



1981

TWICKENHAM SOUTH STAND
Home of England Rugby Union Team
1991 RWC Final



1993

BATH TEACHERS STAND
Bath Rugby Team



1994

HONG KONG STADIUM
Hong Kong Sevens



JOHN SMITH'S STADIUM
Huddersfield Giants RLFC



1997

MACRON STADIUM
2 RL World Club Challenge Finals



2000

WESTPAC STADIUM
Wellington Sevens
2011 RWC (7 Games)



1999

MILLENNIUM STADIUM
Home of Wales Rugby Union Team
1999 RWC Final



ANZ STADIUM
NRL Grand Final
2003 RWC Final



ETIHAD STADIUM MELBOURNE
2003 RWC (7 Games)



2003

SUNCORP STADIUM
2008 RLWC Final
2003 RWC (9 Games)



STADIUMmk PHASE I
Northampton Saints
Heineken Cup Games



2007

WEMBLEY STADIUM
RL Challenge Cup Final
2015 RWC (2 Games)



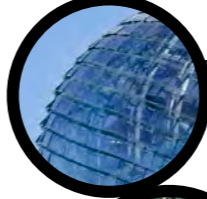
2008

CBUS SUPER STADIUM
Gold Coast Titans
Gold Coast Sevens



2009

FNB STADIUM
Tri-Nations /
Rugby Championship Venue



2010

AVIVA STADIUM
Home of Ireland
Rugby Union Team



EDEN PARK
2011 RWC Final



2011

FORSYTH BARR STADIUM
2011 RWC (4 Games)



BBVA COMPASS STADIUM
Annual USA Eagles
Match



2012

AMI STADIUM
Canterbury Crusaders



ETIHAD STADIUM EXPANSION
2015 RWC (1 Game)



2015

OLYMPIC STADIUM TRANSFORMATION
2015 RWC (5 Games)



2016

GRAND STADE DE L'OLYMPIQUE LYONNAIS
2016 Champions Cup Final



FFR GRAND STADE
Home of France
Rugby Union Team

TBC

**“THEY ARE THE
ALL BLACKS
OF SPORTS FACILITY CREATION...
EXCEPT THAT
THEIR TRACK RECORD IS
BETTER”**

- STEPHEN JONES, RUGBY WORLD MAGAZINE



WHO WE ARE

Populous is a global award-winning design practice specialising in creating environments that give users and spectators unforgettable experiences. As well as our stadia design, our comprehensive range of services includes arena, conference and exhibition centre architecture, interior design, environmental graphics and wayfinding, events planning and overlay, master planning, sustainable design consulting and facilities operations analysis.

Populous are the world's leading designers of sports and entertainment facilities, having worked on some of the world's most iconic venues, including the London 2012 Olympic Stadium, Wembley Stadium, Yankee Stadium, the O2 Arena, Silverstone F1 Circuit, the FNB Stadium in South Africa, and the Emirates Stadium for Arsenal FC.

We have worked on over 2000 sports and entertainment projects around the world. With a portfolio of over 400 major event venues, we are also recognised as a world leader in overlay design, procurement and delivery.

As well as our passion for sport, Populous has a strong belief in sustainability and understanding how our buildings embed themselves in their environment. We have undertaken research into 'sustainable stadia' and designed some of the most energy-efficient venues in the world.

In addition to our extensive portfolio of work, we have a number of projects currently in development, including the French Rugby Federation's Grand Stade, new arenas in Las Vegas and Bristol, a long-term strategy for the development of Lord's Cricket Ground, and football stadia in the UK, Russia, Qatar, France and Mexico.



**“ WE HAD A VISION
POPULOUS TURNED THAT VISION INTO A STADIUM
LIKE NO OTHER
A STADIUM FOR THE FANS
A STADIUM THAT WILL SECURE THE
FUTURE
OF FRENCH RUGBY ”**

- SERGE BLANCO, VICE PRESIDENT, FÉDÉRATION FRANÇAISE DE RUGBY



**BBVA
Compass
Stadium,
Houston**

This stadium in Houston has hosted a match between the USA Eagles and a Tier 1 national rugby team every year since 2012. The popularity of rugby is booming in the States, with a sell-out crowd watching the Eagles' 2014 match against the All Blacks at Chicago's Soldier Field. The sport also recently gained varsity status, meaning rugby players can now get college scholarships.

**Hong Kong
Stadium**



Home to the Hong Kong Sevens, the most prestigious event on the World Rugby Sevens calendar, **Hong Kong Stadium** sees thousands of costumed fans pack into its infamous South Stand every March to revel in a carnival atmosphere that is totally unique to the sport. Sevens has a much more open field than the fifteen-man version of the game, with Fiji finishing as champions of the 2014-15 tournament. In 2016 the biggest spotlight in world sport will shine on rugby when sevens makes its debut at the Rio 2016 Olympic Games.

