

Let There Be Light



Main image: Newport-on-Tay Tennis Club
Inset from top: Unlit porous macadam courts
Newly installed LED lights

Wormit and Newport-on-Tay Tennis Club –Key History Line



Newport-on-Tay Tennis Club

There has been a tennis club in Newport since 1884 making it one of the first clubs in Scotland. For most of its history the club operated with 3 blaes (shale) courts without lights and a traditional timber clubhouse.

Newport is now the first tennis club in Scotland, and one of the first in the UK to install full LED floodlights. This pro-active club has recently completed floodlighting their tennis courts for the first time in their 132 year history and are now at the forefront of lighting technology.

A Fresh Start

In 2012 Newport LTC combined resources with Wormit Tennis Club to form WANT (Wormit and Newport Tennis Club) with 6 courts across two sites close to the Tay. The combined clubs were able to pool their resources, invest in facilities and offer a wider range of coaching opportunities to all members. However the court sharing was limited from October to March due to the lack of lights on the Newport site.

Re-Surfacing

In 2013 Newport secured funding and started a facility upgrade plan which initially focussed on the court surface. The blaes construction is often referred to as clay but is in fact shale. Historically it was a popular surface with good playing characteristics but very susceptible to wet or frosty weather, very labour intensive to maintain through the year and required significant work at the start of the season. The benefits of floodlighting blaes courts are minimal as the courts tend to be out of use during the winter months when the need for floodlights is highest.

A decision was made to reconstruct the Newport courts with an all weather surface and the club changed to painted porous macadam courts.

Floodlighting

Now that the courts were suitable the next step in the refurbishment process was to install floodlighting. In 2014 the Scottish Government launched the Legacy 2014 Active Places Fund to fund capital projects which improve

community facilities for people to be active and take part in sport. Meeting this objective, in February 2014 Newport applied for funding for traditional metal halide floodlights and were informed in March 2014 that they had been successful with an award of £13,860 towards the installation.

At this stage the club were confident of securing the remaining funding. However the club then encountered a significant problem when they were advised that their existing supply was not

Key Facts

- **Club:** Wormit and Newport Tennis Club
- **Project:** Install LED floodlights to three courts
- **Project Value:** £38,000
- **Principal Funding Partners:** Legacy 2014 Active Places Fund managed by sportscotland, LTA Tennis Scotland, SUEZ, FET, Fife

Case Study - Facility Development

LED Floodlighting



Main picture : Aerial view
 Inset: Location plan showing the location of the floodlighting Columns
 Below: View across courts

Lighting Design

The club now needed to find additional funders and to remove the need for a new supply. After discussions with the sportscotland Facility team a specialist contractor was invited to carry out investigations at the club and discovered that there was sufficient capacity to run LED lighting but not metal halide. Further discussions highlighted a number of other advantages that LED lights would offer over metal halide.

- Lower running costs
- Lower maintenance costs
- Minimal lamp replacement
- Instant on and off controls
- Ability to adjust lux levels
- Lower power requirements
- Improved quality of light

During the period from application in 2014 to installation in 2016 LED technology had advanced and costs reduced to the point that it became viable to consider this as an option.

The club approached existing funders to gain their agreement to the specification change and identified a new funder who, based on the benefits outlined above, was willing to fund the increased cost.

Installation

The club invited tenders from 3 lighting contractors and the work proceeded with an experienced specialist LED sports

lighting contractor. The club undertook builders work and ducting using a local contractor. The work took around 4 weeks to complete.

A post installation survey was carried out to check compliance and some improvements were suggested to reduce light spill and improve uniformity. The contractor returned to fit new lenses which greatly improved the directional focus of the lights and reduced spillage to within acceptable levels whilst improving uniformity of lux level.

Key Lessons

- Fully investigate existing installation before starting a new project
- Be aware of changing technology and improved specification
- Utilise specialised and experienced contractors

sportscotland Support

- Expert design advice.
- Facilitating project development and viability.
- Funding advice and support.

Sports Development :

Senior : 65 Senior Members
 2-3 Senior teams

Junior : 50 junior members
 5 teams

LTA Tennismark Accredited venue

LTA licensed coaching team

Facilities

Tennis Courts 3 nr. bitmac

Lighting Specification

Columns 8 x 10metre
 Luminaires Osram 875w
 Lux level 400 lux
 Uniformity 0.81

