible*



## *Energy Centre*

The Energy Centre will have great scale and presence and deliver vital utilities and infrastructure for the Games and legacy.

It will be an engaging landmark in the tradition of great London historic power stations. It is one of the high quality utility buildings that form the backbone of the Park.

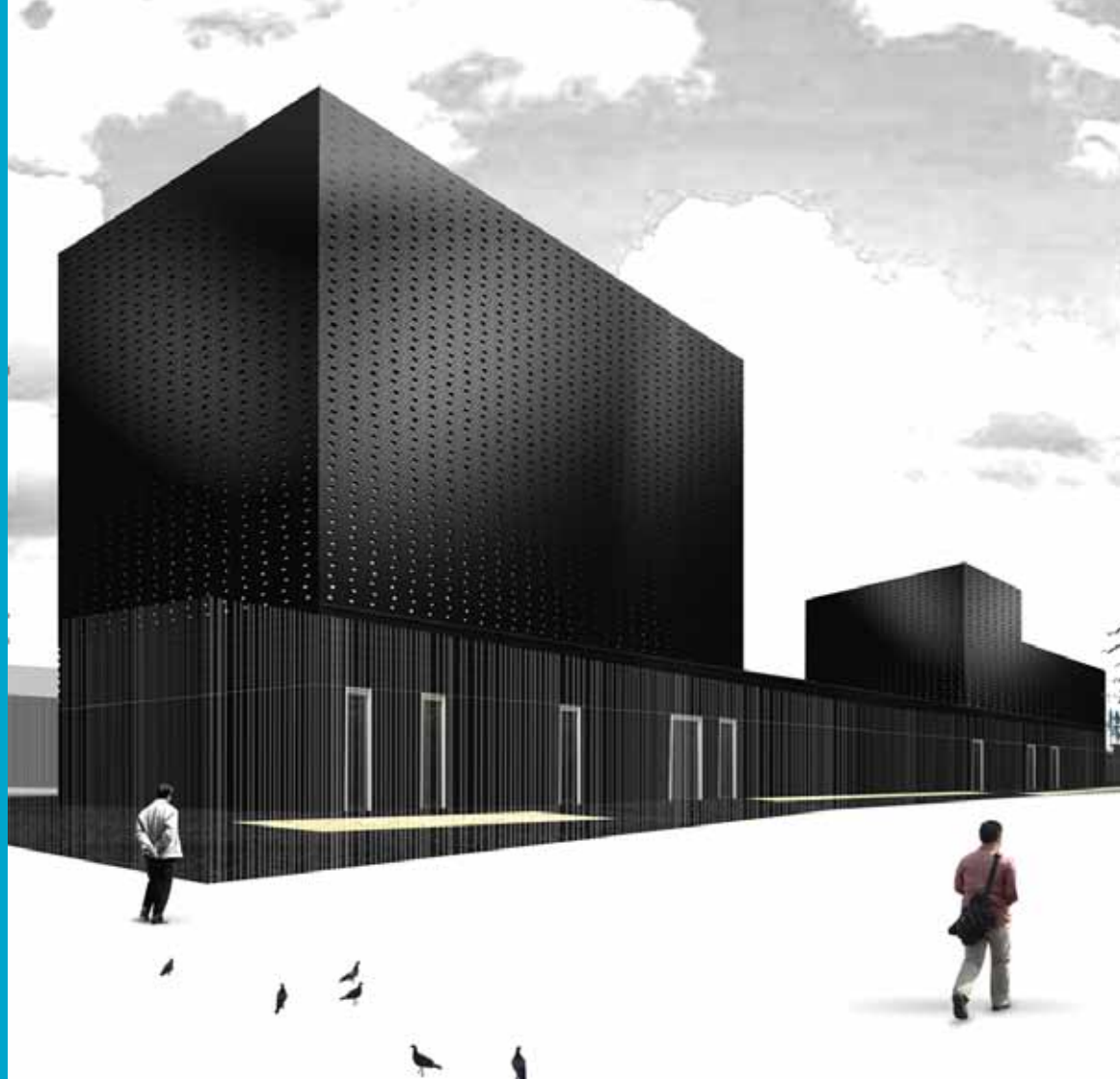
The building includes biomass boilers, gas to generate heat, and a Combined Cooling Heat and Power plant to capture the heat generated by electricity production. The site-wide heat network will be used to generate domestic hot water and water for the Aquatics Centre swimming pools and other venues and buildings.

*sustainable*



## *Primary Substation*

The Primary Substation will be the first building completed on the Olympic Park site and the first of the permanent utilities buildings. High quality craftsmanship and materials have been used. At night the cooling towers will be lit from within to give the building a glowing presence.



*legacy*

## *Pumping Station*

The circular form of the pumping station sits to the north of the Great Eastern Railway as part of the family of utilities buildings across the Olympic Park. The building will improve the local built environment and the vent stack will create a visual landmark in a complex urban area.

Bazalgette drawings will be displayed on the external panels around the building to celebrate past engineering feats on the site.



*design*

## *engagement*

Throughout the design process comments from stakeholders and members of the local community have been used to improve designs and ensure the facilities in the Olympic Park will meet the needs of their users in Games and in legacy alike.

Through targeted meetings, technical workshops, public exhibitions and events, the architects along with the project teams have actively engaged with key groups and local communities. Their views have helped to shape the final designs.

## *community*



## *ACCESS*

Inclusive design is at the heart of our design process. We want everything we build to be as accessible as possible. We have set high standards in our Inclusive Design Strategy.

Key features of our inclusive design include:

- the choice of wheelchair seating positions;
- level gradients achieved across the Olympic Park;
- level access to venues and seating; and
- accessible changing rooms and support facilities for all venues.

*inclusive*



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The construction of the venues and infrastructure of the London 2012 Games is funded by the National Lottery through the Olympic Lottery Distributor, The Department for Culture, Media and Sport, the Mayor of London and the London Development Agency.

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Published June 2009.



**MAYOR OF LONDON**