GOING GLOBAL

An aerial night view of Brisbane, Australia, showing the city's skyline, the Brisbane River, and the Suncorp Stadium. The stadium is illuminated with green and white lights, and its low, flat roof is visible. The surrounding urban environment is lit up with city lights, and the river reflects the lights from the buildings and bridges. A large white circle is overlaid on the image, containing the text "CREATING DESTINATIONS".

CREATING DESTINATIONS

Suncorp Stadium, Brisbane

We don't just design buildings, we design places.

Whether we're working on a single structure or a larger masterplan, it's essential that we consider the context of our designs within the surrounding urban environment. **Suncorp Stadium** is located in an inner city residential area on the edge of Brisbane's CBD. It was designed to reduce disruption to local residents, while making access for spectators as easy as possible. The low, flat roof stops the stadium from dominating the local skyline but also serves to contain noise from the crowd, while enclosed sports lighting, and low-impact exterior lighting, reduce light spill. A service road has also been located beneath the stadium to lessen the impact of heavy vehicles on streets nearby. Populous developed an integrated transport strategy, focused on encouraging visitors to either walk or use public transport to reach the stadium. New transport infrastructure and a series of new pedestrian routes were created, linking the stadium back to the city so that it no longer felt isolated.



REVENUE GENERATION



arenamk

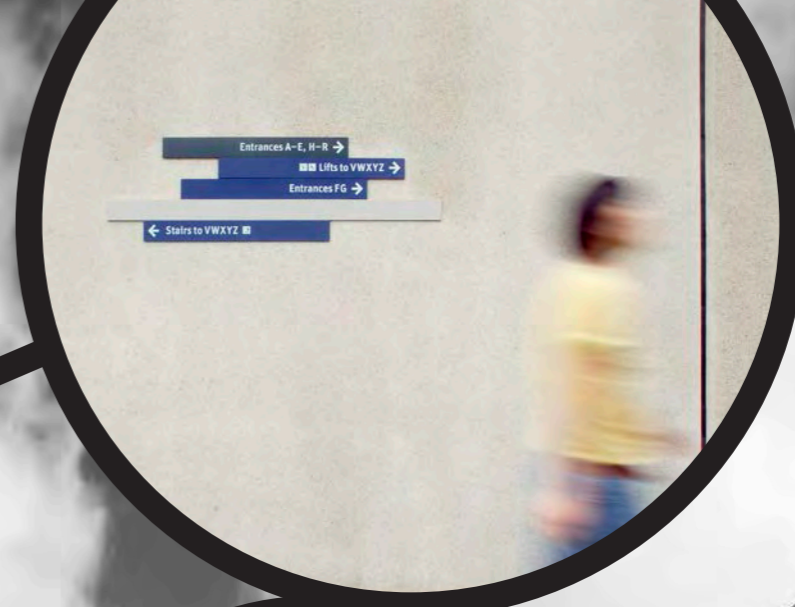
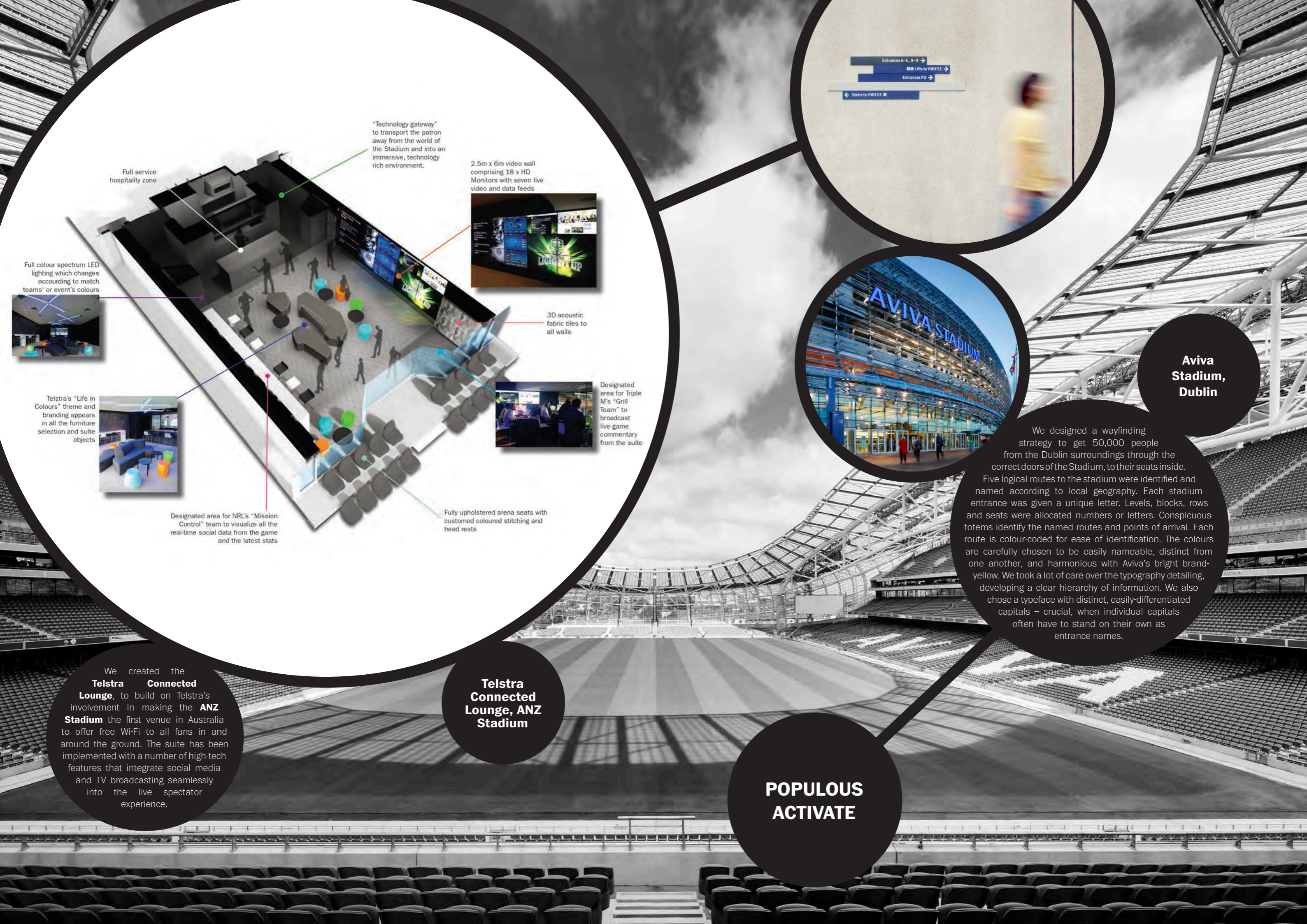
Founded in 2004, MK Dons have developed a fanbase out of almost nothing. They needed a stadium that could adapt with their ambitions for growth, so we developed a phased scheme, with an initial capacity of 22,000 seats, which has since expand to 30,000 in time to host matches of the 2015 Rugby World Cup. The true ingenuity of *stadiummk* lies in its multipurpose functionality, which allows it to generate revenue throughout the year. A 4500-seat arena hosts its own events, such as the Unibet Masters Darts Tournament in 2015, but it can also be integrated into the stadium concourses on matchdays, with two levels of bar facilities, balconies and toilets to compliment the club's hospitality offering. And then there is the hotel. 376 rooms encircle the stadium stands, boasting an incredible occupancy rate of over 95%. The pitch-side rooms also transform into corporate hospitality suites for use during matches, as well as serving other corporate functions, such as conferences and meetings, throughout the week. With a ballroom, a gym, and office space, as well as other connected developments at the surrounding Denbigh North site, the stadium is able to create income from a variety of sources, ensuring financial stability, and providing a number of useful services for the local community.

