PROJECTS

Introduction
Ken Shuttleworth

'It's hard to believe that this is Make's ninth year – and that we are building up to our tenth anniversary in 2014!

The year got off to a fantastic start when we were placed 46th in *The Sunday Times 100 Best Small Companies To Work For* list – the only architectural firm to be ranked. This was followed by two more prestigious awards – the *AJ100 Practice of the Year* for the London and South East region and the *2012 Building Good Employer Guide,* in which we were ranked 2nd out of 60 entrants ...

... In July we had a visit from the Deputy Prime Minister Nick Clegg, as part of the government's promotion of employee-owned businesses. It's great to see our business model getting the recognition it deserves and I'm interested to see how the intended "culture shift" evolves as a result of the campaign.

It's been an amazing year for London, with the Olympic and Paralympic games exceeding everyone's expectations. We were delighted to see our Copper Box – "the Box that Rocks!" – play a huge part in the success of the games and host some really thrilling events ...

... The venue is the only permanent indoor arena to remain after the games, and we're looking forward to seeing it transformed into a fantastic new community facility for East London.

We are helping to keep the spirit of the Olympics alive by working on two key legacy projects; the South Park Hub – a cafe and leisure facility for visitors to the Olympic Park – and Chobham Manor, the first legacy housing development to be built on the Olympic site ...

... Further afield, we have opened an office in Hong Kong on the back of our success in China and are overseeing the final construction stages of a 23-storey residential tower in Kowloon.

We have also won a second healthcare project in Iraq and are undertaking our first job in India.

On top of this, we will soon be launching our brand new website and are moving to a new office in the summer. So a big thanks to everyone who has supported us in 2012 – and watch this space!'

Ken.

Contents

The Olympic legacy

Collaborating with an artist

Education

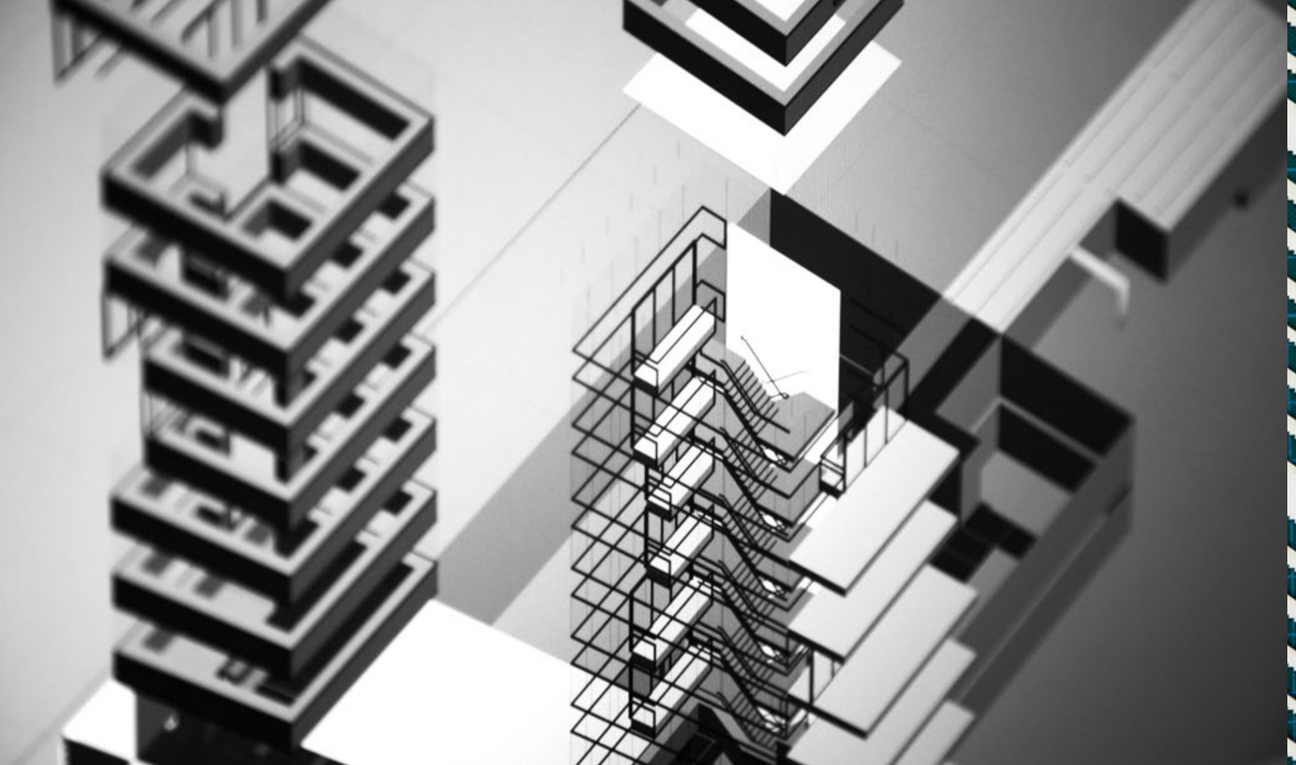
The heritage of Westminster

Hong Kong & Mainland China

Masterplanning

Modular design

On site



THE OLYMPIC LEGACY

2

1, 2 Ken Shuttleworth's photographs of the Olympic opening ceremony.

Ken Shuttleworth describes his experience of the Olympic opening ceremony

'I was lucky enough to attend the opening ceremony, which was without doubt the most incredible theatrical experience of my life – a breathtaking spectacle with constant surprises, to the point where it was difficult to keep track of what was going on or to know where to look. The sheer scale of the event was overwhelming – I was completely swallowed up in the moment and had to resist leaping out of my seat to join in!

When we arrived the entire stadium was filled with the English countryside; how on earth were they going to move it all before the games started? There was bird song; there were sheep, cows, geese – even shire horses traipsing up and down. The scenes of the English bucolic ideal looked absolutely beautiful. Then the lighting and music kicked off and the scene was gradually dismantled before our eyes.

The remarkable logistics of recreating the industrial revolution simply took our breath away – the rings coming together was so exciting. Then the house appeared, with projected images of what seemed to be a record of my entire life as I knew every single one!

Following the ceremony on Twitter really enhanced the experience, especially when David Taylor tweeted "the French commentator has stopped talking...". I'm not surprised as this part of the ceremony was so uniquely British, I'm amazed any other country in the world had a clue what was going on. When the athletes came in accompanied by an army of drummers I started scanning around for the Olympic torch as I couldn't work out where it was; for a while I was focusing on the tree, but I was very wrong ...

3

The gold medal of the night definitely went to Heatherwick Studio for the most amazing cauldron in the history of the Olympic games! Such is the inventiveness of Thomas Heatherwick – surely Britain's most creative and original designer – that it was a symbolic triumph that transcended all its predecessors.

Above all the cauldron was so enjoyably risky; multiple moving parts, gas, fire, children and millions of people watching live around the world – a fraught combination which simply *had* to work on the night. And it did! For the design to be such a fitting climax to an amazing ceremony, as well as a wonderful tribute to the 8,000 Olympic torch bearers, was pure genius.

I remember seeing the iconic architecture of the Beijing Olympics – the Bird's Nest and the Water Cube – and wondering how we could possibly match it with a small percentage of their budget. But as a group of architects I think we made the country proud. The Olympic Stadium was a fantastic success and the Aquatics Centre is a really impressive building.

Our gleaming Copper Box was just wonderful to be in, with handball becoming *the* game of the games, and the Orbit really added to the sense of fun and celebration. All this was complemented by beautiful and original landscaping.

I think architecture and spectacle came together to give us a summer to remember for a long time to come.'

3 The Copper Box. **4** Aerial view of the Olympic Park.

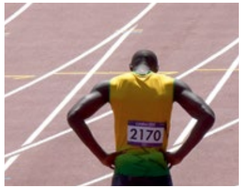
4









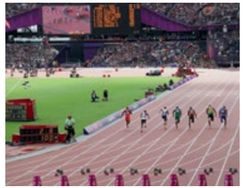




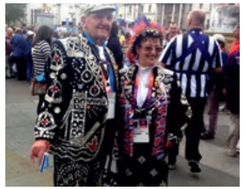











5 Some of our highlights from the London 2012 Olympic Games.

1

1 The Copper Box during the handball tournament. **2** 'RUN' sculpture by Monica Bonvicini outside the Copper Box. **3** Cross-section of the arena.

2

3

THE COPPER BOX

The 2012 Olympics have been a major catalyst for the regeneration of East London. This comprehensive redevelopment is now progressing to the next phase with the ongoing transformation of the Queen Elizabeth Olympic Park.

Make's Handball Arena – renamed the Copper Box – received an overwhelmingly positive reaction during the Olympics, with the handball competition becoming one of the biggest hits of the games. The arena was a fantastic showcase for this dynamic, action-packed game, which is now one of the fastest growing sports in the UK.

The venue is now set to become part of the legacy vision by playing a key role as an important community facility. As the only permanent indoor arena to remain after the close of the Olympics, its transformation into a multi-purpose sport, concert and community venue will leave a lasting legacy and make a significant contribution towards the revitalisation of the Stratford area.

Flexible design

As well as the Olympic handball competition, 'the Box that Rocks' hosted the modern pentathlon fencing and Paralympic goalball tournaments. Our highly flexible design was able to accommodate the incredibly tight event turnaround with minimal disruption; an efficient, retractable seating system allowed the shape and size of the playing surface to be changed quickly and easily to suit different court layouts and spectator numbers: 7,000 seats were required for handball, 6,000 for goalball and 4,000 for modern pentathlon fencing, with a turnaround period of just 48 hours allocated for the switch from handball to fencing.

Legacy

As one of the first legacy venues scheduled to open in the summer of 2013 – and the third largest concert venue in London – the Copper Box is expected to attract around 400,000 visitors a year and will become a multi-use facility hosting a wide variety of national and international sporting competitions, as well as cultural, business and entertainment events such as concerts, conferences and exhibitions.

4 Handball players in action.
5 Multi-coloured seating.
6 Aerial view of the legacy masterplan: (a) Aquatics Centre (b) South Park Hub (c) Orbit (d) concert and event space (e) Olympic stadium (f) promenade.

4

5

Catering for an incredibly diverse range of sports, including handball, netball, basketball, volleyball, badminton, table tennis, boxing, martial arts and wheelchair rugby, the arena will also include a gym and fitness suite, changing rooms, a creche, a cafe, meeting rooms and administration offices.

The adaptable design has created a truly multi-purpose arena that will maximise revenue streams and provide a financially sustainable arena for Greenwich Leisure Limited, who will be operating it on behalf of the London Legacy Development Corporation.

Make's contribution towards the Olympic legacy is continuing through our involvement with two more important schemes on the Queen Elizabeth Olympic Park – the South Park Hub and Chobham Manor.

6

1 Illustrative view of the South Park Hub (competition illustration). **2** East elevation.

1

SOUTH PARK HUB

Planning permission has been granted for our competition-winning South Park Hub – an elegant, rectilinear building which will be located in the Olympic Park next to the Aquatics Centre, the Olympic Stadium and the Orbit.

Comprising a cafe, retail and event space, the building will become a key destination for visitors to the park, with its prime setting offering strong visual connections with the impressive surroundings. The Hub is stitched in to the landscape as part of an integrated masterplan for the park.

Concept

Due to the scale and complexity of the dominant structures and stadia located nearby, we have designed a simple, low-lying pavilion which subtly responds to, rather than competes with, its neighbours.

The well-proportioned building takes the form of a series of horizontal and vertical planes which enclose the internal and external spaces. Two blocks are joined by a single roof plane, which connects them so that they read as one rectilinear form; a pedestrian route flows through the middle of the blocks, breaking up the space and drawing people in and through the building.

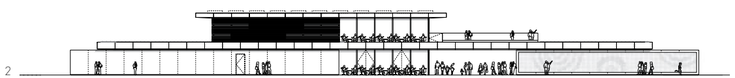
Rooflights bring natural light into this central space and reveal views of the upper levels of the Orbit, which towers over the pavilion. Spine walls separate the public and private spaces and extend beyond the roof line to visually link with the flowing, organic lines of the landscape.

Our strong yet simple concept provides a flexible design framework which can easily incorporate additions in the future. The structure permits the use of domestic construction techniques: prefabricated, long-span timber cassettes can be mechanically lifted and fixed into position, with no on-site working required. This practical design approach keeps the level of buildability extremely efficient and fast, while facilitating the delivery of a high-quality building within a challenging budget.

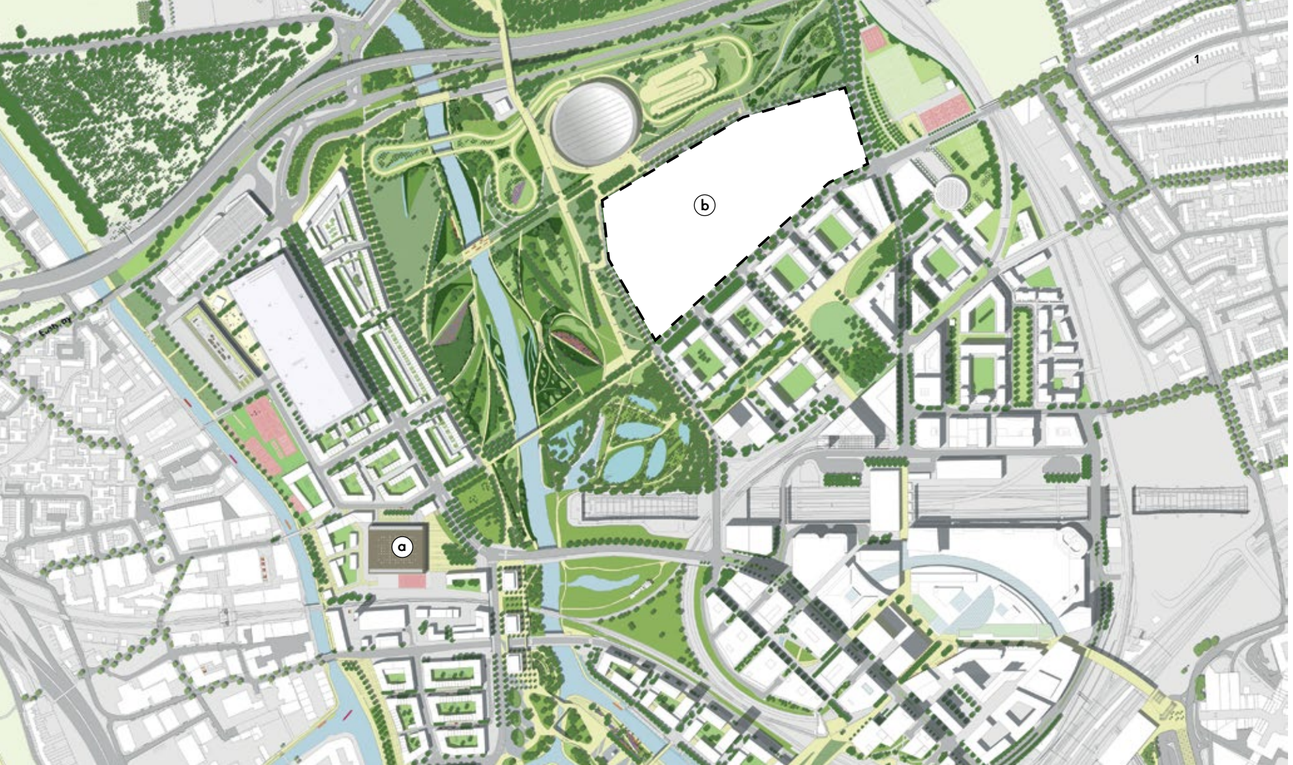
Facilities

The two parts of the Hub have different functions. Cafe and retail facilities are located to the south of the building and form the heart of the pavilion; an impressive glazed frontage reveals the activity beyond and the space opens up to provide external seating which spills out towards the river. Flexible event spaces are available on the upper level, as well as covered external seating and a roof terrace above the cafe area, which offers stunning panoramic views.

