

A NATIONAL SPORTS FACILITY IN A HISTORIC LANDSCAPE – THE MAKING OF ST GEORGE’S PARK

It's been over a decade coming. But today, the National Football Centre at St George's Park in Burton upon Trent is a truly world class destination for training and sporting facilities. A £100 million development set in 143ha of parkland, it's the training home for Club England which runs all 24 England representative sides. It's also an inspirational centre for coach education, a Hilton and



Hampton hotel complex, a conferencing hub for business and sporting communities, a leading centre for sports medicine and science, and a training magnet for teams, individual players and athletes. Engineering and environmental consultancy Wardell Armstrong was selected by the FA to be the project landscape architects to support their vision for world class sporting facilities within a quintessential English parkland setting.

With English football in the relative doldrums ever since the glory days of the 1966 World Cup, and the national team always seeming to be chasing the tail of more lavishly resourced countries, the FA had long cherished an ambition to create such a world class facility. So in 2001 they bought a large area of land in the historic landscape of Byrkley Park, a former home of the Bass brewing family in the ancient forest of Needwood.

In 2005, the first outdoor pitches began to take shape. But by 2010, work had started in earnest to build and bring to reality the vision of a national football centre to match anything anywhere in the world. The FA's ambition was to see it completed and operational by the summer of 2012 – an extremely demanding programme with a construction period of only seventeen months.

But as well as the time pressures, there were major landscaping and ecological challenges facing the designers. Since the demolition of the Victorian house in the 1950s, the landscape had fallen into a neglected state of land management. There were large areas of locally rare wood pasture with many mature and veteran trees. The site had also become home to large populations of protected species including great crested newts, lapwing and golden plover and 297 great crested newts, 182 smooth newts, 57 frogs and 7,157 toads were trapped and carefully moved to their new habitat before works could commence.

Would it be possible to integrate a very large new development together with all the necessary earthworks and infrastructure into such a sensitive historical landscape in a way that would sustain the heritage and wildlife habitats of the park?

To help meet this difficult challenge, Wardell Armstrong was selected by the FA in 2010 to be the project landscape architects as part of the multidisciplinary design team. They worked closely with the design build contractor Bowmer and Kirkland (to whom the design team were novated), and the lead architects Redbox Design Group.

SHARED COMMITMENT

These close working relationships played a critical role in recognising the sensitivity of the landscape and the importance of carefully maintaining the setting. Ecological mitigation was a high priority at the design stage and throughout the contract period, both in terms of translocation and the protection of areas and species. Despite the inevitable rigorous cost control on a project of such scale and complexity, there was a shared commitment to maintain high quality landscaping throughout, without letting it suffer as a late element of the project.

Wardell Armstrong was responsible for the development of the landscape strategy and management. This included biodiversity mitigation for the whole estate as well as the design of the external works and planting. The landscape design involved the creation of the hotel courtyard, a new lake to its front, the first stages of the re-establishment of parkland pasture, and new tree planting. Specialist surface finishes were used to articulate routes and allow the site to be fully accessible. The development has been achieved with the removal of only six trees, all of poor quality, while ensuring the protection of the many mature and veteran trees.

An early task was to mitigate for the migrant population of golden plover. As part of the landscape design the Wardell Armstrong team created a new habitat with a 1500m² lakeside beach area, replacing a large area of rough stone. They also created a new lake to the front of the hotel with marginal aquatic planting as part of a SUDS surface water management system to allow drainage from hard surfaces. As well as serving as an attractive feature for visitors as they approach the hotel complex, the new lake attracts biodiversity and wildlife.



An even greater challenge was to ensure that the large numbers of existing trees were protected. Many of these are mature, including seventeen oaks of veteran status. Bowmer and Kirkland took a highly responsible approach in accepting the importance of root protection zones and exclusion areas from the outset. Wardell Armstrong contributed to induction talks to

site operatives on the sensitivity of the natural environment. The exclusion zones they created succeeded in ensuring that no land was disturbed within the root spread – a particular challenge when one copse was within only twenty metres of a planned building.