**stadiummk,
Milton Keynes**



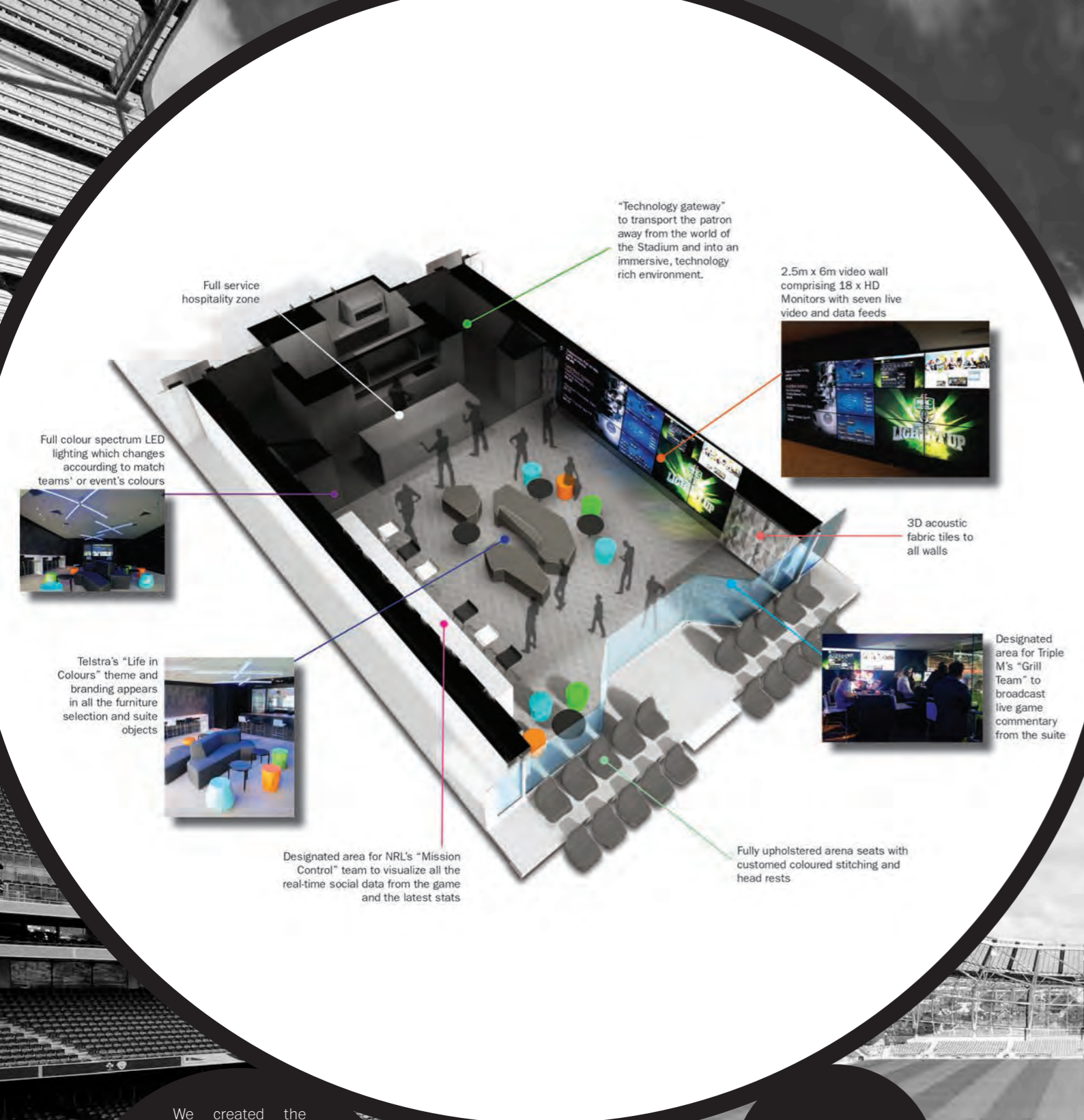
**“SUNCOORP
STADIUM
MAGIC. LOVE IT.
PERHAPS THE BEST RUGBY STADIUM
IN THE WORLD”**