The northern part incorporates a visitor reception, administrative support areas and a box office for ticket sales to the Orbit and activities taking place across the Olympic Park; a daily peak of 15,000 visitors to the park is anticipated when the Hub opens in the spring of 2014.



2



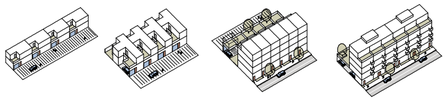
1

CHOBHAM MANOR

Make is leading the team which is delivering the first legacy housing scheme in London's Olympic Park. Located between the Velodrome and Athletes' Village, Chobham Manor will be an open, publicly accessible residential development that encourages social engagement and promotes economic and environmental sustainability.

Comprising more than 800 homes, the scheme is one of five new neighbourhoods to be built on the legacy site. Accessibility and inclusivity are central themes of the development, which will become an integrated, mixed community centred around family neighbourhoods.

The development will be a catalyst for the ongoing transformation of the Olympic Park and the regeneration of the wider area. Flexible uses, adaptable public realm and interchangeable housing typologies will allow the masterplan to adapt to the changing needs of its residents over time.



2

Recognisably London

Our principal goal is to create a new part of London. Many people in the Stratford area who want a family home with access to open space are faced with the dilemma of a moving to a smaller property, or relocating to a less dense suburban area. Chobham Manor addresses this issue by providing the best of both worlds – a fundamentally urban location with excellent connections to the city, as well as access to good quality green space.

A mix of housing types to suit a broad range of residents provides choice and flexibility, with the aim of establishing a diverse and balanced community with high levels of social engagement.

Integration

The development will be fully integrated with the surrounding Olympic legacy site and the East London context, without compromising its unique sense of place. Our design is informed by the flowing landscape of the Lea Valley and builds on the positive characteristics of London's typical urban grain and the traditional Georgian square. Generated from the adjacent street patterns in order to create natural permeability, the scheme will be inviting and inclusive – a natural extension to the existing residential areas, rather than an exclusive 'island development'.

Amenities

Residents will be supported by a range of new local amenities and community facilities, linked by a series of open green spaces, which will provide Chobham Manor and the wider locality with an attractive and useful public resource.

Three interlinked community greens are arranged along a central route which stretches from one end of the site to the other, becoming a natural extension of the Olympic Park. Each green has its own individual character, responding to the community at whose heart it is located.

1 Make's projects shown on the consented Olympic legacy plan: (a) the Copper Box (b) Chobham Manor site.
2 A diverse range of housing types will deliver a sustainable, integrated community.

COLLABORATING WITH AN ARTIST

2

1 (previous page) Artist Catherine Bertola's design, which will be integrated into the surface of the office building. **2** Illustrative view of the office facade showing the pattern carved into the stone. **3** Concept sketch. **4** Building entrances off Hanover Square.

3

4

Hanover Square lies within the Mayfair Conservation Area, south of Oxford Street and west of Regent Street. Initially laid out in 1714, it was the first of five prominent West End squares to be built and was once a very fashionable residential address, although it has become somewhat neglected in recent years.

The forthcoming construction of the Bond Street Crossrail station, due to open in 2018, has spurred regeneration of the Mayfair area. Since the station exit is situated on Hanover Square, footfall in the square is due to increase significantly and its character changed into an 'arrival destination'. Our mixed-use scheme will help the square to regain its status as a prestigious address by creating a modern, forward-looking development with a style and scale suitable for this historically rich location.

The scheme includes a piece of unique artwork which will be carved into the building's stone facade. A competition was held to find a suitable artist to

7–10 HANOVER SQUARE

5

6

collaborate on the project and Catherine Bertola was chosen for her highly distinctive design, which references the historic context of the site.

Concept

An existing block will be demolished and replaced with residential and office accommodation in two separate but adjacent buildings. The design has been crafted to sit comfortably within the Conservation Area and respect the site's history, while providing a positive example of contemporary architecture.

The buildings are located in the north-east corner of Hanover Square, directly opposite the planned Crossrail station exit. An overarching architectural language of solidity maintains the square's existing character and relates to the wider Mayfair context, however each building adopts a different expression to reflect its distinct use.

Office

The facade of the office building is formed from Portland Stone and incorporates vertically expressed punched windows of varying size. Public art is integrated into the fabric of the building in the form of a beautiful carved pattern which is transposed on to the stone facade. The traditional design links the building to the era when Hanover Square was built and the royal dynasty after which it was named.

Most of plant is located within two basement levels, allowing the top floors of the buildings to be occupied; the seventh floor is set back from the main facade in order to soften the roof line and create an external terrace overlooking both Hanover Square and Princes Street. The ground floor accommodation provides attractive frontages, with two new retail units flanking the main office entrance.

Residential

The red brick-clad residential building on Princes Street comprises six high-quality dual-aspect apartments, one to each floor. Taking inspiration from Mayfair's traditional architectural style, the facade incorporates a series of curved bay windows accentuated by glass and metal balustrades; these are grouped vertically and decrease in size going up the building, following the predominantly domestic style of the street. Spandrel designs between the windows have vertical and diagonal fanning patterns which create a textured effect across the facade.

5 Verified view of the office building across Hanover Square.
6 Residential apartments overlooking Princes Street showing curved bay windows.
7 Main elevations on Hanover Square and Princes Street.

7

1

2

3

Biography
Catherine Bertola was born in Rugby in 1976. She studied Fine Art at Newcastle University and currently lives and works in Gateshead. She has collaborated on a broad range of commissions and exhibitions, both nationally and internationally, with institutions such as the Museum of Arts and Design (USA), Kunsthalle zu Kiel (Germany), Artium (Spain), the National Museum Wales, the V&A, the Whitworth Art Gallery, the Government Art Collection and the National Trust (UK).

www.workplacegallery.co.uk

Artist Catherine Bertola describes the process of developing a design for incorporation onto the facade of 7–10 Hanover Square

'My design for the facade is inspired by eighteenth-century woven Spitalfield silk, which was produced in London during the period when Hanover Square was established. When it was first built, Hanover Square was a very fashionable residential address whose inhabitants dressed in the finest silk and lace. In the nineteenth century the square became more commercial in nature and was home to a range of tailors, milliners, embroiderers and other textile traders. Fabric is therefore woven into the history of the site, making it a fitting concept for the public art commission. The contemporary appropriation of a historic pattern on the facade will create an interesting connection to the origins of the square.

In order for the work to have a specific resonance with the history of the site, I chose an appropriation of an eighteenth-century silk design produced for King George II's coronation canopy. George II was Great Britain's second Hanoverian king – the dynasty after which Hanover Square was named. Spitalfield silk was designed and manufactured a short distance from the site and was among the most expensive and coveted silk of its time. The original fabric would have been woven from gold thread and the finest coloured silk and stood as a symbol of the King's status and wealth. I felt that the association with luxury and quality was appropriate for a building of this calibre.

The artwork needs to complement the architecture so that the two co-exist symbiotically. I found that the nature of the new building lends itself to bold, abstract imagery. Damask patterns are formed from symmetrical block repeats, which can cover a surface more densely than other types of pattern. One of the advantages of this particular design is that it is easily scalable; it can be expanded to cover more of the surface or reduced to cover less, without losing its impact or integrity.

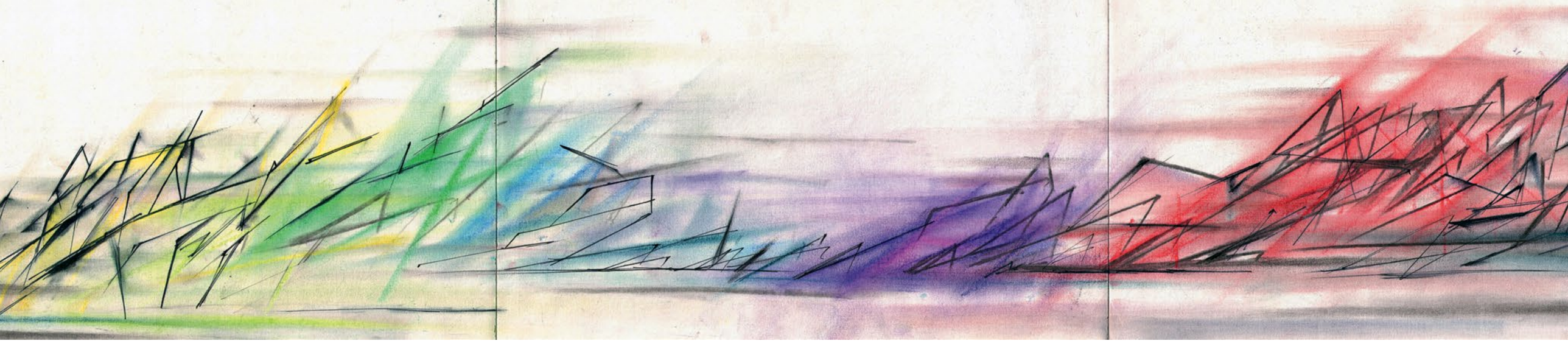
It is important that the pattern is visible from a distance as people approach the building, while also having an element of detail that is revealed on closer observation. It is formed from motifs of different scales; larger, bolder forms are framed and intersected with more complex, intricate detailing. From a distance the pattern is striking and instantly recognisable, while the detail provides visual interest when viewed at close quarters. The pattern sweeps across the two facades, uniting the surface and giving the sense of wrapping the building. The mass is concentrated on the corner, although the focus is on the principal facade and accentuates the primary entrance.

The pattern has been simplified for use on a contemporary building and adapted for the technical purposes of carving into stone. It will be carved at different depths to give a sculptural feel and add a visual richness to the surface, creating a dynamic play of shadow and light that will animate the facades. The motifs have been separated into four layers which correspond to a specific surface depth. The first layer is the face of the facade itself; the second layer sits proud of the facade; and the remaining two layers are cut into the facade. The various depths will weather differently over time, further accentuating the pattern and allowing it to take on a life of its own.'

4

5

1 *Bluestockings (Fanny Burney)*, 2009, pen on paper, 85 x 135cm. **2** *Unfurling Splendour (Adaptation II)*, 2009, dust and PVA, 600 x 300cm. **3** *Layer/s, lost without trace*, 2009, dust, PVA, paper and tacks. **4** An eighteenth-century silk design produced for King George II's coronation canopy. **5** The final facade design; the different tones represent different depths of carving.



1

EDUCATION

Participating students:

Selin Arabaular, China Chapman, Aliyah Ferguson, Mariam Idrissi, Sam Jones, Moin Mahomad Rafik, Jennifer Mensah, Manish Parsotamo, Ainslie Plews, Jack Rhodes, Manpreet Riat, Malak Sarour, Donjeta Sejdiu, Katie Maria Stares

Participating schools:

Alperton Community School, Ashcroft Technology Academy, Brampton Manor Academy, Chingford Foundation School, The Coopers' Company and Coborn School, Fulham Cross Girls' School, Seven Kings High School, Walthamstow School for Girls

2

3

'In the twenty-first century, corporate social responsibility has become a prerequisite for the property sector. Given that the built environment affects the whole of society, it is essential that people working within the profession are drawn from a diverse range of backgrounds. There is no better way of achieving this than by creating more accessible pathways into higher education.'

Victoria Thornton, OBE, Hon FRIBA, Director – Open City

1 (previous page) Painting of the 100m Olympic sprint by Accelerate mentee Moin Mahomad Rafik. **2,3** Mentors and mentees working together. **4** Accelerate exhibition in the Make studio window.

Accelerate into University

Open City's 'Accelerate into University' charity programme is the first of its kind to support 15 to 17 year olds from non-traditional backgrounds who are keen to enter the architecture profession. It is aimed at school pupils from London who want to pursue a career in architecture or the built environment and would benefit from additional mentoring and skills enhancement.

Make and the Bartlett School of Architecture are working in partnership with Open City to deliver this exciting programme, alongside 18 other architectural practices. The 50 participating students are all forecast excellent exam results but either have no family history of university education, or are on free school meals. The key aim is to provide additional support which will help them develop the skills required for entry to higher education architecture-related courses.

The 18-month scheme is enabling these young people to reach their full potential and improve their chances of entering university. Practical work experience sessions held at the Make studio, involving direct engagement with architects, is equipping the students with the experience, skills and confidence needed to aid them in achieving places at university.

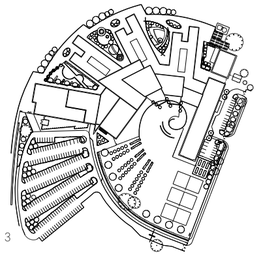
'Accelerate into University' is educating those young people who will become built environment professionals in years to come; in the long-term this will result in a more representative demographic group shaping our future cities. The findings from the Accelerate programme will feed directly into the publication of the first ever good practice guide to mentoring for architecture.

www.open-city.org.uk

4

1

2



3

1 Horizontal brick banding on the exterior elevations of the learning communities. **2** Eden Space exterior showing full-height vertical windows and coloured strips. **3** Spiral plan.

The Thomas Clarkson Academy is now complete and fully operational. Taking four years to build from conception to completion, the new school – part new build, part refurbishment – has already had a huge impact on the local Wisbech community.

