

# The No.1 Court, Wimbledon Living Wall

*The All England Lawn Tennis Club, Wimbledon, London*

Project Case Study

Client: The All England Lawn Tennis Club

Installed: 2019



## Project Brief

The challenge presented by the AELTC was to create a sustainable, creative landscape design for the No.1 Court façade that reflected the 'tennis in an English garden' ambience cultivated throughout the rest of the grounds. It was also important to meet the high horticultural precedent set by the existing landscaping. Biotope worked closely with the client and considered all environmental aspects including location, aspect, shade conditions and exposure of the location, to design a unique planting design and palette incorporating the AELTC brand colours of purple (Hebe 'Caledonia' and Liriope 'Big Blue'), green and white (Bergenia 'Bressingham White', Euonymus fortune 'Emerald Gaiety' and Polypodium vulgare).

The unique planting design takes inspiration from physics imagery and reflects a movement wave pattern relating to momentum with speed, such as a tennis ball being hit.

The plants are hardy and a combination of species that offer year-round interest and ensure there is foliage cover even in winter. Throughout the living walls there are seasonal blooming species from spring to autumn, especially the Hebe 'Champagne' and 'Caledonia' which are expected to bloom during The Championships fortnight.

In 2013, The All England Lawn Tennis Club (AELTC) announced plans for a multi-million pound refurbishment of the No.1 Court, famous as the second largest Show Court used for The Championships, Wimbledon. Included in the plans were a new, fixed and retractable roof, increased spectator capacity, refurbishment of the hospitality suites, the creation of a two-level public plaza and the installation of two living walls, one each side of the Big Screen facing Aorangi Terrace, commonly known as 'the Hill'. To achieve this landscape vision Biotope was appointed to work with the AELTC on the design, planting, installation and maintenance of the living walls.

## Highlights

- ◆ The living walls were installed on the north-west and west aspects of No.1 Court, using more than 14,000 plants and covering a total area of 245m<sup>2</sup>.
- ◆ Thousands of spectators enjoy watching tennis on the Big Screen from the Hill during The Championships each year making the living walls a key part of the landscape design for the No.1 Court Project.
- ◆ A very specific planting scheme was designed and tested at the Biotope nursery before the final living wall panels were planted.
- ◆ The new living walls were unveiled to the public on 19th May 2019 to a capacity crowd and an international television audience during The No.1 Court Celebration.





### Shade and Lighting Conditions

The No.1 Court living walls cover three aspects, with the design including two returns, one each side of the Big Screen. These return areas needed to show a continuation of the planting design from the main sections utilising the same planting design and plant species. Unlike the two main sections of wall, which received higher natural light levels, the two returns are tucked back under the roof overhang meaning that there is a much greater level of shading. In these conditions the plants would grow at different rates to the plants in the rest of the wall.

Biotechure carried out a full shade study and lighting review which involved taking light readings from various areas of the walls throughout the year to fully understand seasonal and daily variation. The north facing aspect does not get any direct sunlight, and the south facing aspect only gets sunlight when the sun is low in the sky due to the overhanging roof.

This lighting review indicated that these two elevations would require additional artificial lighting to allow the plant selection to thrive. It was agreed that a series of adjustable and temporary / removable spotlights would be positioned to cover the living wall returns giving the plants in these areas enough additional lighting to ensure a rate of growth consistent with the rest of the plants.

**“One of our enduring ambitions at Wimbledon is to cultivate the ambience of ‘tennis in an English garden’ for our guests to enjoy when they attend The Championships. Finding a creative and appropriate way to incorporate this theme into the No.1 Court Project was a significant challenge and we worked closely with the team at Biotechure to meet it. The end result, after five years of planning and testing, are the living walls: extraordinary and beautiful pieces of landscape design framing the Big Screen on the Hill and providing the finishing touch to the No.1 Court Project. As they continue to grow and bloom, I see the living walls delighting the half a million spectators who walk through our gates every year, many of whom tell us they are almost as excited to see the flowers and plants around the grounds as they are the tennis.”**

**- Philip Brook CBE, Chairman | The All England Lawn Tennis Club**







### **Trial Wall**

In 2017 Biotope constructed and planted two trial walls at our nursery in West Sussex. The aspect and angle of the walls was designed to perfectly match the permanent location of the walls at No.1 Court. This gave the client the opportunity to evaluate the planting palette and design, which aided the decision making process, ensuring that the finished living walls would be exactly as they had imagined them. The trial walls, which contained 1,120 plants, were in place for over a year so that the seasonal variation could also be recorded and assessed to make sure that the walls would have an interesting and beautiful appearance in all seasons. Most importantly, the client was able to see what the living walls would look like during The Championships Fortnight in summer, which is the most important event in the AELTC's calendar.

### **Irrigation System**

Like all Biotope Living Walls, the No.1 Court living walls have a state-of-the-art irrigation system. The water tank, irrigation pump and power / pressure monitoring system are housed in one of the No.1 Court plant rooms. The monitoring system sends data to the team in our West Sussex office daily reporting on water usage and run times for the system so Biotope can monitor performance.

### **Installation**

The living walls installation was done in two phases, the first fix where the backing structure, waterproof backing board, carrier rails and irrigation lines were installed, and the second fix where the pre-grown planted panels were brought to site and installed.

Every stage of the project was carefully coordinated with Sir Robert McAlpine, the lead contractor for the No.1 Court refurbishment, from pre-growing plants at the nursery and factoring in weather conditions, to panel movement and installation, to ensure all the plants looked their best and were growing healthily when they reached their new home.

### **Maintenance**

Biotope's dedicated, in-house maintenance team will work with the AELTC's horticultural team going forward to ensure that the living walls will stay healthy and looking incredible for many years to come.