- WYNNE GRAY, NEW ZEALAND HERALD



Aviva Stadium, Dublin

We designed a wayfinding strategy to get 50,000 people from the Dublin surroundings through the correct doors of the Stadium, to their seats inside. Five logical routes to the stadium were identified and named according to local geography. Each stadium entrance was given a unique letter. Levels, blocks, rows and seats were allocated numbers or letters. Conspicuous totems identify the named routes and points of arrival. Each route is colour-coded for ease of identification. The colours are carefully chosen to be easily nameable, distinct from one another, and harmonious with Aviva's bright brand-yellow. We took a lot of care over the typography detailing, developing a clear hierarchy of information. We also chose a typeface with distinct, easily-differentiated capitals – crucial, when individual capitals often have to stand on their own as entrance names.



"Technology gateway" to transport the patron away from the world of the Stadium and into an immersive, technology rich environment.

2.5m x 6m video wall comprising 18 x HD Monitors with seven live video and data feeds



3D acoustic fabric tiles to all walls

Designated area for Triple M's "Grill Team" to broadcast live game commentary from the suite



Fully upholstered arena seats with customised coloured stitching and head rests

Designated area for NRL's "Mission Control" team to visualize all the real-time social data from the game and the latest stats

Full service hospitality zone

Full colour spectrum LED lighting which changes according to match teams' or event's colours



Telstra's "Life in Colours" theme and branding appears in all the furniture selection and suite objects



Telstra Connected Lounge, ANZ Stadium

We created the **Telstra Connected Lounge**, to build on Telstra's involvement in making the **ANZ Stadium** the first venue in Australia to offer free Wi-Fi to all fans in and around the ground. The suite has been implemented with a number of high-tech features that integrate social media and TV broadcasting seamlessly into the live spectator experience.

POPULOUS ACTIVATE

Millennium Stadium, Cardiff

In 2013 the England rugby team travelled to the **Millennium Stadium** for their final match of the 6 Nations Championship, aiming to complete their first tournament Grand Slam in a decade. Instead, they lost 30 - 3, a scoreline which gifted the trophy to Wales on points difference. Many commentators suggested the young England team were overwhelmed by the intense atmosphere generated beneath the closed roof of the stadium. England flanker James Haskell said, "If the roof is closed and you're 10 metres from the Welsh line, or they're 10 metres from your line, the noise becomes so oppressive it's like a force on top of you." Even with the roof open, the Millennium Stadium was still recorded as the loudest venue in the competition, with an average sound level of 92.0dB. The other Populous stadium to feature in the tournament, Dublin's **Aviva Stadium**, recorded the second loudest sound, at 89.8dB. The importance of atmosphere cannot be overestimated. It isn't just about noise - it's about connecting fans to the players on the pitch, creating an environment they couldn't experience when watching a match at home. Once a ground gets a reputation for its atmosphere, fans want to feel it for themselves and the demand for tickets increases. As England discovered during that humbling defeat, the energy of the crowd also feeds into the success of the home team.