Formerly known as Thomas Clarkson Community College, the school recently acquired academy status and has appointed a new principal. Despite this change in leadership and ethos, the school's layout and design have proven flexible and easily able to adapt to the new configurations and teaching approaches.

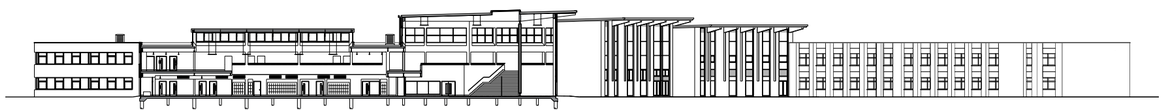
As the largest employer in Wisbech and the daily home of 1,300 pupils, the continued success of this community amenity is of vital importance to the town. The significant increase in the number of 16+ students staying on to study A-Levels is an indicator of the positive influence the new school has already had on the local population.

THOMAS CLARKSON ACADEMY

4,5 The central Eden Space is large enough to accommodate a full capacity of 1,500 pupils and has one of the tallest climbing walls in East Anglia.
6 Contextual section through the Eden Space and Mandela learning community.

4

5



6

Spiral concept

In plan form, the spiral concept of the school can be easily identified. Echoing the Fibonacci sequence found throughout nature, the spiral suits the practicality of the site itself as well as the educational model of choice, where separate learning communities are accessed off a central, multi-use space.

The concept is also manifested in the green wall in the main Eden Space, where the planting has been arranged to follow the spiral sequence; a Begonia is planted at the centre of this pattern, chosen because its leaves naturally display the Fibonacci shape as they grow.

Eden Space

Eden is the primary circulation space and forms the heart of the school, with all facilities leading off it – the administration, library and reception facilities in a refurbished block to the east, the three learning community fingers to the north, and the sports hall, theatre, dining room and community entrance to the west.

This central area is deliberately flexible. Large enough to accommodate a full capacity of 1,500 pupils for assemblies and large-scale events, the space can also be broken down into smaller configurations for group teaching and has been named 'Little Eden' by the school. At three storeys high, the dramatic space draws the eye upwards – encouraging the pupils to raise their aspirations and aim high! It also contains one of the tallest climbing walls in East Anglia.

Context

The materials and style of the academy are very much from, and of, the Fens. Horizontal brick banding on the exterior elevations of the learning communities references the surrounding flat arable farmland; while vertical coloured stripes separate the full-height strip windows of the Eden Space and provide a visual link to the rows of Poplar trees that act as wind breaks across the Fenland landscape.

Energy efficiency

Sustainability measures have been integrated throughout the school and are being used as learning resources

7 View through the Eden Space showing the sixth form break-out space on the left. **8** The green wall has become a key feature and a gathering point for pupils. **9,10** Each learning community is identified by a colour and an inspirational figure.

7

in their own right. The use of cross-laminated timber has resulted in negative CO_2 emissions from the structural materials due to the sequestration of carbon in construction; this has significantly reduced the carbon footprint of the building, saving the equivalent of 2,000 tons of CO_2 compared to steel and concrete – equating to around 8 million car miles. Some of the cross-laminated timber has been left exposed to allow teachers to illustrate this concept to pupils.

In addition, Eden's green wall not only cleans the air but also demonstrates the principles of a soil-less hydroponics system for growing plants, while a biomass

8

9

10

boiler located in the school's energy centre can be a learning tool to explain less carbon-intensive heating systems.

Colour

The academy's colours – green, yellow and blue, representing the trees, corn and sky of the Fens – are used to brand and unify the school both inside and out. Stripes in these shades are a prominent feature of the front of the school, adding colour to the external facades of the theatre and the Eden Space.

Internally, each of the three learning communities is associated with one of these colours and an inspirational person; green is Nelson Mandela, yellow is Emmeline Pankhurst and blue is Martin Luther King. Within each learning community, large coloured posters of these leading figures, designed by the project architect Greg Willis, are defining features of the communal spaces. Each image incorporates the names of every person who worked on the design and construction of the school, ranging from the BSF officials to the construction team, as well as all the inaugural students and teachers.

The colour theme continues through to the lockers, toilet cubicle doors, chairs and carpets – even the pupil's ties, which correspond with the learning community to which they belong.

1

THE AMENITIES BUILDING

We have been appointed to deliver our second project at the University of Nottingham's Sutton Bonington campus, having successfully completed the Gateway Building in 2011.

Comprising a dining room, bar, common room, graduate centre, faith room, student guild services and a broad range of additional facilities, the Amenities Building is located in a prime position at the heart of the campus and will form an important central focal point where all campus residents can meet and socialise.

Masterplan

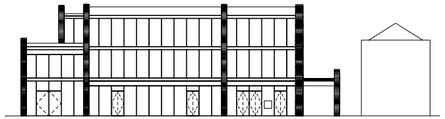
The new building has been developed in response to the original Sutton Bonington masterplan, drawn up by Make in 2008. A key concept for the campus redevelopment is improved legibility through the creation of a central pedestrianised area known as the Boulevard.

The area surrounding this route is currently fragmented by car parking and movement along it obstructed by two buildings – the Rushcliffe Restaurant and the Students' Union. These structures and the existing Amenities Building will be demolished and replaced by the new building, which amalgamates all the facilities under one roof.

Concept

The new three-storey building has a simple configuration, with clearly defined entrances and generous public spaces arranged around a spacious, open concourse which directly links to the Boulevard, helping to unify and integrate the campus. Orientated to encourage legibility and pedestrian flow and maximise views of the surrounding landscape, the design establishes a strong connection between the building and its environment, in particular Lime Avenue, which was planted to commemorate those lost in the First World War.

A high degree of flexibility has been incorporated into the design to accommodate potential occupancy changes during the life of the building, as well as embodying the university's long-term commitment to environmental sustainability.



2

1 Illustrative view of the main entrance, bar and dining hall from the Boulevard. **2** North elevation.

3

4

Materials

A simple palette of natural materials has been chosen, allowing the new building to complement and enhance the aesthetic of the surrounding green landscape while creating a distinctive, contemporary appearance.

The defining materials are brick and timber, which blend in with the style of the nearby campus buildings and the wider locality. These materials are carefully arranged to enhance the quality of light and optimise the building's environmental performance, helping to deliver an integrated sustainability strategy.

Dining Hall

Located on the first floor, the dining hall is the most dramatic space within the building and will serve up to 500 campus residents per sitting. It can also be used to hold events such as formal dinners and conferences.

The generously proportioned room offers a contemporary interpretation of the Medieval Great Hall. The double-height space creates an open, airy environment, with ample natural light drawn in through a top-lit timber roof structure and a north-facing 'great window', which establishes a visual connection with the Boulevard. Wood panelling is used to line the walls, providing a warm, robust finish.

5

Concourse

The concourse is conceived as a continuation of the Boulevard and functions as the primary circulation space, while becoming an informal meeting and social area in its own right. It provides a double-height connection between the bar and the dining hall, with glazed openings along the eastern facade offering fantastic views of the Boulevard and Lime Avenue.

Bar

This flexible, multi-functional space forms the social focus of the building. Located on the ground floor, it opens on to an outdoor space, offering opportunities for outdoor seating beneath the over-sailing dining hall located above.

Entered via the concourse and separated from the building's quieter functions, the bar can accommodate a range of uses and can be flexibly arranged to hold social events such as gigs, club nights, parties and screenings.

3 Illustrative view of the concourse with staircase to the dining hall. **4** View of the bar and the dining hall's 'great window'. **5** Study model of the wall construction. **6** East elevation of the concourse.

6

1

1 Illustrative view of the main facade and external courtyard space. **2** South massing elevation.

THE BRIDGE CENTRE

As a result of our involvement with the property industry charity LandAid, we were approached to provide pro-bono design services for this purpose-built youth, sport and community centre in North Devon.

Outline planning permission has been submitted for the scheme, as part of a wider application put forward by developer Redrow Homes for a new housing development with a community benefit. The Bridge Centre will offer exemplar facilities for the local Bideford community and the wider North Devon region, as well as generating new employment opportunities.

Wings South West

The project is being facilitated and run by Wings South West, a local charity which works with marginalised young people in North Devon – one of the most deprived rural areas in the UK – by providing a range of activities and training opportunities. Wings employs 12 staff and has more than 60 volunteers who operate from two centres in Bideford.

The centre

The multi-purpose centre will offer a wide range of sports and community activities in a modern, high-quality building which has been designed in accordance with Sport England guidelines. Facilities include a large sports hall, a performance space, a church, a fitness, dance and martial arts studio, general offices and meeting rooms, a shop and a bistro, and ancillary facilities. Approximately 150 car parking spaces will also be provided.

The two-storey building is divided into two main wings – one comprising the sports hall and the other the performance space and church. This configuration will accommodate a phased build schedule by allowing each section to operate independently during construction, if required.

A long atrium runs between these large spaces and forms the heart of the building. Visibility in this central area is maximised with the inclusion of voids in the atrium, which draw natural light in through a series of rooflights. The space comprises changing facilities, services and a climbing wall which rises up through one of the atrium voids to the first floor.

The atrium, primary stairs and rooflights are designed using the principles of wing kinematics, forming a pattern which visually emulates the wings of a bird in flight – and takes inspiration from the name of the Wings charity.

Context

Careful consideration has been given to the positioning, massing and orientation of the centre due to its residential context and close proximity to an extra care facility, which also forms part of the planning submission. The Bridge Centre is rotated to address this facility, with a landscaped buffer zone proposed between the two buildings to provide a communal area which encourages interaction and the sharing of resources.

The building is aligned north–south to maximise natural light and angled to create positive spaces around the narrow perimeter by reducing shadows and dead spaces. The bistro and shop provide an active facade next to the main entrance, which leads on to an outdoor courtyard space.

2

1

THE HERITAGE OF WESTMINSTER

Designing in the City of Westminster
Professor Robert Tavernor

'The City of Westminster is exceptionally rich in historic architecture and enjoys the breadth and space that its urban twin, the City of London, has lacked.

Designing in Westminster presents a particular challenge; how is the mix of political and social aspirations that define its uniqueness to be represented? This debate raged in the nineteenth century with the so-called "battle of the styles", which saw government buildings in Whitehall dressed as Renaissance and Baroque palaces: the Palace of Westminster famously has a sober classical form with extravagant gothic detailing that complements the adjacent medieval Great Hall and the skyline of Westminster Abbey. The more recent MPs offices at Portcullis House (Hopkins Architects) and the modern take on mansion block typology at One Hyde Park (Rogers Stirk Harbour + Partners) demonstrate that architectural quality and vitality – as well as controversy – remains a constant in Westminster.

So, how to design appropriately in such an exceptionally demanding urban context? Responses to this question will vary considerably between those who seek to invest in Westminster's urban fabric, and those whose role is to safeguard its character. This is not an arena for compromise; the higher the status of the context, the greater the potential for a clash of professional opinions. Westminster attracts world-class investors and attendant design and planning teams, who are balanced by leading local political figures and experienced planning officers. Inevitably, the process that leads to a planning decision is often complex, protracted and frustrating. Successful outcomes require patience and a willingness and ability from both parties to negotiate.

1 (previous page) Aerial view of Westminster showing the locations of Make's three schemes: (a) Artillery Row (b) 48 Leicester Square (c) St James's Market.

The three recent projects by Make that are featured here illustrate design responses to both the general and specific urban contexts of Westminster. The first two, in St James's Market and Leicester Square, relate buildings to public space in the West End. The third on Artillery Row reinforces – and effectively reinstates – the corner of a prominent urban block in Victoria. Each project required the architects to understand the qualities and character of the place; rather than imposing a single design approach, Make has responded specifically with sensitivity and – as much as the historic contexts permitted – with panache.

48 Leicester Square, previously known as Fanum House and the headquarters of the Automobile Association, is strongly associated with the "modernisation" of Leicester Square in the 1920s, when cinemas replaced theatres. The existing building is not listed and is not distinguished architecturally; its character is compromised by poor overall proportions, a relatively squat middle section and a visually cluttered, top-heavy asymmetrical roof which dominates its form.

Nonetheless, the architectural detail of the base and the giant order is well considered. The combination of the principal Portland stone rhythm of columns and pilasters, and the striated stone base with wide openings, creates a visually powerful container for the building. The visual weight of the body on its base is relieved by the glass and bronze work that provides a secondary level of visual interest in relation to the primary frame.

Make considered a range of building options for 48 Leicester Square, including early proposals for an entirely new building which would relate to the W Hotel to its north and establish a strong "modern" edge to the west side of the square. However, following initial consultation with Westminster's planning officers, it was decided that the existing building had external architectural elements worthy of retention.

This led the team to find ways of retaining those parts of the facade – its principal masonry frame as high as the cornice to the giant order – and renewing the glazing and bronze-coloured metalwork that weaves in-between it. The architects found that by adding a cornice above the attic windows, so that they become a classical "frieze" sandwiched between an existing lower and new upper cornice, the proportions of the middle section of the building would be positively transformed.

Several different roof forms were considered that would complement the proportions of the enhanced base and simplify its silhouette. The decision was made early on to select a bronze coloration that would relate to the bronze work of the main body of the buildings and bring it through the stonework frame to a formal resolution at the building's top.

The proposed roof will become a significant part of the new composition, and while very contemporary in conception and character, it derives from a long and distinguished tradition of Western architectural and urban design: the roof of the Basilica in Vicenza, Italy, was an interesting precedent, with its copper-clad roof providing a strong visual focus, as were exemplars local to Westminster, including the Western Pumping Station at Grosvenor Dock.

Thus, the roof is made up from four curving mansard-like components set parallel to each face of the building and rising from the datum set by the attic storey frieze and new pronounced cornice that surmounts it. The plan of the existing building is not strictly orthogonal and has corners with quite different angles at its southern end. The architects have skilfully overcome the asymmetrical geometry of the plan with a roof that appears simply resolved. It will have large parallel-set corner ridges that rise from the chamfered corners of the existing building and new corner clocks, to a horizontal summit.

The metal framework of "blades" that forms the proposed roof will appear solid from some viewing locations at ground level, where they will appear to overlap one another, and more open from other angles revealing the glazing between them. It will not read as a heavy form, but lattice-like – in some ways similar to the great plant houses of Kew Gardens.

However, and importantly for the specific character of the Leicester Square Conservation Area, the roof of No. 48 has grown out of the retained and enhanced architecture that supports it below, as well as the functional needs of a twenty-first-century commercial building. This will be a compelling architectural synthesis that enhances the architectural and urban reputation of Leicester Square. It will become urbanistically and visually a significant part of the evolving rich urban character of Westminster.'

