

The sports surface design consultants

The professional
services available from





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Let us
introduce

Sports Labs Ltd are a multi-disciplined consultancy practice, specialising in the delivery of sports facilities for both the public and private sector.

Sports Labs can help clients by assisting in site investigation, feasibility studies and the design and budget costings of a project, to determine what can be achieved when working to specific budget constraints, or limited ground and site conditions.

We can advise on the types of products available and on the best method to procure a finished facility, through traditional methods with a high level of supervision and project management.

Through our in-house laboratory, we also offer a full QA support package, where testing that is vital to producing a quality installation can be carried out. This testing is completed to ensure that the surface installed will meet the stringent performance criteria laid down by governing bodies.

ourselves

Sports Labs staff are drawn from engineering, business and professional sport.

We have a holistic understanding of the sports facilities construction sector.

Our design and pre-tender works encompass all of the following areas:

- Intrusive site investigations to determine the ground characteristics
- Feasibility studies to determine the suitability of the site
- Topographical surveys
- Utility surveys to identify services local to the site to support the installation
- Soil characteristics to determine the best drainage design to satisfy Environment Agency and local legislation
- Consultation with local planners and statutory bodies
- Planning applications
- Outline design drawings
- Budget costings

Company profile

Design & project management

- Selection and orientation of the best site for the facility
- Selection and assessment of products for sports specific use
- Assessment of site investigation information to design facility foundations, drainage and construction
- Design of the whole facility to comply with planning conditions
- Selection and preparation of the correct construction contract for the project
- Detailed design and construction drawings
- Specifications and Bills of Quantities
- Budgets and costs from detailed designs
- On-site supervision of the construction works
- Monthly assessment and valuations for the project
- Project management and technical guidance where required during construction
- Multi-dimensional reporting to all stakeholders and parties to the contract

QA and technical supervision


- Measurement of the construction quality through a series of field and laboratory tests
- Measurement and assessment of base compaction utilising Prima FWD
- Assessment of surface regularity at all stages of construction
- Determination of porosity of installed layers
- Shockpad quality
- Tensile strength of insitu shockpad
- Carpet quality
- Carpet seam strength
- Assessment of infill quality and quantities
- Final performance testing to FIFA/EN/FIH or IRB standards

Edinburgh University

Facilities development project, hockey pitches, Peffermill Campus

Sports Labs have been working with Edinburgh University for over 7 years, where we have been constantly improving the sports facilities on offer at their Peffermill sports venue in the south east of Edinburgh.





These facilities are widely regarded as the premier hockey venue in Scotland where there are 2 world class water-based hockey pitches.

The latest pitch was completed as recently as 2009 by McArdle Astroturf, using the very latest tufted Nylon technology from America.

This facility is used frequently for world and European events, therefore, our involvement with the University in the early stages was key to the success of the project. Using our laboratory resource, we worked closely with the University and the manufacturers to determine the optimum blend of shockpad and carpet to produce a surface worthy of hosting world class events.

Sports Labs continue to work with Edinburgh University and hope to add more premier synthetic facilities for football and rugby at their Peffermill site in the next few years.






Dundee University

Facilities development project, football and hockey pitches, Riverside Campus

The University of Dundee approached Sports Labs in October 2008 to assist them with the development of brand new sports facilities at the Riverside Campus and a second campus site.

The development was to include one full size 3G pitch built to FA community use standard that could also be used for rugby training (IRB22), one full size sand dressed hockey pitch built to perform to FIH standards, one full size natural grass pitch and four new polymeric tennis courts (second campus site).

The project had to be fully designed and procured through the University procurement route, before 19th December 2008.



This involved a significant amount of time spent with Brian Ewing (Institute of Sport & Exercise) and Gilbert Valentine (Estates), ensuring that the design of the facilities were going to work in the areas identified. Also, the specification was to be as sustainable as possible with life cycle costs never far away from design decisions.

The design was completed and the tenders were issued before the end of November 2008. These designs allowed for a double pitch area with large warm up and training area within the double pitch area. The double pitch is surrounded with twin bars, using rebound mesh on the football half and kick boards on the hockey side. Storage areas were designed at this stage to remove the need to construct an external store for goals when not in use. The area is lit using nine 15m raise/lower columns. This facility is located at the Riverside area and is supported by existing changing facilities.

The natural pitch is located immediately in front of the sports pavilion and has been completely re-drained and cultivated as well as separated from the surrounding pitches by the new spectator rail. This facility is located at the Riverside area. The tennis courts are replacement courts that involved a complete reconstruction to provide the University with a sustainable facility that demanded maintenance budget spent each year. Logistically this construction would be more demanding due to the location, but effective design pre-tender would manage this problem.

This facility is located in the main campus area. Budget costing for this project was estimated at around £1.3million.

The tenders were returned and a robust evaluation process narrowed out Spadeoak Duracourt as the preferred contractor, using Tiger products, Total Turf 67 for the 3G and Evolution 18 for the sand dressed surface. The Polymeric surfacing would be supplied by Playdeck. Quickly the project team were established and construction began on 1st March 2009. The project team consisted of Spadeoak (Peter Lothian), The University (Estates & Institute of Sport) and Sports Labs. This team would meet every two weeks to keep up the project's momentum.