ATMOSPHERE



**“RUNNING OUT FOR YOUR COUNTRY
IN FRONT OF YOUR HOME FANS
AT A PACKED
MILLENNIUM STADIUM
IS THE BEST FEELING
EVER”**

- LEIGH HALFPENNY, WALES INTERNATIONAL

Forsyth Barr Stadium, Dunedin

At 45°52'S, **Forsyth Barr Stadium** is the most southerly professional stadium in the world, with a cold and wet local climate. We constructed a permanent ETFE (ethylene tetrafluoroethylene) roof to encourage maximum attendance at all events. Designed for use in the space industry, ETFE is UV transparent and, while only 1% the weight of glass, it is able to bear 400 times its own weight. A team of turf experts spent 2 years on site testing the effects of grass growth under ETFE.



TECHNOLOGY





Sections 640 - 6
Food & Beverage
Toilets

Eden Park is set within a sensitive historical neighbourhood and this residential context, lack of public transport access and the varying state of repair of the various stands created a complex array of issues that needed to be addressed in the design. The redeveloped stadium embodies the principles of sustainable sports architecture through the careful integration of existing facilities into new east and south stands, the re-orientation of the cricket block to create an improved spectator experience, and the development of a public transport hub to the western end of the ground. The new south stand and eastern terraces are wrapped in a translucent skin that encloses the concourse and integral activities of the stadium while removing the fences to the park's perimeter, an approach that has allowed the park to open up to the public, while keeping the stadium secure along the building's edge.

**Eden Park,
Auckland**



SUSTAINABILITY





London 2012 Olympic & Paralympic Games

EVENTS & OVERLAY

We have supported some of the biggest events in world sport with our expertise in event masterplanning and overlay design. Our largest undertaking to date was the **London 2012 Olympic & Paralympic Games**, where we were responsible for designing the main Olympic Stadium, as well as temporary competition venues sited at some of London's most historic landmarks, like the beach volleyball at Horse Guards Parade, the archery at Lord's Cricket Ground, and the equestrian events in Greenwich Park. In addition, there was a need for over 100 temporary structures to support these facilities, from media centres, offices, and stores, to drug testing laboratories, pedestrian bridges, and temporary start and finish lines. Overlay is the logistical, technical and architectural work that ensures these facilities are of the highest quality.

AMI Stadium, Christchurch

After two earthquakes, the local government in Christchurch decided to build a temporary stadium while the long term future of the city's badly-damaged main stadium could be decided. The NZ \$30M stadium was constructed in less than 100 days, in time for the Canterbury Crusaders first home game of the 2012 Super Rugby Season.





THE FUTURE



**FFR Grand
Stade, Paris**

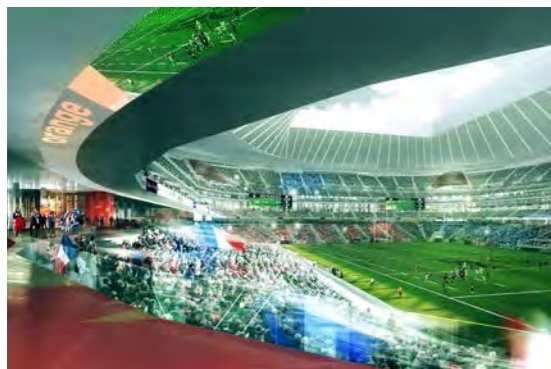
Everything about the design of the **FFR Grand Stade** is geared towards creating the most intense atmosphere in international rugby. The seating tiers will be the steepest in the world for a stadium of this size, coming closer to the pitch than at any other rugby venue, while giving every spectator the best possible sightlines. The general admission concourses - designed like the arcades around a village square - will provide a direct view of the field of play. Supporters will be able to circulate easily from their seats to the different eating and drinking areas, while remaining in the atmosphere of the arena. The stadium will have a retractable roof to contain the noise of the crowd, and also a retractable pitch, which will allow it to host a wide variety of events. The stadium's most original features are positioned on its highest level. The four corners of the upper concourse will be animated by large platforms open to the seating bowl. These areas - the *Plazas des Bandas* - will be home to the spectators' brass bands, which are traditional in French rugby. The bands have been specially positioned so that the sound of their instruments will reverberate around the roof above, before cascading down the tiers below.



Range
11-30
01-10

**“A MAGIC PLACE TO PLAY HERE AT
WEMBLEY
ONE OF THE GREAT GROUNDS...
AND 90,000 PEOPLE
SCREAMING
THAT’S WHAT YOU PLAY THE GAME FOR”**

- Richie McCaw, Captain, New Zealand



FFR GRAND STADE

LOCATION: Paris, France
CLIENT: FFR
COMPLETION DATE: TBC
CAPACITY: 82,000

The FFR Grand Stade will be France's national rugby stadium, hosting all home matches, while also accommodating conventions, shows and a range of sporting events thanks to its multi-purpose design. The retractable pitch will give the FFR the best quality pitch in international rugby. The retractable roof will deliver a more intense atmosphere and ensure matches are played whatever the weather. Its architecture echoes a fortified town, and the white stone quarries of Baux de Provence. Inside, the Plazas des Bandas, the arcades, the multi-level lounges, and the corner suites make a variety of unique spaces to stir the fervors of the French rugby fans.