Biography
Robert Tavernor is Emeritus Professor of Architecture and Urban Design at the London School of Economics, and Principal of the Tavernor Consultancy which provides London-based townscape and heritage advice. He acted as heritage consultant on the 48 Leicester Square scheme.

www.tavernorconsultancy.co.uk

1

2

1 Illustrative view of the refurbished building from Leicester Square. **2** Outline of the Leicester Square Conservation Area with the site marked in red.

48 LEICESTER SQUARE

Occupying a prominent location on Leicester Square, this distinctive nine-storey 1920s block comprises offices on the upper levels and food and drink outlets on the ground floor. Our redevelopment scheme has been granted planning permission and will restore this familiar historic landmark, unlocking its potential and giving it a new lease of life. The refurbished building will create a striking new backdrop to London's most celebrated square and further enhance its appeal as a world-class destination.

Regeneration

Leicester Square and its immediate surroundings have recently undergone a significant upgrade, with improved public realm and the restoration of several historic buildings on Regent Street and Piccadilly Circus.

The rejuvenation of 48 Leicester Square builds on this regeneration process. Forming part of the Leicester Square Conservation Area, the building is the only stand-alone block on the square and frames its entire western side. Although the facade has many fine features, it is severely compromised and badly in need of repair.

We aim to deliver a building of exemplary quality that responds positively to the vibrancy of this busy cinema and entertainment destination, while preserving the historic character of the area.

Architectural style

The existing architectural expression of the building is relatively consistent on all elevations, with three parts to each one; a base, a middle and a top. The redeveloped building will maintain this relationship with the use of restrained but modern architectural language and traditional, high-quality materials that are sympathetic to the original design.

The material palette for the redevelopment respects the original choices and works in harmony with them, utilising the Portland stone and bronze-coloured metalwork typical of many historic buildings in Westminster.

3

Refurbishment

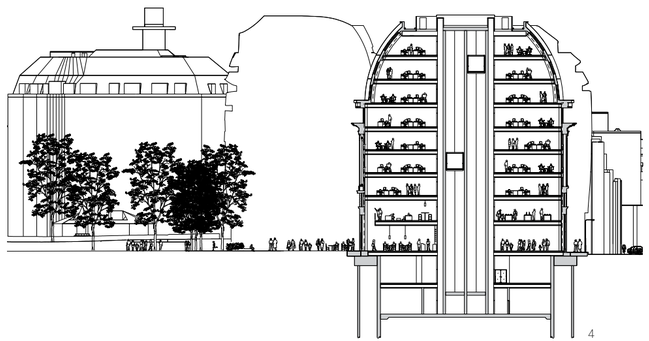
Our design makes the best of the existing property by retaining the historic facades up to the upper cornice line on all four sides of the block, and sensitively restoring them to respect the integrity of the original architectural features and details.

Seven floors of office accommodation will be upgraded to comply with modern standards and a new office entrance carefully inserted on Whitcomb Street which integrates with the period facade and ground floor elevation. The existing attic storeys and roof are to be substituted with a contemporary mansard, and all floorplates and the basement structure will be replaced behind the retained facade.

The ground floor will be restored and reconfigured to accommodate high-end retail provision and premium outdoor dining space that positively engages with the currently under-utilised streetscape.

Curved mansard

An elegant new roof will enclose the building's attic storey, offering a modern interpretation of the traditional London mansard style, where arch geometry sits on top of a classical base. This respectful contemporary addition to the building composition reduces the existing top-heavy visual mass, while still sitting below the viewing corridor limit.



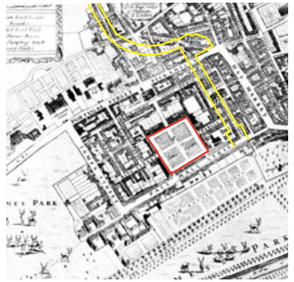
4

5

6

3 Illustrative view of the new office entrance on the corner of Whitcomb Street and Panton Street. **4** Proposed section. **5** Illustrative view of the proposed scheme across Swiss Court. **6** View of the existing building across Swiss Court.

1



2

1 Illustrative view of the two blocks surrounding the public realm. **2** Map of St James's, 1681, with site outlined in red and Regent Street outlined in yellow.

ST JAMES'S MARKET

Make has been commissioned to redevelop two key blocks in the heart of London's West End, as part of The Crown Estate's £500-million ten-year investment programme to revitalise the St James's area. The flagship St James's Market scheme is located to the south of Piccadilly Circus between Haymarket and Lower Regent Street, and represents the first phase of the development.

The regeneration of St James's Market will revitalise a hidden historic site in the heart of Westminster. Our vision is to restore the area to its former glory and celebrate its identity with the creation of a vibrant new destination defined by world-class architecture and high-quality public realm.

Site

The development site lies south of Piccadilly Circus and is bounded by Jermyn Street to the north, Haymarket to the east and Regent Street to the west. It is divided into two blocks – the Haymarket block and the Regent Street block.

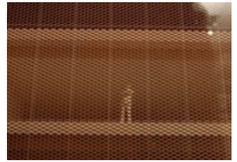
As the name suggests, St James's Market was originally a provisions market serving local residents. However, the area has been somewhat forgotten following the construction of Regent Street in the 1820s; despite its rich cultural and built heritage and close proximity to many of the capital's famous landmarks, St James's Market has become isolated and does not have a strong identity. In addition, the recent rejuvenation of Regent Street has not reached the area, making it out of keeping with its surroundings.

Public realm

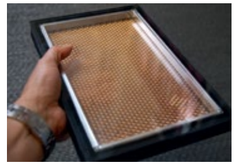
The new and existing buildings will be harmoniously amalgamated with distinctive new public realm. The character and quality of the area will be enriched with the provision of an attractive new pedestrian square, which will become a defining feature of St James's Market, drawing people into the heart of the site.

Much of the newly configured site will be traffic-free; four back streets on the eastern fringe of St James's will be pedestrianised and transformed into lively

3



4



5

6

thoroughfares which improve connectivity with the wider urban context, in particular the Grade I listed Royal Opera Arcade. St James's Market's position as an eclectic and lively shopping and dining destination will be reinstated.

Buildings

While very different from one another, the two buildings are presented as a complementary pair addressing the new public square. The original facade of the Regent Street office block will be retained and the building reconfigured with new internal floorplates; the block facing Haymarket is to be replaced with a contemporary office and retail building which sensitively echoes the quality, scale and materials of the St James's Conservation Area. With a target of BREEAM Excellent, the sustainability credentials of both buildings will be significantly enhanced.

The Regent Street block gives the impression of permanence and solidity, derived from its retained facade. A glass 'fin' wall with integrated metal mesh

3 Illustrative view from the new public space. **4** Model showing detail of the fin wall. **5** Sample of copper-expanded metal mesh. **6** Regent Street building elevation. **7** Verified view looking down Haymarket. **8** Haymarket building elevation.

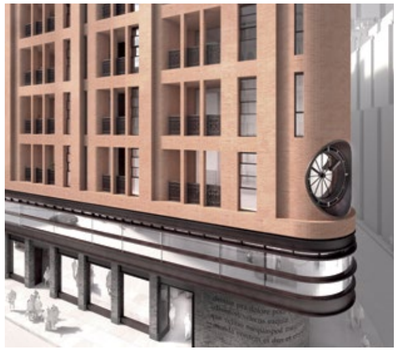
7

shading separates this original facade from a new rear elevation and has a highly reflective glazed surface which mirrors the period detail. The mesh within the fin adopts the same colour as the metalwork on both blocks.

The new Haymarket block has a lighter, more contemporary style than the Regent Street block, with a mixture of solid and curved stone expressed as a delicate veneer. The building's organic geometry provides an interesting counterpoint to the weighty, rectilinear form of its neighbour.

8

1



2

3

1 Illustrative view looking south along Artillery Row. **2** Detail of the Artillery Row facade revealing its set-back loggias and metal-clad first floor winter garden level.
3 Site plan.

ARTILLERY ROW

Make's competition-winning design proposes the refurbishment and extension of an existing 1980s office building in London's Victoria to provide eight floors of private residential accommodation, plus ground floor retail space. A total of 22 new apartments will be created by retaining and reconfiguring part of the original building fabric and adding three new floors and a setback penthouse level.

Our highly sustainable design strips the existing building back to its primary structure and replaces the facade and mansard roof with a robust, simple form that ties in sensitively with the local context. The proportions, details and materials directly reference the Victorian warehouses of the nearby Westminster Cathedral Conservation Area.

The ground floor will be opened up with active retail frontage which reinstates the building's commercial character. The historic curved corner form, abandoned with the 1980s development, will be reintroduced to emphasise the junction of Artillery Row and Howick Place. A new civic clock has been redesigned to form a corner feature.

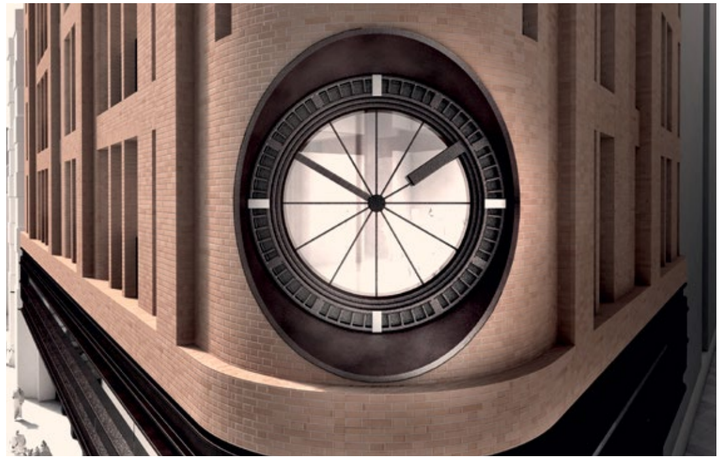
Context

Located within a pocket of post-war development, the site comprises a diverse and varied range of architectural styles. There are two Conservation Areas situated adjacent to the building and two Grade II listed structures directly opposite it.

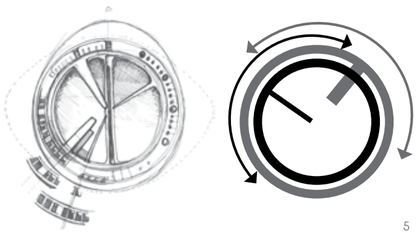
Geographically this prime corner site enjoys one of the most enviable locations in London, in close proximity to St James's Park and Buckingham Palace. Artillery Row is directly connected to Victoria Street, which is currently undergoing major regeneration. An adjacent development site along Howick Place is also nearing completion and will increase the high-quality residential and office accommodation on offer.

Refurbishment

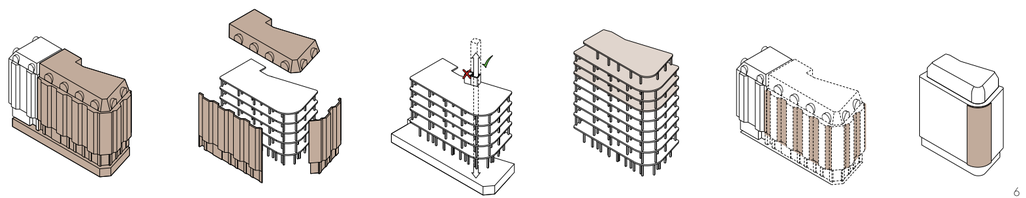
The building's existing structural frame and basement will be retained and a new, highly insulated facade



4



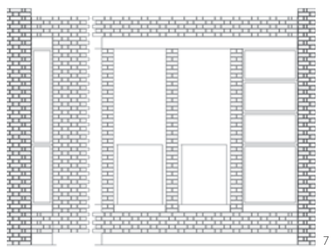
5



6

4 Detail of the new clock with its face acting as a window to the second floor apartment. **5** Study drawings of the new clock. **6** Proposed construction sequence illustrating the re-use of the existing structure.

7 Flemish bond brickwork setting-out study. **8** A Victorian warehouse in the neighbouring Westminster Cathedral Conservation Area. **9** Cast metalwork along Francis Street. **10** Proposed brick-lined apartment loggia.



7

installed. The lead mansard and dormer windows will be removed and replaced with a simple curved roof form which takes inspiration from the robust nature of the neighbouring warehouses and the steep slate roofs of Artillery Row. Levels 1 to 7 will be full floors comprising residential accommodation.

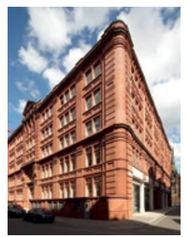
Details and materials have been introduced which draw from the fine examples of historic buildings within the Conservation Areas; complementing the masonry work of its neighbours, the form and articulation of the red and grey brick facade is used to express the structural frame and ordering of the elevation. This brickwork is accentuated by ornate, cast metal detailing inspired by the decorative floral patterns found in the existing urban fabric.

New clock

The current clock is a key feature of the building but its position on the fifth floor, and its relatively small diameter, makes it difficult to see from street level. We have designed an elegant, contemporary replacement with a larger face, which will be installed on the corner of the second floor and recessed into the brickwork to increase its perceived size and express the depth of the facade.

Hour and minute hands are attached to concentric metal rings which rotate around the clock face. Formed from glass, the face becomes a unique feature by doubling up as a window which connects through to the living room of the apartment behind.

8



9

10


1

香港

HONG KONG

2

1 (previous page) Hong Kong skyline with views of the harbour and Kowloon. **2** View of the West Kowloon Cultural District with the International Commerce Centre building to the right. **3** Hong Kong harbour sunset.

John Puttick, leader of Make's Beijing studio, comments on the recent development of arts and culture in Hong Kong.

'Make's first art gallery – and first completed scheme in Hong Kong – is one of a number of exciting new exhibition spaces to open in the city. The former industrial district of Chai Wan, located on the eastern side of Hong Kong island, is now home to an eclectic range of galleries, design studios and cultural venues which have sprung up in disused factory buildings, and the area is rapidly becoming a key part of the city's arts scene.

This change is indicative of a significant trend which is transforming Hong Kong from a shopping and sightseeing destination into an important international platform for contemporary arts. With a plethora of new arts centres and venues opening, the city is set to become a major cultural metropolis. Several leading European galleries have recently established a presence in the city, notably White Cube Asia which opened in March this year. The number of large-scale arts events is also on the rise; this year's Hong Kong Art Fair attracted more than 63,000 visitors and the inaugural Hong Kong Affordable Art Fair will take place in 2013.

There is also a growing emphasis on conserving and retrofitting Hong Kong's historic and industrial buildings and converting them into cultural centres. Herzog & de Meuron's scheme to refurbish the disused Central Police Station – one of Hong Kong's most well-known colonial-era buildings – into a new contemporary art museum and performing arts centre is just one example.