Acorn regeneration areas were established and fenced off from grazing so that any acorns that sprouted could be used as native stock, while new blocks of native planting served to increase the age diversity of the estate. 2450 new trees were planted in total.

QUALITY FINISHES

The natural undulations of the parkland landscape are reflected in the stunning timber, glass and burnished steel architecture of the new national football centre, with its office accommodation, sports medicine and science facilities including hydrotherapy, rehabilitation and altitude chamber, and the main sports building containing a full size indoor 3g synthetic pitch, twelve court sports hall and gymnasium. Externally, eleven pitches including a replica Wembley pitch with a Desso stitched synthetic fibre and three community pitches, sand training and rehabilitation areas complete the world class facilities.

Working closely with the architects from Redbox Design Group to make sure that the external environment reflected the design intent of the whole development from the hotel courtyard outwards to the car parks and the parkland beyond, Wardell Armstrong was also responsible for the external finishes from the building thresholds.

The centrepiece of the hotel complex is the formal courtyard with its patterned natural granite paving and pools linked by a central rill and flanked by raised lawns, formal yew hedging and framed by a double line of box headed hornbeam underplanted with ivy. Quality finishes were maintained throughout with the extensive use of natural stone for paving and retaining walls.

Pedestrian circulation was carefully considered to achieve maximum accessibility on a sloping site, with steps kept to a minimum. A hierarchy of broad granite-paved paths connects the buildings. Mastertint coloured asphalt in the car parks captures the colour of local natural gravels, while new planting is already softening the impact of the parking areas. Further into the estate, Breedon gravel provides informal paths through the landscaped areas.

Polymeric rubber crumb surfacing - again colour matched to the locally sourced natural gravel - was used on the footpaths around the sports building and between changing rooms and pitches to allow players to walk around in studded boots.

The first phase of the re-establishment of the parkland estate has begun with the return of arable fields to permanent pasture, the management of a local rare area of wood pasture through selective grazing, and the planting of replacement parkland trees to improve the age diversity on the estate. This has involved sourcing specimen oaks of Midland provenance.

INSPIRING POTENTIAL

“St George’s Park is a haven for personal development,” said its chairman David Sheepshanks. “It encourages an ethos of learning, teamwork and leadership, and radiates an energy of fitness, human performance and innovation every minute of the day.”

Wardell Armstrong’s team of landscape architects who contributed to the success of the scheme was led by Andrew Roe, together with Helen Kennedy, Stephanie Leung, Graeme Rosser and other specialists who helped with the technical design of the hard and soft landscaping and the setting out of the works. Many aspects of the project called for intricate and involved detailing to ensure the design concepts were achieved.

“It was a huge privilege to work on such a nationally prestigious scheme,” said Andrew Roe. “We’re proud to have played our part in creating a setting to inspire sporting potential while also protecting and enhancing the natural landscape of the area.”

The tight seventeen month timetable was successfully met. After site works started in February 2011, the project was handed over on time on 2 July 2012. The facilities became fully operational and open to the public the following month. The official opening took place on 9 October during a visit by Their Royal Highnesses the Duke and Duchess of Cambridge. The Duke planted the eighth millionth tree in The National Forest - a scarlet-leaved pin oak chosen to reflect the red of St George and sourced by the Wardell Armstrong team.

As well as designing the new environment, the consultancy prepared a long term landscape strategy for the management and maintenance of the estate, both as a planning requirement and as a dynamic document to provide cost-effective management techniques for the resident ground staff who have the responsibility of maintaining the sports fields and facilities to the highest standards.

Recognising the importance of the landscape and the setting of their new world class facilities, the FA has also retained Wardell Armstrong for a further period to provide continued advice on the establishment of the landscape, and to make sure that further planned development initiatives are sympathetically integrated.

“We’re the experts when it comes to football pitches and grass,” said head groundsman Alan Ferguson. “The Wardell Armstrong team have been a great help in helping us manage the wider landscape beyond the playing fields, and maintain its heritage and diversity for future generations.”