FORSYTH BARR STADIUM

LOCATION: Dunedin, New Zealand
CLIENT: Carlsbrook Stadium Trust
COMPLETION DATE: 2011
CAPACITY: 20,000
VALUE: NZ \$165m
COMPETITIONS: 2011 RWC

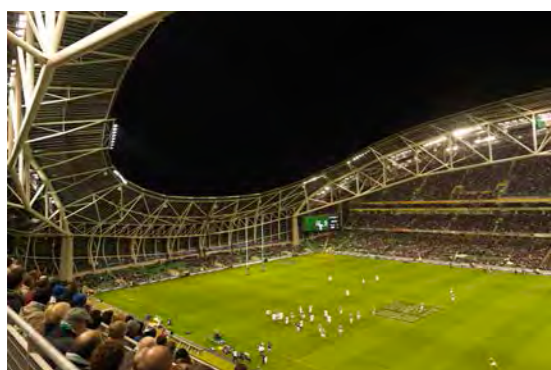
Forsyth Barr Stadium is the most southerly professional stadium in the world. When the decision was made to commission a new stadium, an all-weather venue was the obvious choice, but given the modest size of Dunedin (119,000 people), it was difficult to justify the cost of an enclosed venue for a handful of sporting matches. It was agreed that the stadium be used for a variety of purposes, including sporting, cultural, and educational uses. A permanent roof was therefore required. Using ETFE, the Populous team designed the world's only permanently covered stadium to boast a natural turf playing field.



EDEN PARK

LOCATION: Auckland, New Zealand
CLIENT: Eden Park Trust Board
COMPLETION DATE: 2010
CAPACITY: 60,000 (RWC),
50,000 (Legacy)
COMPETITIONS: 2011 RWC

The redevelopment of Eden Park saw the stadium capacity increased to 60,000 for the Rugby World Cup finals before reducing to 50,000 in its legacy mode. The redeveloped stadium embodies the principles of sustainable sports architecture through the careful retention and integration of existing facilities into new east and south stands, the re-orientation of the cricket block to create an improved spectator experience, and the development of a public transport hub to the western end of the ground. The new stands are wrapped in a translucent skin that encloses the concourse and integral activities of the stadium whilst removing the fences to the park's perimeter.



AVIVA STADIUM

LOCATION: Dublin, Ireland
CLIENT: Aviva Stadium
COMPLETION DATE: 2010
CAPACITY: 50,000
VALUE: €400m
COMPETITIONS: 6 Nations

The fluid form of the Aviva Stadium is a response to the proximity of the adjacent terraced housing, the transparent skin of the roof sloping down on the north side to allow the maximum amount of light through to the neighbouring gardens. The shimmering shingled roof surface rises up on the east and west to give cover to the large side stands and the roof drops down slightly again at the south to maximise winter sun onto the pitch. The stadium is designed to host international standard rugby, football and concert events, providing improved facilities for event spectators, tenant clubs, conferences, and the local community.



CBUS SUPER STADIUM

LOCATION: Robina, Australia
CLIENT: MSFA
COMPLETION DATE: 2008
CAPACITY: 25,000
VALUE: AUD \$120m
COMPETITIONS: HSBC Sevens World Series (Gold Coast Sevens)

The stadium is designed to reflect the identity of the Gold Coast. The main tenant of this regional stadium is the Gold Coast National Rugby League team, but the stadium also accommodates rugby union and soccer. It was completed before the beginning of the 2008 rugby league season. The building is designed for atmosphere and cost efficiency. The seating bowl is a single wrap-around tier, designed to achieve the closest possible seating configuration as well as the maximum coliseum effect. The cantilevered roof on all four sides of the stadium is also designed to provide a sense of enclosure as well as providing retention of sound and light and protection from weather.



SUNCORP STADIUM

LOCATION: Brisbane, Australia
CLIENT: Queensland Government
COMPLETION DATE: 2003
CAPACITY: 52,500
VALUE: AUD \$180m
COMPETITIONS: 2003 RWC

Suncorp Stadium at Lang Park is the first purpose-built rectangular stadium in Australia. Set in the heart of an inner city residential area on the edge of the Queensland capital city's CBD, the stadium is the quintessential urban stadium. The stadium has been designed to reflect a sub-tropical climate and outdoor lifestyle. Open air terraces and viewing galleries provide a modern interpretation of traditional Australian stadium features. Materials have been carefully selected to reinforce the design, such as recycled timber screens to shade the large glazed areas enclosing dining spaces. Outdoor BBQ grills have also been located behind the screens.