3

Of course the most significant contribution towards the city's transformation into an international cultural destination is the forthcoming West Kowloon Cultural District development – one of the largest arts and cultural projects in the world. Make is very excited to be part of a multi-disciplinary team, headed by James Corner Field Operations, which has been shortlisted to submit proposals for one of the 17 new venues – the Freespace – which is an outdoor theatre, performance and live music venue. The masterplan will be located on 40 hectares of landscaped public space on the Kowloon waterfront.

This ambitious development will allow Hong Kong to take centre stage as a world-class cultural quarter showcasing the local arts scene, as well as international events, exhibitions and performances. It is going to be a fascinating period of transformation for the city!'

4

4 Former Central Police Station, one of Hong Kong's iconic colonial buildings.

John Puttick, 作为Make北京工作室负责人，对于香港的文化艺术发展有以下体会。

Make的第一个完成的画廊，同时也是在香港第一个完成项目，是这座城市的令人激动的新兴的展览空间之一。现场位于香港岛的东部，曾是柴湾的工业用地，现已成为画廊,设计工作室及文化场馆纷涌聚集的家园，它们在这块废弃工业用地上春笋般的生长，使得这块区域很快成为香港艺术领地的焦点。

这种变化显示香港正从一个购物观光型城市转变为当代艺术国际平台的趋势。随着一系列艺术中心及文化场所的开放，一个文化大都市的气质正逐渐丰富和充实。近来许多欧洲著名的画廊均在这座城市设立了办事机构，尤其是白立方画廊亚洲分支已于今年三月份开放。大型艺术类活动的数量也在日益增加，今年的香港艺术博览会吸引了超过63,000人次，首届香港‘买得起的艺术节’也将于2013年开幕。

对历史及工业建筑 进行保护改造，将其转化为文化中心，在香港正在得到越来越多的重视。Herzog 和 De Meuron将香港废弃的中央警署（香港最为知名的殖民时代建筑之一）改造为当代艺术博物馆及艺术表演中心的设计正是其中一例。

当然在城市转型中最突出的应是即将进行的西九龙文化区域的开发-全世界最大的艺术文化项目之一。Make也非常荣幸的参与由James Corner Field Operations领导的多专业的团队，已被提名参与17个新场地中的一处场地设计——自由空间——一个集户外剧场、表演及现场音乐于一体的场所。基地是位于西九龙海边，一处有40公顷大的公共开放景观空间。

这个雄心勃勃的发展，将使香港在世界文化版图上移植舞台中心，向世界展示当地艺术，以及国际性的艺术事件、展览、演出。一个令人兴奋的转变阶段将在这座城市上演！

1 Aerial view of Kowloon showing the Argyle Street tower under construction.

We are working with Swire Properties on the final construction stages of a high-end 23-storey residential tower with a unique design in a luxury residential district of Kowloon. It is now in the final construction stages and due for completion in April 2014.

项目位于香港九龙的傳統高尚住宅區，是太古地产發展的为一栋23层高的高端住宅，该设计独特新颖。现在已处于施工的最后阶段，该建筑将于2014年4月完成。

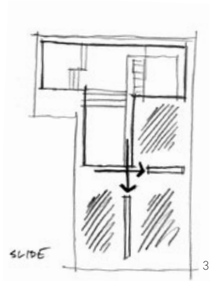
亚皆老街

ARGYLE STREET

1

2

1 Entrance to the gallery showing the sliding panel. **2** The new insertion has creates a series of rooms. **3** The flexible gallery space is able to display a variety of art works and exhibitions.



3

This multi-function art gallery opened in May in a former industrial warehouse in Hong Kong. Once home to a toy factory, the building has been refurbished and transformed into a dynamic exhibition space for renowned British art curator Karen Smith. The gallery, located in Chai Wan, is currently being operated by Beijing-based art organisation Platform China.

Joinery insertion

To maximise and rationalise the empty warehouse space, we devised the concept of inserting a new structure into the existing stripped-back concrete shell. Rather than dividing the space into a series of rooms, it is organised by a single, continuous piece of joinery which fits the gallery's functions together like parts of a puzzle and splits the space up into several smaller, interconnected areas.

Visitors enter a low space and progress towards a larger, double-height area as they move through the gallery, culminating in a spectacular view overlooking Hong Kong harbour. The original windows have been replaced and enlarged in order to highlight the impressive vista and draw more natural light in. The floor and walls of the supporting spaces are lined with bamboo – a material with warm, rich tones, a natural finish and exceptional sustainability credentials.

Flexible configuration

The joinery insertion has been configured to accommodate several existing concrete ceiling beams; these have been used to hang sliding panels which can be drawn across the gallery to sub-divide it. By adjusting the position of the panels, the space can be adapted and a variety of configurations created to allow a range of exhibitions, installations and events.

Platform China

Platform China was established in Beijing in 2005 with the aim of promoting and exhibiting emerging contemporary Chinese artists. With two gallery spaces in Beijing's 798 Art District and five international residency studios, the multi-disciplinary organisation encompasses visual art, architecture, performance, film and installation and provides a platform for cultural exchange and dialogue between Chinese and international artists. This is their first gallery to open in Hong Kong.

www.platformchina.org

柴湾画廊

CHAI WAN GALLERY

4 Contemporary art exhibition.
5 Main gallery space with views of the harbour.

这个多功能艺术画廊已于五月份开幕，其前身为位于柴湾的一个工业仓库。旧日的玩具厂房，经过设计翻新，转变成了活力四射的展览空间。它现属于著名艺术策展人凯伦·史密斯(Karen Smith)，并由北京的艺术组织站台-中国 (Platform China) 管理。

精细组件的嵌入
我们在现有的裸露混凝土外壳中置入新的结构，使仓库空间最大化和最合理化。画廊空间没有被简单分割成一系列的房间，而是由单独的连贯空间将不同功能组织起来，形成若干如拼图般精细而又互相关联的区域。

步入画廊，参观者从低矮空间被引向一个宽阔的双层通高空间，进而到达俯瞰香港海港的终点。原有窗户被更换、扩宽， 意在延展视野和引入更多自然光。附属空间的墙地面均使用竹材 - 一种温暖，质感丰富而自然，且公认为极其环保的材料。

灵活的配置
嵌入的连接体结合了天花上的原有混凝土梁，这些梁用来悬挂活动墙以分隔画廊空间。通过调整活动墙的位置，可营造多样布局创造不同的形态，容纳各种展览、装置艺术及活动。

柴湾
近年来,柴湾已成为一个创意中心,是香港的文化景观中的关键部分。此块位于香港岛东侧的前工业区，现已成为各种设计工作室，艺术画廊，餐饮和店铺的家园，它们如雨后春笋般涌现在这里的旧工厂，享用着老厂房宽敞的空间和壮观的海景。

站台中国
站台中国于2005年在北京成立，致力于中国当代艺术的推广和发展。站台中国拥有两家在北京798艺术区的画廊，五所国际艺术家工作室，涵盖了视觉艺术，建筑，行为艺术，电影和装置艺术等多种艺术形式，同时为中国和国际艺术家的文化交流提供了平台。这是他们在香港开设的第一家画廊

www.platformchina.org

4

5

MAIN LAND

CHINA

中国内陆

1 View from the mainland looking towards the island and pavilion. **2** Cross-section through the pavilion.

威海馆

WEIHAI PAVILION

Weihai Pavilion is our first project to be completed in China. Located on an island of reclaimed land on the coast of the Shandong Peninsula in northern China, the distinctive building houses a hospitality suite, information centre and exhibition space for a major residential development currently under construction in Weihai.

Curved form

The elegant crescent form is designed to respond to, and engage with, the city and the seascape. The single-storey structure is divided into two spaces, separated by a curved spine wall. The primary entrance is located in the inner concave facade, which faces inland and reflects the city behind it.

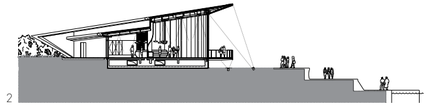
The main space is enclosed within the building's outer convex curve, which overlooks the ocean; incorporating an exhibition area, bar, small cinema and meeting spaces, the fully glazed elevation to the south-east benefits from panoramic views of the sea.

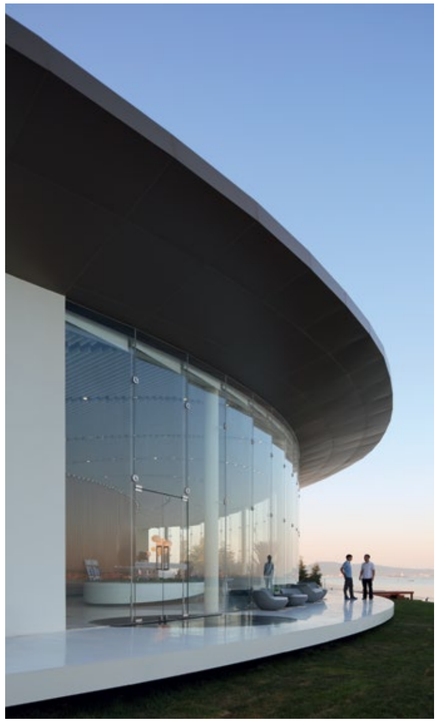
A continuous terrace wraps around the exterior, with an over-sailing standing seam aluminium roof providing shaded coverage and giving the pavilion its striking form.

Environmental design

All materials used in the construction of the pavilion were sourced locally. Bamboo vertically lines the interior curved wall and was chosen for its warm, natural appearance as well as its qualities as a highly renewable, self-sustaining material.

The building can be mechanically or naturally ventilated. Mechanical ventilation is provided via an efficient displacement system, in which air is introduced through the ground floor slab via a buried concrete plenum; the cooler air rises in the space as it warms naturally. In winter the under-floor heating provides a warm zone at the bottom of the space, so that the air closest to the occupants is heated. The thermal mass of the concrete floor slab and frame also assists in moderating the temperature of the pavilion throughout the day.





3

威海馆是我们在中国的第一个竣工项目。这座独特建筑位于中国北部山东半岛沿岸的一座填海小岛，它给人以开放好客的印象，包含了接待、信息中心和展览空间，服务于正在施工中的一个大型住宅区.

弧线形式

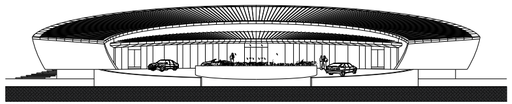
优雅的弦月形状是对城市及海边环境的呼应及契合.建筑分为两个主要空间，通过一个弧线型承重墙将其分隔开。主入口位于弧面内侧，面向陆地并反射位于后面的城市.

朝向大海的外侧弧面包含着建筑的主要空间。面向东南方向的整体玻璃立面容纳了展览、吧台、放映室及会议空间，透过它能遍览大海全景。连续的露台环绕建筑外部，结合风帆样式的铝制遮阳屋顶，为威海馆提供了独具一格的外形。

生态设计

建筑中的所有材料均来自当地。我们将竹子运用于室内弧形墙面以强调竖向线条，也是因其具有天然的质感，暖色的基调和可再生性、环保性.

该建筑允许机械通风或者自然通风。机械通风是一个高效的转换系统，空气通过预埋的混凝土气室经过地板进入室内，在室内被加热而上升。在冬季地热系统可在底部产生一个温暖区域，为使用者提供适宜空间。混凝土楼板及框架的隔热性也对温度变化起着一定的缓和作用。



4

5

3 External terrace area.
4 Front elevation (convexed) and rear elevation (concaved).
5 Aerial view of the pavilion looking south-east.

6

7

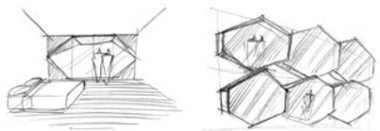
6 Internal view of the main space. 7 External view of the primary entrance.

1

1 Illustrative view of the window modules angled to reduce solar gain. **2** View of hotel tower contrasting with the adjacent theatre. **3** Sketch studies of the window modules forming 'eyes' from each hotel room.

2

Make was commissioned to design the facade for this new six-star hotel, located in an attractive riverside setting in Wuhan – the most populous city in central China. The 30-storey hotel is under construction and sits immediately adjacent to a distinctive new theatre by Stufish Entertainment Architects, designed to resemble a traditional Chinese lantern. These starkly contrasting buildings will be seen together in views across the river; we chose to highlight the visual difference between the two structures with a facade design that offers a cool counterpoint to its vibrant neighbour.



3

The tower is characterised by a series of hexagonal modules which create the effect of 'eyes' looking out on to the city from each hotel room. Each of the 902 modules is formed from highly reflective aluminium and angled out from the facade to create a dynamic texture on the surface of the building and shade the glass from the sun. Integrated lighting is designed to emphasise this striking textured effect at night-time. Silver aluminium cladding panels are arranged between the modules to provide areas of highly insulated facade.

The regular geometry of the facade design is broken up at the base and top of the tower, where the proportions of the cladding modules subtly change. At the lower floors the modules open up to create larger areas of glazing suitable for retail use; at the upper floors they become vertically elongated to form the points of a 'crown' which surrounds the roof, making a dramatic impact on the city's skyline – especially when lit at night.

Make受委托设计一栋新建六星级酒店的外立面。该酒店位于中国中部人口最密集的武汉市的东湖岸边。目前这座三十层高的酒店正在施工中，紧邻一座象征中国传统灯笼形态的剧院。在东湖对面可看到这两座个性鲜明的建筑。我们通过立面设计强调这两座建筑的视觉差别，以对比突显两者间活跃的律动.

一系列的六边形“眼睛”模数赋予塔楼个性，使每一间酒店客房都有通过“眼睛”鸟瞰城市的独特视角。902个模数单元由反光度较高的铝板维合，且以一定的角度倾出立面，在构成整个幕墙肌理的同时，也为每个房间提供遮阳效果。结合照明设计，这种肌理在夜晚被加强。模数之间的幕墙采用具有高度隔温绝缘的银色铝板。

在塔楼的顶端及底部，立面的规则几何形式被打破，其模数比例也发生了细微的变化。底层的模块扩张，提供更大面积的玻璃区域于商业；顶部竖向伸展形成‘皇冠’环绕在塔顶，在夜色照明中，为城市天际线平添了几分戏剧色彩。

万达东湖酒店立面

WANDA DONGHU HOTEL FACADE

1,2 Illustrative views of Chengdu Hotel (1) and Pinnacle One (2).
3,4 Construction photographs of Chengdu Hotel and Pinnacle One.

1

2

Construction is under way on our two schemes in Chengdu, which form part of a larger masterplan to regenerate the centre of the city.

