

## SHORTSTOP

**Coventry City:** The directors of Arena Coventry Limited (ACL) announced that it will let the English League One football club will play at the Ricoh Arena for free next season. Both ACL and Coventry have been in dispute for more than a year over rent issues.

**2014 Commonwealth Games:** Operators of The Hydro, a new £125m multi-purpose venue in Glasgow, were unable to confirm if it would open on time after a fire broke at its construction site. The Hydro is due to host the gymnastics and netball finals at the event.

**Liverpool:** The Premier League side's managing director Ian Ayre said redevelopment of its Anfield stadium will begin this summer, following last year's announcement that the club will expand the ground by 15,000 seats, rather than build a new stadium on Stanley Park.

**Zaha Hadid:** The UK-based architect was selected to design the Al Wakrah Stadium in Qatar, a host venue for games at the 2022 FIFA World Cup. Hadid designed the Aquatics Centre used at the 2012 London Olympic Games and was selected to design Tokyo's Kasumigaoka National Stadium last year.

**Crystal Palace:** The newly-promoted Premier League side plans to expand Selhurst Park's capacity from 26,000 to 40,000. Palace previously wanted to develop its former ground at the Crystal Palace National Sports Centre, but this was met with strong opposition by the local council and residents.

**2016 Olympics:** Officials in charge of preparing the Joao Havelange Olympic Stadium, which will host athletics at the event, said that the arena's roof will have to be rebuilt, with work not expected to finish until 12 months before the Games begin.

**Formula One:** Plans to stage a night race on the streets of Bangkok from 2015 were dashed by government officials. The city's metropolitan authority passed a law banning motor racing in inner Bangkok to preserve its cultural heritage. The race could now be hosted on the island of Phuket.

**Olympic Stadium:** The multi-purpose stadium, originally built for the 2012 London Olympics, was given the green light by the London Legacy Development Corporation to expand by 20,000 seats.



The new stadium vision - Minnesota Vikings

## OUT OF THIS WORLD

The National Football League is set to welcome its latest state-of-the-art venue in 2016, with the arrival of a \$975 million stadium in Minnesota.

**Rob Ridley** asks the designers exactly what makes it state-of-the-art.

**THE STRIKING DESIGN** of the Minnesota Vikings' new home has seen many liken it to a 'spaceship'.

Masterminds of the 65,000-seater venue are HKS Sports & Entertainment Group, whose most recent National Football League (NFL) projects have included the Cowboys Stadium, home of the Dallas Cowboys, and the Indianapolis Colts' Lucas Oil Stadium.

Bryan Trubey, design principal at HKS, admits the Vikings have proved a "really bold client" in embracing the innovative aspects of the project.

With the largest transparent roof in North America, and doors that open onto the downtown Minneapolis skyline, the architects claim the facility's openness and sleek geometric exterior will make it unlike any other stadium in the United States.

"It's going to look instantly recognisable," Trubey told *SportBusiness International*. "It's an incredible looking building, but also the interior is pretty unique in that the building is completely open to the downtown skyline, and that's an unusual gesture."

However, it is the design of the roof, and its use of ETFE plastic, that is set to prove to be the stadium's signature element (ETFE panels cover the outside of the Allianz Arena, home of Bayern Munich). Spanning 240,000 square feet, ETFE material on the south side will make up 60 per cent of the entire roof, while hard metal decking on the north side will account for the remaining 40 per cent.

The angle of the roof will allow sunlight over the entire field, creating a hybrid indoor-outdoor feel for fans, while also addressing key climate

and sustainability challenges, with snow-loading a major issue in Minneapolis.

"The real issue here was how we could change the whole feel of the interior of the building, making it transform from an indoor arena-style environment to a completely outdoor environment," says Trubey. "You can only operate a retractable roof under certain conditions. If the wind gets too high, or you get too much snow, you can't operate it. We think the [ETFE] solution is far superior to having a retractable roof."

"You feel like you're outdoors all the time. It also helped us from a sustainability standpoint, allowing us to heat the building much more efficiently during the [American] football season, which occurs during the middle of the winter, while also allowing better ventilation during the summer time."

As with any modern stadium, multi-purpose is again crucial to the design, and with the likes of the Super Bowl, basketball, soccer and world-class concerts on the potential hosting roster, Trubey believes the world of sport and entertainment are the stadium's oyster.

"We've gone one better with the Vikings because we have got all the different settings of the Cowboys and Lucas Oil, but also have a configuration where we're able to set up an NCAA (National Collegiate Athletic Association) baseball facility," he says. "This is one of the unique usages of the existing facility which they wanted to carry over."

Digital technology will also be on show with two of the largest video boards in the NFL, each measuring 120 by 50 feet, added to by thousands of feet of video ribbons running around the seating tiers.