WESTPAC STADIUM

LOCATION: Wellington, New Zealand
CLIENT: Wellington Stadium Trust
COMPLETION DATE: 2000
CAPACITY: 34,500
VALUE: NZ \$96m
COMPETITIONS: 2011 RWC

Westpac Stadium is home to the two main sporting codes of rugby and cricket. The purpose built stadium offers state-of-the-art facilities for 34,500 spectators, and provided a unique opportunity to develop a world-class cricket venue as a whole entity - rather than adding to an existing facility in a piecemeal fashion. The bowl took an unusual oval form as a rational response to the need to provide a five block cricket wicket of international standing. The bowl design includes a complete oval lower tier, with separate box level seating of 2600 to the underside of the roof, giving dramatic and unobstructed views of the whole arena.



ANZ STADIUM

LOCATION: Sydney, Australia
CLIENT: Stadium Australia Trust
COMPLETION DATE: 1999
CAPACITY: 110,000 (Olympic)
85,000 (Legacy)
VALUE: AUD \$510m
COMPETITIONS: 2003 RWC

ANZ Stadium is the largest capacity Olympic stadium ever built. The challenge was to design a venue which could accommodate 110,000 people during the Olympics but which could be reduced down afterwards to operate as a sustainable long term venue of 85,000 seats. The design solution was the removal of the upper end tiers and the addition of end roofs post-Games. Moveable seating tiers on rails were also installed to enable spectators to be brought in closer to the action, and allow for a variety of sports. This was the first time that a stadium of this scale had been designed to be reconfigured post event.



MILLENNIUM STADIUM

LOCATION: Cardiff, UK
CLIENT: Welsh Rugby Union and Cardiff City Council
COMPLETION DATE: 1999
CAPACITY: 74,500
VALUE: £120m
COMPETITIONS: 1999 RWC, 2007 RWC, 2015 RWC, 6 Nations

The Millennium Stadium is all about atmosphere. For many rugby fans there's nowhere else quite like it in the world. The steep tiers surround the pitch like a ravine putting spectators right on top of the action, while the roof, even when open, emphasises the roar of the crowd, consistently creating the loudest ground in the Six Nations. While primarily a venue for rugby, the Millennium Stadium has also staged a number of concerts, including the Tsunami Relief Concert. The stadium also hosted the Final of the FA Cup while Wembley Stadium was being built, and is set to host the 2017 UEFA Champions League Final.



HONG KONG STADIUM

LOCATION: Hong Kong
CLIENT: Hong Kong Jockey Club
COMPLETION DATE: 1994
CAPACITY: 40,000
VALUE: \$85m
COMPETITIONS: HSBC Sevens World Series (Hong Kong Sevens)

Nestled in the valley of a tropical forest where the topography soars 300 feet above the surface of the pitch, the facility is the essence of site-shape unity. A continuous seating bowl, elliptically shaped about the pitch, gracefully transitions the surrounding hillsides into the structure of the stadium. The stadium incorporates two levels of seating to accommodate 40,000 spectators, and includes 50 private air-conditioned suites on an exclusive club level. Also included within the complex is 50,000 square feet of office space for the Hong Kong Sports Development Board in a separate office building, complete with its own lecture theatre.



CIRCUIT OF WALES

LOCATION: Rassau, Wales
 CLIENT: Heads of the Valleys Development Company
 COMPLETION DATE: TBC
 VALUE: £250m

The Circuit of Wales will transform 830 acres of Blaenau Gwent in the scenic Welsh valleys on an unparalleled scale, and will shine the global spotlight on the region. It will represent a centre of excellence for UK motor sport and deliver an unrivalled low carbon international motor sports facility. Additionally, the development will be a world-class automotive cluster, centred around a performance circuit designed to host international motor sport events such as MotoGP, World Superbikes, World Motocross and World Touring Car, and will be a major addition to the UK's portfolio of leading motor sports facilities.



TOTTENHAM HOTSPUR STADIUM

LOCATION: London, UK
 CLIENT: Tottenham Hotspur FC
 COMPLETION DATE: 2018
 CAPACITY: 61,000

The new stadium for Tottenham Hotspur FC will revolutionise club stadium design, as well as bringing the spectacle of the NFL to North London for the first time. Designed to perfectly accommodate both elite football codes, the stadium will have a capacity of 61,000 seats and will include a large single-tier, 'home end' stand of 17,000 seats – the largest of its type in the UK – creating an intense atmosphere during matches. A large open public square to the south of the stadium, equivalent in size to Trafalgar Square and operated by the THFC Foundation, will allow for a range of sporting and community activities throughout the year.



LORD'S WARNER STAND

LOCATION: London, UK
 CLIENT: MCC
 COMPLETION DATE: 2017

The Warner Stand is the first major phase of MCC's redevelopment of Lord's. The stand will dramatically improve the views from 600 seats that currently have very poor sightlines, and provide a new state-of-the-art match control and match officials' facility. It also includes a spectacular 135-seat restaurant with commanding views over the Ground. Providing cover to the new stand will be a semi-translucent fabric roof, supported by a timber structure. This style of roof – the first of its kind in the country – will reduce shadowing from the stand on to the playing area, while also ensuring that spectators benefit from both shade and a high degree of natural light.