The result of the pro-active project team was that the project was delivered under budget and ahead of program including providing the University with additional car parking for eighty cars and improving the emergency access routes to the facilities. The University took possession of the site in August 2009 before the students returned, allowing for staff maintenance training and familiarisation of the new facilities.

This project progressed from design desk to completion and handover in nine months, which is truly fast track considering there was a design, then tender period, followed by evaluation and award before the contractor arrived on site.

An aerial photograph of a lush green football pitch with white markings. The pitch is viewed from a high angle, showing the intricate patterns of the grass and the white lines. The background is a dark, semi-transparent box containing text.

University College Dublin

Facilities refurbishment project, GAA football pitch, Devlin Park

Devlin Park at UCD, Dublin has been the home of Gaelic Games at UCD for thirty years now. In 2007 it was decided to convert the natural grass pitch to a full synthetic pitch. The pressure on the green spaces on campus has meant that all pitches have to sustain a high level of use, and this included the GAA pitch.

In the Spring of 2007 the ground was broken to start the process of converting the pitch. Occupying a footprint of 145m x 80m this is a large synthetic area which attracts a high installation cost. The summer weather conditions in 2007 were not conducive to installing synthetic pitches, so with very wet conditions and a poor site, progress was not made until the last half of the year, eventually resulting in the opening of a well received pitch in October.

The pitch on occasion must host other sports so a full size soccer pitch occupies the central area, however in season the pitch is used by UCD and many other clubs for training and games.

The synthetic surface is a high quality dense polyethylene 65mm carpet laid onto a dynamic base.

The new surface is a 55mm monofilament which has been designed for heavily used community pitches. The pitch has met the specification requirements and the manufacturer has applied for a certificate for the surface as installed.

Client: University College Dublin, Sports Centre,
Bellfield Campus, Dublin 4.
Contact: Kevin Barnes, telephone: 00353 1706 2145.

Start date: May 2007. Completion date: Nov 2007,
telephone: 00353 1706 2145.

Contractor: Thornton Sports Ltd.

Surface: Dynamic base, 65 dual mono, fibrillated
tape SIS carpet with SBR infill, at the time to the
IRB standard.



University College Cork

Facilities refurbishment project, eight lane athletics track and hockey pitches, Mardyke Sports Centre

University College Cork embarked on a major refurbishment of its outdoor sports facilities at the Mardyke Sports Centre in 2003/2004. This followed a major refurbishment of the Sports Centre building which included the installation of an indoor pool.

The specification for the refurbishment included upgrading the eight lane athletics track to an international standard, and the upgrade of the old sand-filled pitch to incorporate a water-based hockey pitch with the latest sand dressed surface.

UCC sought tenders for Consultants to undertake a feasibility study on the upgrade of the outdoor synthetic sports facilities at the Mardyke Sports Centre in Cork. Sports Labs were appointed to undertake this work with a view to taking the project through to the construction phase.

Design, tendering and construction

The feasibility study highlighted a number of problems on-site including settlement of the existing track surface and a lack of engineering materials underlying the pitch. This placed constraints on the budget. The cost plan which was agreed was approximately €1.4m. The design of the facility had to recognise the need for careful control of the budget and, following a competitive tender process, a specialist contractor was appointed to undertake both the track and the pitch upgrade.

The track was removed and the levels on-site were improved by overlaying the existing bituminous substrate to bring it up to modern requirements.

A sandwich system comprising of an IAAF certificated Conica system was installed. The unusual feature of this pitch was the presence of the synthetic pitch in the infield of the track.

The synthetic pitch was to be a sand dressed pitch with an innovated irrigation system sponsored by Sports Labs, which allows this pitch to sustain the use of football play and yet be an excellent surface for hockey – in fact, playing as a water-based pitch at the weekends when hockey is played competitively.

Client: University College Cork, Cork, County Cork.
Contact: Christine O'Donovan,
telephone: 00353 87 247 0344.

Contractor: McArdle's Sport Tec Ltd. 1-2 Thames Park, Leicester Way, Wallingford, Oxfordshire OX10 9TA, telephone: 01491 827810.




A large, well-maintained green lawn occupies the foreground and middle ground of the image. In the background, there is a large, multi-story building with a mix of brick and stone, surrounded by mature trees. The sky is clear and blue. The overall scene is bright and sunny.

Fettes College Edinburgh

Facilities refurbishment project, recreational play surface

Fettes College, Edinburgh is one of the UK's premier independent schools, and boasts a significant campus for hosting sport, education and accommodation for all of its students.

Sports Labs have worked with the college on a number of sports surfacing projects over the last 8 years and continue to advise the school on the latest products available to them for their future developments.



The latest project was to refurbish the facilities that support each student's individual accommodation area. These facilities aim to provide the students with a more informal area to play 'inter-house' competitions, and support the main sporting facilities located within the sports fields of the school campus.