The Chengdu Hotel encompasses 100 hotel rooms and 42 serviced apartments and is targeted for completion in the spring of 2014. We have recently been commissioned to convert two historic courtyard buildings close to the hotel site into a luxury spa, which will be available to visitors to the new development as well as hotel guests.

Pinnacle One is a 47-storey international Grade A office tower located in close proximity to the Chengdu Hotel which will also be completed in early 2014.

作为城市中心再生规划的一部分，我们位于成都的两个项目均在施工中。

47层高的睿东中心，是一座国际A级写字楼。该项目预计将于2014年初完成。与其相邻的酒店，包含100间客房和42间服务式公寓，也将于不久开放。

我们当前受委托将酒店附近的两座保护古庭院改造为水疗中心，将来不仅服务于酒店宾客，也可作为一处参观景点对外开放。

成都酒店和睿东中心

CHENGDU HOTEL & PINNACLE ONE

3

4

1

MASTER PLANNING

1 (previous page) Illustrative view of the Elephant and Castle masterplan. **2** Plan of the proposed masterplan.

John Prevc, project architect for Make's Elephant and Castle masterplan, talks about the relationship between public space and buildings

'Are the spaces between buildings more important than the buildings themselves? Many who understand how successful cities work would say that they are – but only when the spaces are partnered with the buildings and have a strong dialogue with them. If we are to design socially cohesive, well-used, popular cities we need to better understand the relationship between streets and spaces, and the buildings that form their edges.

Public spaces can often feel anonymous – nothing more than connections between buildings and destinations. They should, however, be places of substance in themselves which add to the interest and excitement of city life. If designed well, they can instil a sense of ownership, pride and wellbeing, as well as promote economic growth. If designed badly, they can produce ghettoes, social tension and a community which may fail.

The role played by buildings must not be underestimated; their uses, especially at ground floor level, are critical to defining the nature of the spaces they spill on to. However the edge between inside and outside space is often where much of city life is to be found; the broader the edge, the better the relationship between the building and the public realm.

Urban edges have a number of characteristics; they have different "thicknesses" relating to their level of accessibility, both physical and visual; they can be external or internal spaces,

2

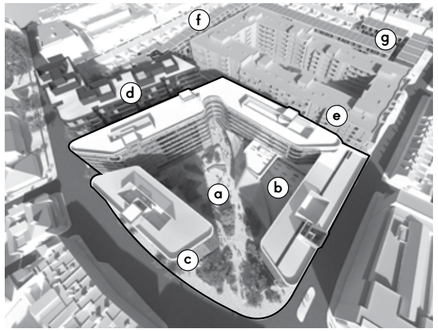
or both – such as shops, cafes and markets; their use and character can change depending on the time of day, the day of the week, the season and the weather. An appreciation of both the context and the culture of the place in which the edge exists will better ensure the success of the urban realm and the community which occupies it.'

In April we submitted an outline planning application for the 10.2 hectare Elephant and Castle redevelopment masterplan, which includes plans for up to 2,469 homes as well as shops, offices, restaurants, community facilities and a large new park.

The £1.5-billion project is part of a regeneration agreement between Lend Lease and Southwark Council to replace the Heygate housing estate, built in the 1970s. The masterplan is due for completion in 2025; if approved, the first phase is expected to commence in 2013.

ELEPHANT & CASTLE

1



2

1 Illustrative view of the Greenwich Centre and Plaza.
2 Aerial view of the masterplan showing (a) Greenwich Square Plaza (b) The Greenwich Centre (c) Block 1 (d) Block 2 (e) Block 3 (f) Block 4 (g) Block 5.

GREENWICH SQUARE

Greenwich Square sits on the vacant brownfield site of the former Greenwich District Hospital, strategically located between the Greenwich World Heritage Site and Greenwich Peninsula. The first phase of the development is currently under way, with overall completion scheduled for 2017.

Our scheme contributes towards the ongoing regeneration of the area by providing new homes, a public destination and a community hub – all seamlessly integrated with the surrounding urban grain. A new neighbourhood will be created with a strong character and identity that is fully founded in its local context.

The masterplan layout draws existing street patterns and key alignments into the site to form strong linkages and active frontages. New public space and community facilities will provide a focus for the whole of East Greenwich and become a stimulus for further regeneration of the area.

History

East Greenwich's strong identity was defined by the docks located on Greenwich Peninsula, however the area fell into decline following the closure of the industry in the late twentieth century.

In recent years, the construction of the Millennium Dome and the subsequent regeneration of the surrounding district has increased the population density of Greenwich and changed its demographic. Greenwich Square provides an opportunity to address this change by creating a vibrant new focalpoint which will unify the area.

Residential

The residential provision comprises five blocks containing a range of dwelling types and tenures, with the aim of attracting and sustaining a wide selection of the community.

The facade design unifies the five blocks so they are seen as belonging to one family, while ensuring that each building has its own unique identity and appearance.

3

The blocks are assigned to different housing types according to their location. A total of 629 new homes will be provided, placed within a hierarchy of streets which creates a safe, accessible and legible environment; a mixture of apartments, maisonettes and townhouses brings a variety of accommodation to help meet local housing needs.

The Greenwich Centre

The new Greenwich Centre will be an important civic destination for the wider East Greenwich community, providing extensive amenities arranged over three floors. These include a leisure centre with two swimming pools, dance and exercise studios, a fitness suite, a library, a residents' service centre, a crèche and cafe, and a healthcare clinic.

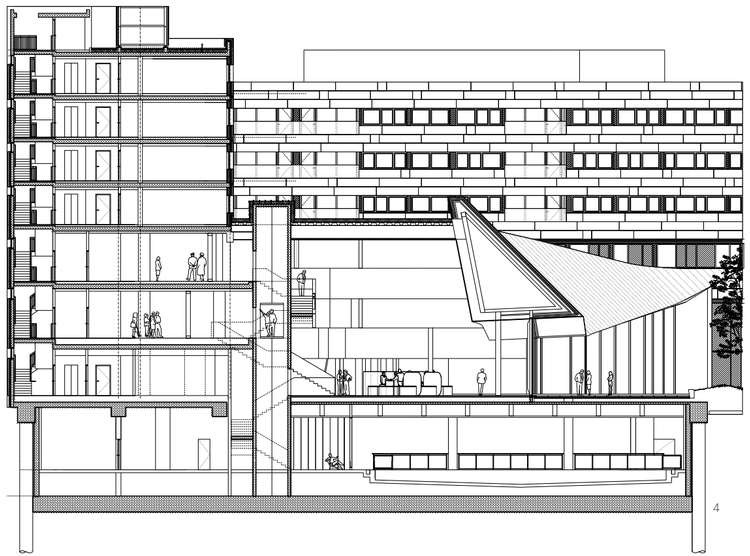
Defined by its distinctive curved form – 'the wave' – that runs the full length of the facade, the centre's continuous, undulating shape distinguishes it from the residential blocks, offering a striking counterpoint to these predominantly rectilinear buildings.

Public realm

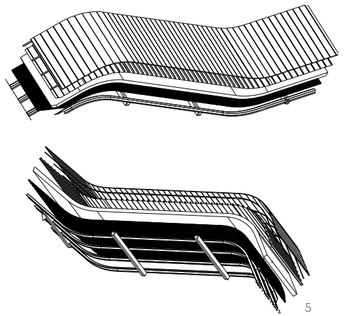
A series of fully integrated spaces with differing functions and uses will create a rich and attractive public realm with associated community facilities and retail provision.

A major feature is the introduction of a 2,400m^2 public square at the heart of the development. The well-defined space encourages active and passive recreation through informal flexible seating areas, a naturalistic children's play space, a multi-purpose plaza, restaurants, cafes and shops.

3 Illustrative view of the Greenwich Centre. **4** Cross-section of Block 1 and the Greenwich Centre
5 Exploded views of the Greenwich Centre 'wave'.



4



5

Sustainable design

An extremely high standard of sustainability is targeted in all aspects of the development, including the incorporation of on-site energy technology and the detailed design and specification of building materials. Environmental impact will be reduced through a joined-up process from design to construction; sustainable lifestyles are encouraged by providing good access to public transport and cycle facilities and the whole development will be supported with a sustainable management regime.

1

MODULAR DESIGN









2

1 (previous page) Modular construction in the factory in Newark. **2** Fabrication of the Hammersmith Palais modules in the factory.

Modular design and construction

Two of Make's schemes – Hammersmith Palais and The Serpentine – have been designed using prefabricated modular manufacturing.

Modular building systems are gradually becoming more accepted as a form of construction. Commonly used in the building of hotels and residential projects, volumetric fabrication enables the quick and cost-effective delivery, while producing an extremely high-quality product that allows a wide variety of flexible configurations.

Prefabricated modules are built off-site in controlled factory environments, enabling the fabrication and site work to run concurrently and thus reducing the construction programme. Indoor assembly results in a clean, safe fabrication process which is unaffected by bad weather – further increasing work efficiency and avoiding damage to the building materials. The environmentally friendly production process also minimises wastage and allows a high percentage of residual waste to be recycled.

The Serpentine residential development

'This innovative development was completed in April and is the flagship of the Housing Association's campaign to build two-bedroom homes for an exceptionally low cost of £60,000.

A prefabricated, structurally insulated panel system (SIPS) was integral to our design from the outset, with the final solution provided by Stewart Milne Timber Systems, whose factory is located in nearby Witney. The Serpentine comprises 94 dwellings but is made up of only eight faceted unit types. The construction is highly durable and helped to reduce the overall construction cost and shorten the build programme.

The timber-clad units also provide a warm, domestic character, while achieving exceptionally high energy efficiency and flexibility.'

Justin Nicholls, project architect

Hammersmith Palais student accommodation

'Our need to meet the tight deadline imposed by the start of the 2013 academic year led us to consider modular construction as a viable option for Hammersmith Palais. The 418 student accommodation pods are being manufactured off-site by Caledonian Modular, with each unit incorporating a bathroom, kitchen, study and sleeping area.

Designing for volumetric construction changed the way we thought about the design of the buildings. The main challenge was to design an efficient and regularised structure, while giving the building character and integrity within its historic urban context. We eagerly await the end result!'

Paul Simms, project architect

1 Elevation showing the new street frontage along Shepherd's Bush Road. **2** Plan of a typical bedroom, en-suite shower room, kitchenette, study facilities and bed/wardrobe arrangement.

1

Three new buildings containing student accommodation are currently under construction on the site of the former Hammersmith Palais in Shepherd's Bush. Due for completion in August 2013, the scheme will become a high-quality, well-managed living and working environment comprising 418 self-contained living and bedroom units, as well as communal areas, leisure and retail facilities, external amenity space and car and cycle provision.

2

HAMMERSMITH PALAIS

By taking full account of its social, historic and environmental context, our design aims to establish a strong sense of place, both inside and outside, as well as fostering a community spirit and sense of ownership. The buildings are sensitively stitched into the Conservation Area and the surrounding streetscape of Shepherd's Bush Road and relate to the two Grade II listed brick buildings located on either side of the site. The leisure and retail uses on the lower floors will create a cohesive, vibrant streetscape and an enhanced pedestrian experience.

Two sites

Fabrication of the building is taking place on two sites simultaneously; the student bedroom units are being manufactured under controlled factory conditions in Newark, while the concrete substructure is under construction in Hammersmith. This highly efficient process will reduce the construction programme by three months, ensuring that the building is delivered in time for the start of the new academic year.

3

4

5

3 Templates and jigs are being used to duplicate the modules. **4** Modules under construction in the factory in Newark. **5** Installation of the basement and ground floor concrete slabs on site in Hammersmith. **6** Cross-section of the student entrance and reception area.

Production

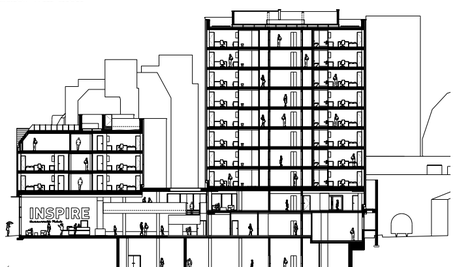
Each pod weighs six tonnes and takes around 28 days to complete. The individual units are lined up in the factory while teams of specialist subcontractors work on each one in turn; up to 600 skilled factory operatives are working on the pods at any one time.

The units' services, fixtures and fittings – including the furniture – are being installed in the factory. A benchmark pod is permanently on display on the factory floor and the foreman is responsible for ensuring that every module is built to its exact standard. Once signed off, the units are wrapped and stored ready for delivery to site.

Installation

Completion of the concrete structure will coincide with the sign-off of the first batch of bedroom pods, expected to be February 2013. The modules will then be transferred to the site – one per truck – and placed on top of each other by tower crane at a rate of six per day. The stacked units form the upper section of the building and are supported by the second floor pre-tensioned slab and secured using steelwork cassettes that form corridors between the rooms.

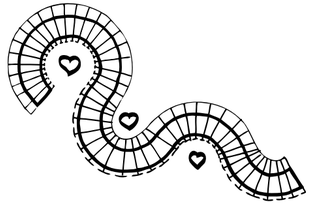
Once the units have been stacked and connected, the aluminium- and stone-cladding systems will be installed. Fixing brackets for the cladding, waterproofing and windows are being fitted to the modules in the factory – further reducing the labour needed on site.



6

1 Aerial view of the completed scheme. **2** Original concept sketch.

1



2

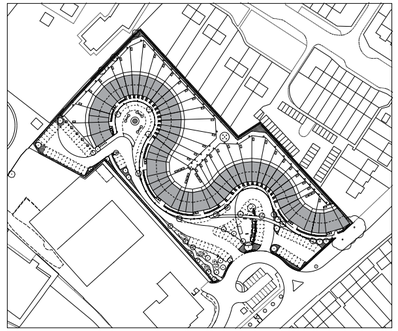
The Design for Manufacture competition was launched by the UK Government in 2006, as a challenge to the house-building industry to address the national housing shortage. Make formed part of a consortium which won the competition to design and build high-performance residential units for a construction cost of just £60,000.

Located near Aylesbury Town Centre on a former Territorial Army site, the principal aim of the development is to regenerate the local area and create a fully integrated community that reduces environmental impact and supports sustainable lifestyles.

The high-quality scheme is stitched into the urban fabric and made up of a mix of dwellings and tenures that cater to the needs of a wide variety of residents, ranging from first-time buyers to pensioners, while accommodating possible future growth.

THE SERPENTINE

3



4

5

6

3 Competition-winning model. **4** S-shaped plan. **5** Timber facades of the two- and three-storey houses. **6** Panorama of the construction site.