DARLING HARBOUR LIVE

LOCATION: Sydney, Australia
 CLIENT: NSW Government
 COMPLETION DATE: 2016

Sydney's new International Convention, Exhibition and Entertainment precinct at Darling Harbour will reflect the dynamism of Sydney's cityscape, while respecting the precinct's parkland setting. The landmark Convention Centre, deliberately clad in materials which reflect its spectacular harbour outlook, will be complimented by the rest of the precinct which looks onto parkland. Here, the building's boundaries are set back, designed so the landscape becomes part of the building, with circulation and meeting spaces open to the park, terraces functioning as meeting spaces, and a huge 5000 sqm open deck on top of the building providing a platform to be used for major events.



LONDON 2012 OLYMPIC STADIUM

LOCATION: London, UK
 CLIENT: LOCOG
 COMPLETION DATE: 2012
 CAPACITY: 80,000

The London Olympic Stadium brought all 80,000 spectators far closer to the event than at previous Games venues with a compact seating bowl. The design made full use of the stadium's island situation, providing a circuit of spectator podium concourse, connected by bridges to the main park. This podium concourse promoted the carnival nature of the event with an array of facilities distributed along the water's edge. During the three hours of an athletics event, spectators were free to move from their seat out onto the podium to visit these colourful clusters of concession pods, and view across the waterways the activities in the adjacent park and venues.



SILVERSTONE

LOCATION: Silverstone, UK
 CLIENT: BRDC
 COMPLETION DATE: 2011

Having failed to gain the rights to the F1 Grand Prix in 2008, Silverstone wanted to upgrade their track and facilities to bring the historic circuit back to its rightful position at the heart of UK motor sport and make it a destination again, for drivers and spectators. The masterplan had several phases, including a 360 metre long pit and paddock building and an upgraded circuit with a new section that would enable Silverstone both to get a circuit licence to host MotoGP and bring the excitement of overtaking back to the track.



WIMBLEDON CENTRE COURT

LOCATION: London, UK
 CLIENT: AELTC
 COMPLETION DATE: 2009
 CAPACITY: 15,000
 VALUE: \$450m

The most dramatic feature of the Centre Court redesign is the retractable roof. Measuring 65 x 75m, the hydraulically operated structure is a folding fabric concertina, with steel trusses supporting a translucent fabric skin. The roof allows matches to be played under cover during inclement weather over the two weeks of The Championships. A key consideration in the design was the internal environment: both the players and spectators need to be comfortable. To that end, the design allows natural light to reach the grass, while an airflow removes condensation from within the bowl.



YANKEE STADIUM

LOCATION: Bronx, New York
 CLIENT: New York Yankees
 COMPLETION DATE: 2009
 CAPACITY: 49,000
 VALUE: \$2.3b

Yankee Stadium serves as a container of emotions to capture the revelry and pride needed to carry the most storied franchise in American sport into the next generation. The ballpark's skin is highlighted by a four-story limestone and granite facade inspired by the 1923 Bronx Stadium. The signature frieze from the original ballpark was recreated as a crowning element of the seating bowl, and the same field geometry that served as a framework for yesterday's legends will challenge tomorrow's heroes. Although the ballpark was built across the street from the original location, New Yankee Stadium has ignited a transformation of the Bronx community in which it is located.



WEMBLEY STADIUM

LOCATION: London, UK
 CLIENT: Wembley Stadium Ltd
 COMPLETION DATE: 2007
 CAPACITY: 90,000
 VALUE: £352m

Wembley Stadium was designed as a multi-purpose venue to host football, rugby, events, and concerts. An open, four-tier seating bowl gives excellent sightlines across the pitch, and improved spectator comfort. A retractable roof on the southern side allows additional light and air onto the pitch and shelters spectators during events. Key to the roof design is the Wembley Arch, symbol of the new stadium and the longest single span roof structure in the world. Supporting both the fixed and moving roof sections from above, the arch eliminates internal columns, and brings a new landmark to the London skyline.



O₂ ARENA

LOCATION: London, UK
 CLIENT: AEG
 COMPLETION DATE: 2007
 CAPACITY: 20,000
 VALUE: £168m

Originally known as the Millennium Dome, The O₂ is one of the world's most unique contemporary structures. The logistical challenge of placing a building the scale of the O₂ Arena within the Dome lends itself to the analogy of building a ship within a bottle, only at the largest scale imaginable. An innovative structural methodology was required so that the building cores and enormous roof system could be erected without conventional tower cranes. Voted Best International Arena at the Pollstar Concert Industry Awards every year since it opened, the O₂ Arena sells more tickets than any other arena in the world, outselling its nearest rival by over 50%.