The surfaces chosen had to be 'multi-use' and extremely hard-wearing. The project also had to be delivered during the school's summer break, therefore design and procurement were on a very tight timeline.

The Procurement and selection process chose Doe Sport who used a Tarkett sand dressed artificial grass surface for the new recreation areas.

The project was successfully completed in 2008, and we look forward to working with the college again when they plan further investment in their sports facilities.




Dollar Academy

Facilities development project, hockey pitches

Dollar Academy approached Sports Labs in 2005 to assist the school in their development programme, this included significant building work as well as the construction of a synthetic hockey pitch.

This project was multi-levelled and consisted of a significant design team, working together to take the development through a very difficult and uncompromising planning process.

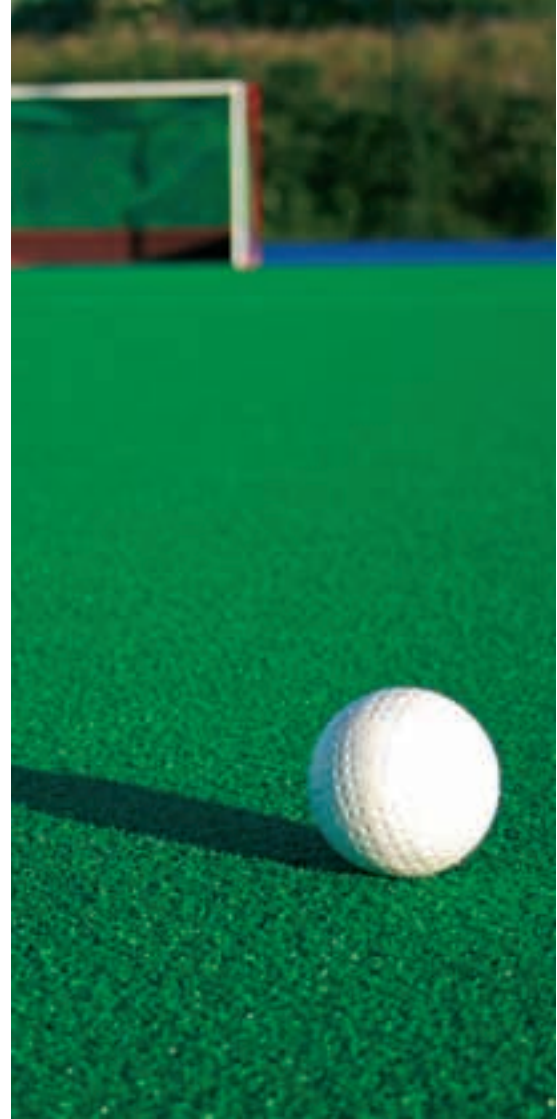
A vertical strip of grey gravel is visible on the far left edge of the page.

Design and communication was key in these first few years to ensure that whilst the statutory authorities were satisfied, the school never compromised on the quality and specification of the facility, which had to be used for both hockey and tennis.

The planning consent was secured and the procurement process commenced. We adopted a traditional approach to tendering and the eventual winner was Hunter Construction, who used a high end Tiger Turf Evolution surface for the hockey field.

Beneath this carpet we had designed a Stifler shockpad that allowed tennis to be played successfully, without compromising the hockey performance.

The project was completed in 2009 and remains one of Sports Labs' most significant success stories.



Headington School

Facilities refurbishment project, tennis courts and hockey pitches

The Bursar at Headington School approached Sports Labs in 2007 to assist them in redeveloping their existing tennis facilities and informal grass area, to deliver a hockey pitch and tennis courts that could also be used for school games besides hockey and tennis.

Design commenced in early 2008, involving significant planning roles, resulting in an innovative lighting solution from Abacus where the telescopic columns retract into their bases, allowing the lights to be stored in a lower position when not in use.



The playing surface chosen was a sand dressed option on an insitu pad, providing the best performance for both hockey and tennis.

Due to the location of this facility being in the centre of the school grounds, the process was very inclusive, with the school playing an important role in the design process. This direct input from the school was fundamental to the success of the refurbishment.

The project was completed in January 2009 with all planning conditions successfully discharged by this time.

The relationship between the client and the contractor still remains strong, with additional work on an adjacent carpark continuing into 2010.



Downe House School

Facilities refurbishment project, hockey pitches

Downe House School in Newbury identified the need for a full size FIH compliant synthetic hockey field within their own playing fields. The school wanted an asset that would allow their students to compete in national competitions.



The Bursars of the school appointed Sports Labs in 2008 to develop the land, procure and project manage the whole process on the school's behalf.

Sports Labs designed the facility through consultation with the school, and produced a tender that was returned and evaluated by the end of April 2008, with the contractors commencing on site in June 2008.

The willingness for the school and the contractors to work closely with Sports Labs allowed the project to complete 3 months ahead of the original programme.

As the new facility is the only pitch within the school, the students are now seeing the benefits of competing on a recognised hockey surface.

The surface chosen was a Tiger Evolution sand dressed surface.





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