Reinvention of the terrace

The distinctive S-shaped linear design combines the best aspects of the traditional cul-de-sacs and terraces which typify the local residential areas. A total of 94 dual-aspect homes are spread over five unit types, maintaining a height limit of three storeys in order to harmonise with the surrounding street character.

The curved line arranges the dwellings as a single continuous terrace, maintaining a clear distinction between public and private areas. Homes of different sizes and types are distributed throughout the site to foster a mixed, integrated community.

Facade

Offering a modern twist on the traditional Victorian terrace, the innovative facade design unifies the units through the consistent use of materials and elevational treatment so they read as one building, while also articulating the individual homes.

Subtle faceted angles express the form and establish visual unity; the colour applied to the elevations further accentuates this uniformity, as well as emphasising the curved form. The two-storey units are treated in one colour which blends into the second colour on the three-storey buildings, therefore blurring the distinction between the different heights.

ON SITE

1

2

3

1 Ongoing site works. **2** Visualisation of the finished scheme. **3** Concept sketch of the site layout.

HEWA 'HOPE' CHILDREN'S HOSPITAL

Construction is expected to be completed at the end of 2013 on our first hospital, which will dramatically improve the standard of healthcare for children in Iraq.

Located in Erbil, the capital of Kurdistan, the hospital will become fully operational in 2014. The facility encompasses three floors housing 56 single rooms, four six-bed bays and 20 VIP rooms, as well as three operating theatres, an emergency unit, an imaging wing, specialist outpatient clinics, a paediatric and neo-natal intensive care department and a women's hospital.

We have recently been appointed to build our second hospital in Kurdistan.

1

1 The Kennedy Institute of Rheumatology on site. **2** Illustrative view of the building **3** Illustrative view of the Nuffield Department of Medicine. **4** The building on site.

2

3

4

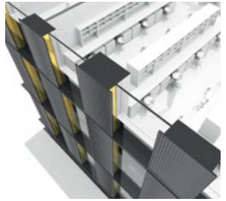
Two state-of-the-art research buildings on the University of Oxford's Old Road Campus are currently under construction, with completion expected in the spring of 2013. The Nuffield Department of Medicine and the Kennedy Institute of Rheumatology represent the first phase of a long-term masterplan to improve the campus, and continue our successful partnership with specialist laboratory designers Nightingale Associates, who we collaborated with on the Old Road Campus Research Building which was completed in 2007.

The two separate buildings have their own distinct identities and user groups but were designed to complement each other, as well as respond sensitively to the neighbouring campus buildings and the immediate surroundings. Configured to allow the inclusion of a third building to be constructed during the second phase of works, the new facilities will help to reinforce the campus's status as an internationally recognised leader in biomedical research and aid cross-departmental collaboration.

OLD ROAD CAMPUS

5

6



7

8

The Nuffield Department of Medicine

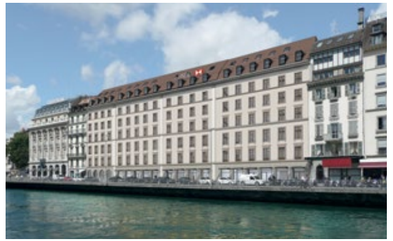
As one of the largest centres for biomedical research in Europe, the Nuffield Department of Medicine will support investigator-led research covering many fields and clinical disciplines. This new laboratory will be an integrated, multi-disciplinary research centre which links biological science with medical application; forming the 'head' of the campus, it creates a strong identity for the department.

The Kennedy Institute of Rheumatology

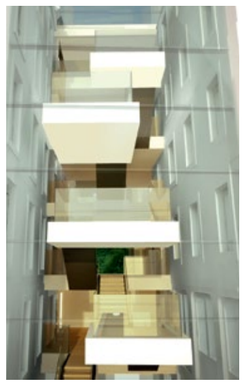
This new facility will become an international centre of excellence for research, training and teaching, with particular emphasis on the treatment of rheumatoid arthritis and osteoarthritis. To be the new home for the Kennedy Institute's research groups, the building combines state-of-the-art facilities with a stimulating environment that supports a multi-disciplinary and collaborative approach to research.

5 The Nuffield Department of Medicine's atrium under construction. **6** Illustrative view of the atrium. **7** Cut-away plan of the Kennedy Institute of Rheumatology's laboratory facade. **8** View of the facade showing the reflective glass panels.

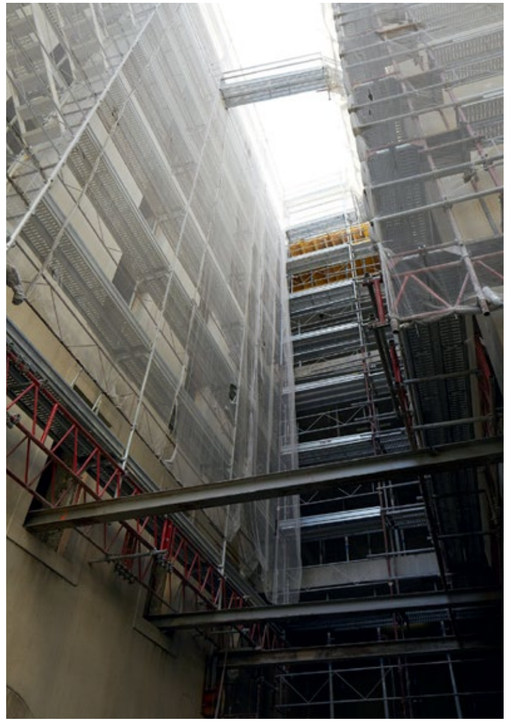
1



2



3



4

1,2 The lake-facing facades are being refurbished. A new roof aligns the four buildings and includes fully glazed dormer windows. **3,4** The main staircase; the middle landings cantilever up to 4m into the space and appear to be floating freely between the existing facades.

Our second scheme for HSBC Private Bank in Geneva is currently under construction and due for completion in October 2013. The project involves the merging of seven structurally independent historic buildings into a unified, high-end office space for the bank and will consolidate several of its Geneva offices in one location.

The existing buildings, located on a prime lake-front setting in one of the oldest parts of the city, are being sensitively transformed into a strategically important client-facing front office for HSBC. The refurbishment will provide a spacious, legible workplace for approximately 650 staff and add a trading floor and premier client meeting and dining facilities, all with breathtaking views of the river Rhone, Lake Geneva and the Old Town.

Refurbishment

The seven buildings were empty for five years and in a very run-down state before construction began, despite being located within an environment of significant heritage buildings.

QUAI DES BERGUES

5

It was essential to unify the structures, while retaining the legibility of the individual buildings – four on the lakefront and three to the rear – and preserving the historic facade. Sensitive intervention was therefore required in order to maintain the exiting structural typology.

The comprehensive refurbishment has resulted in 40 per cent of the building's internal structure being demolished and rebuilt to create a modern, efficient office for the bank. Additional area has been gained through the rebuilding of the sixth and seventh floors, and the addition of new basement space.

By subtly unifying the appearance of the roofs and the facades, the seven buildings appear as one entity while keeping their individual silhouettes and preserving the integrity of the original structure.

Unifying the buildings

In order to unify the space, some of the walls have been removed and the central lift core and staircases

6

7

8

5,6 The new roof provides space for a double-height client reception area and meeting rooms. **7** Illustrative view of the double-height lift lobby on the sixth floor under the fully glazed atrium roof showing the green wall. **8** The atrium offers a quiet space for break-out and informal meetings, as well as providing visual connection between floors.

demolished. An inner courtyard has been replaced with a new glazed atrium, forming a central hub which joins the individual buildings together and gives the ensemble a consistent identity, while maintaining the original courtyard typology.

The timber and glass construction enhances the visual connection between floors and provides the workspaces with generous levels of natural light. Timber 'blades' serve a decorative purpose, as well as providing privacy to the office areas which require confidentiality. Circulation has been optimised with the addition of five new lifts and a dramatic cantilevered staircase which connects all seven floors.

Roof

The entire roof has been rebuilt and transformed into an exclusive client and executive space, offering magnificent views.

An impressive double-height reception is accessed by a dedicated lift service and leads to meeting rooms, lounge areas, a fine-dining room and an external terrace which can be used for functions.

By introducing a continuous mansard-type roof, the geometry of the building is aligned and the external appearance enhanced; the new roof allows generous levels of natural light into the upper levels with new dormer windows and rooflights.

Sustainability

Energy-saving measures include the use of lake water for free cooling – a plentiful resource that is available on the doorstep.

The fully insulated building uses triple-glazing throughout, in combination with external, flexible sun shading. All dormer windows are fully glazed and constructed from electro-chromic glass, allowing users to control the amount of heat or light that passes through them.

1 Night-time photograph of the ground and core works.

5 BROADGATE

Our state-of-the-art office development for British Land and Blackstone is now on site and bringing a new standard to financial trading facilities in the heart of the City of London. With sole tenant UBS due to occupy the building in 2015, the development is currently 95 per cent procured, with the excavation complete, the cores well under way and the steelwork due to commence in 2013.

Facade design

5 Broadgate's design is based on the form of a giant metal engine block which expresses the building's internal functions. The distinctive architectural language of solidity and robustness is reinforced through the exclusive use of stainless steel on the main facade which unifies the surface of the building, giving it a unique identity and a strong presence.

Material research

The scale of the building requires an incredible 34,000m^2 of external cladding, and the complex design has undergone numerous iterations and been tested using a wide range of models, mock-ups and prototypes.

We have worked in close collaboration with the cladding contractor to develop the material treatment of the facade and select the most energy-efficient, low-impact methods of design and production. Extensive research has been conducted into different materials, in order to understand their entire lifecycle and the environmental implications of the supply chain.

Energy efficiency

The cladding system plays an integral part in the energy efficiency of the building by carefully balancing natural daylight with high levels of thermal and solar insulation. 65 per cent of the facade is solid, with stainless steel panels providing a thermally high-performing envelope which mitigates the effects of solar gain.

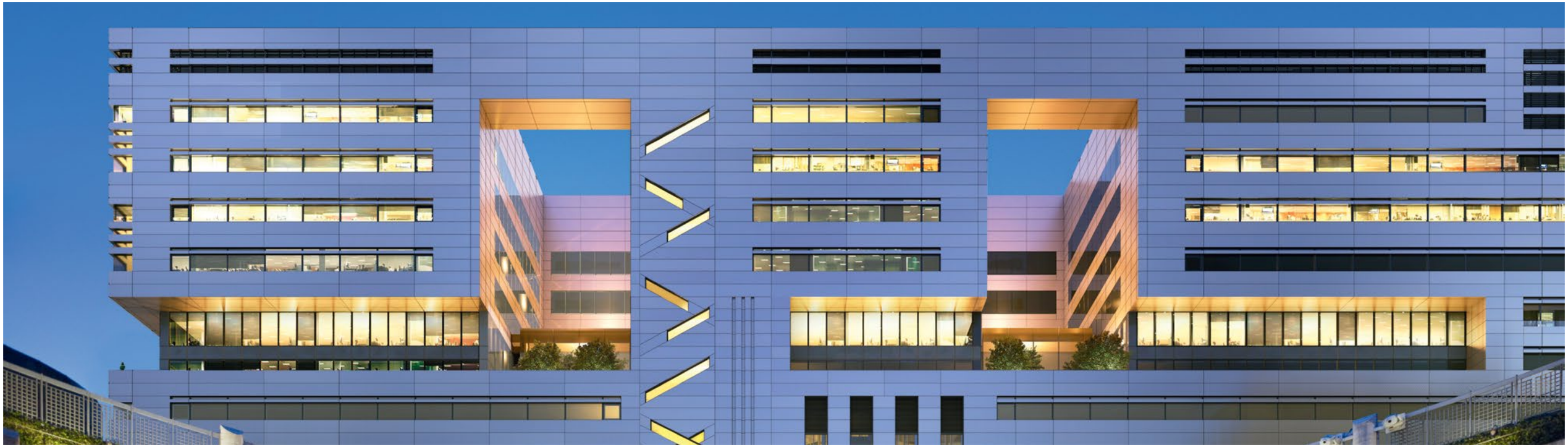
The sustainable facade treatment has helped the project to exceed high sustainability targets; the building was awarded BREEAM Excellent at the design stage.

2 Bright annealed stainless steel coil in the factory. **3** Embossed roller for the linen finish. **4** Cladding mock-ups for the building's office and trading facades.

2

3

4




HEAD HEIGHTS? CONFIRM THEY EXCEED
WHAT IS THE FINISHES DEPTH
WHAT ARE THE ISL? REDUCTED FFLS
NEEDS TO BE
60 # 40. IF
ABOVE 100 MM
WIDTH CANNOT
INCLUDE HANDRAIL
ECLEAR ZONE

The Olympic Legacy

Collaborating with an artist

Education

The heritage of Westminster

	p. 26 / The Copper Box	**p. 30 / South Park Hub**	**p. 32 / Chobham Manor**	**p. 36 / 7–10 Hanover Square**	**p. 46 / Thomas Clarkson Academy**	**p. 52 / The Amenities Building**	**p. 56 / The Bridge Centre**	**p. 62 / 48 Leicester Square**
Location	London, UK	London, UK	London, UK	London, UK	Wisbech, UK	London, UK	North Devon, UK	London, UK
Sector	Sport and recreation	Leisure and recreation	Residential	Mixed use – office and residential	Education	Higher education	Sport and leisure	Mixed use – retail and office
Area	15,500m² /170,000ft²	1,200m² /12,920ft²	9.3 hectares/23 acres	11,260m²/121,130ft²	16,200m²/174,370ft²	4,200m²/45,210ft²	9,500m²/102,260ft²	17,510m²/188,420ft²
Status	Completed	Completed	Design development	Planning submitted	Completed	Planning awarded	Planning submitted	Planning awarded
Client	Olympic Delivery Authority	London Legacy Development Corporation	London Legacy Development Corporation, London & Quadrant, Taylor Wimpey	Legal & General Assurance Society Limited	Kier Eastern, on behalf of Equitix and Cambridgeshire County Council	The University of Nottingham	Wings South West	Linseed Assets Ltd
Consultants	Consortium: Arup, Buckingham Group, DP9, PTW, Southfacing	Arup, James Corner Field Operations, Speirs and Major	J&L Gibbons, Mott MacDonald, WSP Group	Buro Happold, Catherine Bertola, Drivers Jonas Deloitte, EC Harris, Francis Golding, Gerald Eve, Mace, Modus Operandi, Museum of London Archaeology, WSP Group Collaborating architects: Haworth Tompkins, Karakusevic Carson Architects, Muf Architecture/Art, NORD Architecture, PRP Architects	Cocentra, Dell, Hollywood Signs, Imtech Aqua Building Services, Livingston Eyre Associates, LLP, Mitie, Ramboll UK, Sandy Brown Associates, WSP Group	AKT II, Arup, Atelier 10	Arcon Associates, Arup, DP9, M3, Pinsent Masons, RGP Architects, Sense	City Offices Real Estate LLP, Hilson Moran, JMP Consultants Ltd, Professor Robert Tavernor Consultancy Ltd, Rolfe Judd Planning, Waterman Group, WT Partnership
Make team	Stuart Fraser, Robin Gill, Ken Shuttleworth	Stuart Fraser, Grigor Grigorov, Justin Lau, Ken Shuttleworth, Luke Smith, James Taylor, Boris Zuber	Stuart Blower, Frank Filskow, Peter Greaves, Rebecca Harral, Anna MacDougall, Ian O'Brien, Simon Robins, Ken Shuttleworth, James Tiplady	Cara Bamford, Simon Robins, Ken Shuttleworth, Timothy Tan	Richard Meddings, Jamie Rodgers, Ken Shuttleworth, Greg Willis	Oliver James, Anna MacDougall, David Patterson, John Prevc, Ken Shuttleworth, James Tiplady	Mike Bell, Jason Chan, Myoungjae Kim, Jason Parker, Sam Potter, Jamie Rodgers, Ken Shuttleworth	Stuart Blower, Alice Cadogan, Frank Filskow, Stuart Fraser, Ines Fritz, George Guest, Ken Shuttleworth, Andrew Taylor

Hong Kong & Mainland China

	p. 66 / St James's Market	**p. 70 / Artillery Row**	**p. 79 / Argyle Street**	**p. 80 / Chai Wan Gallery**	**p. 86 / Weihai Pavilion**	**p. 92 / Wanda Donghu Hotel Facade**	**p. 94 / Chengdu Hotel**	**p. 94 / Pinnacle One**
Location	London, UK	London, UK	Hong Kong	Hong Kong	Weihai, China	Wuhan, China	Chengdu, China	Chengdu, China
Sector	Mixed use – office, retail, public realm	Residential	Residential	Culture	Culture	Facade design	Hotel and leisure	Office
Area	33,200m²/357,000ft²	3,000m²/32,290ft²	9,000m²/96,880ft²	300m²/3,230ft²	600m²/6,450ft²	Confidential	Confidential	Confidential
Status	Planning submitted	Planning submitted	On site	Completed	Completed	On site	On site	On site
Client	The Crown Estate	Lowndes Property Holdings Ltd	Swire Properties Ltd	Karen Smith	China Resources Land Ltd	Dalian Wanda Commercial Properties Company Ltd	Sino-Ocean Land Holdings Ltd, Swire Properties Ltd	Sino-Ocean Land Holdings Ltd, Swire Properties Ltd
Consultants	AECOM, Alan Saunders Acoustics, Atkins, CBRE, Gardiner and Theobald, Hanover Cube, Ramboll UK, Waterman Group	Access=Design, GVA, Hoare Lea, URS Corporation Ltd	Hyder Consulting, JMK Consulting Engineers LTD, LWK, Wong and Ouyang (Building Services) Ltd, WTP		Collaborating architects: Qingdao Tengyuan Design Institute Company Ltd	SuP Ingenieure GmbH	Arup, Graphia Brands, Lighting Planners Associates, SWADI, Tsinghua University, Urbis Collaborating architects: South West Architecture Design Institute (China)	Arup, Graphia Brands, Hugh Dutton Associates, Lighting Planners Associates, Tsinghua University, Urbis Collaborating architects: China Academy of Building Research
Make team	Harry Godfrey, Jonathan Mitchell, Justin Nicholls, Alejandro Nieto, Vicky Patsalis, James Roberts, Ken Shuttleworth, Rebecca Woffenden	Tim Davies, Adam Grice, Ian Lomas, Richard Meddings, Sam Potter, James Redman, Ken Shuttleworth, Daniel Slavinsky, Tracey Wiles	Jessica Lee, John Puttick, Ken Shuttleworth, Roderick Tong, Qianqian Xu	John Puttick, Ken Shuttleworth, Roderick Tong	Simon Lincoln, John Puttick, Sunny Qin, Ken Shuttleworth	Jet Chu, Simon Lincoln, John Puttick, Sunny Qin, Ken Shuttleworth, Qianqian Xu	Kun Bi, Kunkun Chen, Katy Ghahremani, Yuting Jiang, Justin Lau, Jessica Lee, Mark O'Donnell, John Puttick, Jana Rock, Paul Scott, Ken Shuttleworth, Joanna Szulda, Mark Tynan, Tracey Wiles	Jet Chu, Frances Gannon, Robin Gill, Mark O'Donnell, John Puttick, Ken Shuttleworth, Qianqian Xu

Masterplanning

Modular design

On site

	p. 99 / Elephant & Castle	**p. 100 / Greenwich Square**	**p. 108 / Hammersmith Palais**	**p. 112 / The Serpentine**	**p. 118 / Hewa Hope Children's Hospital**	**p. 120 / Old Road Campus**	**p. 124 / Quai des Bergues**	**p. 128 / 5 Broadgate**
Location	London, UK	London, UK	London, UK	London, UK	Erbil, Kurdistan, Iraq	Oxford, UK	Geneva, Switzerland	London, UK
Sector	Masterplan	Masterplan	Residential	Residential	Healthcare	Education, research	Office	Office
Area	10 hectares/24 acres	9 hectares/22 acres	17,370m²/186,970ft²	7,500m²/80,730ft²	25,000m²/270,000ft²	Kennedy Institute of Rheumatology: 7,430m²/79,980ft² Nuffield Department of Medicine: 5,600m²/60,000ft²	16,400m²/176,500ft²	105,000m²/1,134,000ft²
Status	Outline planning submitted	On site	On site	Completed	On site	On site	On site	On site
Client	Lend Lease, London Borough of Southwark	Hadley Mace	Generation Estates	Denne Construction, Homes and Communities Agency, Thames Valley Housing Association	Kurdistan Regional Government	Mace, The University of Oxford	HSBC Private Bank (Suisse) SA	Blackstone, British Land
Consultants	Arup, David Bonnett Associates, DP9, Grant Associates, Professor Robert Tavernor Consultancy Ltd, Wallace Whittle, Waterman Group, XCO2	BB7, Chapman Bathurst, GL Hearn, Meinhardt Group, Sandy Brown Associates	Beadmans, Caledonian Modular, Heyne Tillett Steel, Morgan Sindall, MTT, Turner and Townsend	ACD Landscape Architects, Charles Funke Associates, Nathaniel Lichfield and Partners, Silcock Dawson and Partners, Stewart Milne Timber Systems	Adams Kara Taylor, Health Care Projects Ltd, Hoare Lea	DPDS Consulting, EC Harris, Long and Partners, Pell Frischmann, Peter Brett Associates, RB Design Management Ltd, Sandy Brown Associates, Scott White and Hookins Collaborating architects: Nightingale Associates	BCS SA, Gartenmann Engineering, Ingeni SA, Protectas, Rigot + Rieben SA, SEAM Design Collaborating architects: Itten Brechbühl SA	Arup, Buro Happold, DP9, Fedra, Francis Golding, Gordon Ingram Associates, Hilson Moran, Hyland Edgar Driver, Mace, Mace Cost Consultancy, Miller Hare, M3 Consulting, NDY Light, Space Syntax, Steer Davies Gleave, URS Corporation Ltd, Watkins Payne Partnership
Make team	Anna MacDougall, Balveer Mankia, Campbell Patterson, David Patterson, John Prevc, Felix Robbins, Ken Shuttleworth, Luke Smith, James Tiplady	Frank Filskow, Peter Greaves, Rebecca Harral, Chris Kallan, Doris Lam, John Man, Balveer Mankia, Justin Randle, Sophie Samuels, Ken Shuttleworth, Natasha Telford	Alice Cadogan, Oliver James, Beth Johnson, Jonathan Mitchell, Justin Nicholls, James Roberts, Ken Shuttleworth, Paul Simms, Barry Wark	Justin Nicholls, Ken Shuttleworth	Gary Rawlings, Ken Shuttleworth, Timothy Tan	Alice Cadogan, Matthew Critchley, Michelle Evans, Chris Jones, Robert Lunn, Justin Nicholls, Ian O'Brien, James Roberts, Ken Shuttleworth	Kathryn Edwards, Michelle Evans, Florian Frotscher, Christina Leung, Eva-Katharina Rupp, Ken Shuttleworth, Daniel Slavinsky, Philip Twiss	Michael Bailey, Matthew Bugg, Philippa Drinkwater, James Flynn, James Goodfellow, Robert Hall, Myoungjae Kim, Jason Parker, Joanna Pilsniak, Ken Shuttleworth, Ben Stuart, Bill Webb, Charlotte Wilson

Make 2012 // Sean Affleck // Michael Bailey // Cara Bamford // Arnd Baumgärtner // Mike Bell // Kun Bi // Kyly Bird // Stuart Blower // Alice Bosc // Eleanor Brooke // Matthew Bugg // Alice Cadogan Lawrence Carlos // Rebecca Carter // Jason Chan // James Chase // Kunkun Chen // Emily Chicken // Jet Chu // Sam Clagett // Barry Cooke // Laura Cooke // Mark Cooney // Matthew Critchley // Timothy Davies // Philippa Drinkwater // Kathryn Edwards // Michelle Evans // Sam Evans Frank Filskow // James Flynn // Stuart Fraser // Ines Fritz // Florian Frotscher // Frances Gannon Katy Ghahremani // Robin Gill // Harry Godfrey // Andrew Godwin // James Goodfellow // Peter Greaves // Vivienne Greenaway // Adam Grice // Grigor Grigorov // Harry Grocott // George Guest Robert Hall // Callan Halls-Palmer // Rebecca Harral // Noam Hazan // Daire Hearne // Oliver James Yuting Jiang // Beth Johnson // Chris Jones // Chris Kallan // Yianni Kattirtzis // Myoungjae Kim Maria Knutsson-Hall // Kalliopi Kousouri // Charley Lacey // Doris Lam // Justin Lau // Jessica Lee Christina Leung // Simon Lincoln // Caya Loeper // Ian Lomas // Graham Longman // Jia Lu Robert Lunn // Anna MacDougall // John Man // Balveer Mankia // Laura Mark // Peter Matcham

Jason McColl // Megan McCulloch // Richard Meddings // Alison Michaels // Paul Miles // Jonathan Mitchell // Sebastian Nau // Graeme Newman // Justin Nicholls // Alejandro Nieto // Sharon Nolan Ian O'Brien // Mark O'Donnell // Zander Olsen // Jason Parker // Vicky Patsalis // Campbell Patterson David Patterson // David Picazo // Megan Pietersen // Joanna Pilsniak // Adina Poncis // Dean Pontefract // Sam Potter // John Prevc // John Puttick // Cathy Qin // Sunny Qin // Justin Randle Gary Rawlings // Mark Read // James Redman // Felix Robbins // James Roberts // Simon Robins Jana Rock // Jamie Rodgers // Eva-Katharina Rupp // Denise Ryan // Sophie Samuels // Paul Scott Matthew Seabrook // Tomas Sharp // Kate Shillingford // Ken Shuttleworth // Paul Simms // Daniel Slavinsky Luke Smith // Yetunde Sogunle // Jamie Southgate // Oliver Sprague // Cristina Strelczuk // Ben Stuart Connie Suffren // Joanna Szulda // Timothy Tan // Andrew Taylor // James Taylor // Stefanie Taylor // Natasha Telford // James Tiplady // Roderick Tong // Philip Twiss // Mark Tynan // Sandra Videira // Barry Wark Bill Webb // Sam Welham // Simon Whitehead // Tracey Wiles // Jamie Wilkins // Greg Willis Charlotte Wilson // Rebecca Woffenden // Sarah Worth // Qianqian Xu // William Yam // Boris Zuber

Annual team
Alice Bosc
Emily Chicken
Sam Evans
Denise Ryan
Ken Shuttleworth

Editorial assistance
Philippa Drinkwater
Kate Shillingford
Connie Suffren
Sarah Worth

Flip book illustrations
Kalliopi Kousouri

Portrait illustrations
Damien Cuypers

Poster illustration
Ciara Phelan

Photography
Zander Olsen

Proofreading
Blanche Craig

With special thanks to
Catherine Bertola, Robert Tavernor, Victoria Thornton

Printed by Regal Printing Ltd

Make
55 Whitfield Street
London W1T 4AH
www.makearchitects.com

Twitter
@MakeArchitects

Picture credits

The Olympic legacy
pp 22
3 Getty Images (photograph)
pp 23
4 Jason Hawkes, Getty Images (photograph)
pp 29, 30
6,1 James Corner Field Operations (visualisations)
pp 32,33
1, 2 London Legacy Development Corporation (visualisations)

Collaborating with an artist
pp 38
5 Miller Hare (visualisation)
pp 40
1 Colin Davison (photograph)
Courtesy the artist, Workplace Gallery and Galerie M+R Fricke
2 Greg Clement (photograph)
Courtesy the artist, Workplace Gallery and Galerie M+R Fricke
3 Jerry Hardman Jones (photograph)
Courtesy the artist, Workplace Gallery and Galerie M+R Fricke
pp 41
5 Catherine Bertola (drawing)

Education
pp 42-43
1 Moin Mahomad Rafik (sketch)

The heritage of Westminster
pp 58
1 Jason Hawkes, Getty Images (photograph)
pp 62, 64, 65
1, 3, 5, 6 Cityscape (visualisations)
pp 66, 68, 69
1, 3, 7 Wagstaff (visualisations)
pp 67
2 www.british-history.ac.uk

Hong Kong
pp 74
1 Miemo Penttinen, Getty Images (photograph)
pp 76
2 Ian Trower, Getty Images (photograph)
pp 77
3 fotoVoyager, Getty Images (photograph)
pp 78
4 Amanda Hall/Robert Harding, Getty Images (photograph)
pp 80-83
1, 2, 4, 5 Trio (photographs)

Mainland China
pp 86, 88-91
1, 3, 5-7 Shu He (photographs)
pp 92
1, 2 Yuandian (visualisations)
pp 94, 95
1, 2 Yuandian (visualisations)

Masterplanning
pp 96
1 Cityscape (visualisation)

Modular design
pp 112
1 Denne Construction (photograph)

On site
pp 119
2 Vins Company (visualisation)
pp 132-133
2 Hayes Davidson (visualisation)

CREDITS & CONTRIBUTIONS