

Ground Water Dynamics Fulham FC Training Facility Case Study



The Challenge was to install the ERGP system at Fulham FC's training facility.





The Problem

Standing water and saturated grounds in-between the training pitches and outside of existing drainage had been a long standing issue for the ground staff. Three of the poorest draining areas of the facility were targeted by the client with the sub soil makeup of the ground consisting of London Clay and the installation itself completed in 10 days. Since the system was installed and following prolonged periods of rain, the areas have remained dry and free from standing water as our system has enabled the previously saturated ground to absorb rainwater at source.

Our Solution

During the install the GWD team, along with assistance from Deputy Head Groundsman Rory Ferguson, were able to navigate drilling around the clubs existing irrigation system. Once the install had finished players could use the treated areas immediately with little change to the make-up of the surface and no post install settlement.

System Design

Following a thorough site investigation and examination of localised bore hole records a detailed design drawing dealing with 3 troublesome areas was produced. EGRP devices at 1 metre centres were vertically installed to form an exit route for groundwater which was trapped near the surface.

PROJECT FACTS

Client



Location

Fulham FC Training Ground, Motspur Park, New Malden, UK

Project Facts

Fulham FC agreed to install the EGRP system in June 2015 at their training facility in Motspur Park, New Malden. With minimal disruption whilst the install was taking place the club were able to keep the training ground open during works, this enabled the pre-season schedule to continue without interruption.

"The Groundwater Team were a pleasure to have on site, best contractors I have ever had. The work was completed perfectly and the site left in the same condition as when they started. On top of all of this the drainage is working in the areas they installed and now are laying dry for the first time in ten years."

Head Groundsman Richard Haynes

The Installation

A Comacchio specialist drill-rig, mounted on track mats used to protect the playing surface, drilled holes at varying lengths from 1.5 metres to 12 metres. EGRP devices were capped and then vertically inserted into the bore holes respectively, penetrating a thick layer of heavy clay near the surface before reaching layers of unsaturated ground below.





What are the benefits of EGRP?

- The EGRP System increases the rate at which surface water soaks into the ground. Vertical bore holes are drilled less than one metre apart, in a "diamond" pattern, and then the EGRPs are capped and inserted at varying lengths from 1.5m to 12m as per the design drawings.
- There is little or no disruption to playing surfaces and the ground remains in use during the install. Each EGRP is installed circa 20cm below ground level and once inserted the top 20cm of the bore hole is refilled with free draining top soil and/or the turf which was removed before drilling.
- There is an immediate localised improvement in percolation rates following the install of the system which is due to the physical drilling of the bore holes. It takes twelve weeks for the ground to resettle back around each EGRP which we refer to as the "acclimation process", after which the system begins to work.
- EGRP deals with rainwater at source by accelerating the infiltration rate
 of normally poor draining soil types and negating the risk of overloading
 natural water ways and/or municipal drainage systems.
- During hot dry spells the EGRP system enables moisture in the ground to return to the surface layers rehydrating the root zone and assisting the grass sward during the summer months.
- No maintenance of EGRP is required as the system is self-cleaning as
 it discharges into fissures which form over time around each device.
 Optimal performance for sports surfaces is achieved by ensuring that
 natural surfaces are well maintained i.e. aerated, free from thatch and
 organic matter.





Whatever type of sporting activity, efficient and effective drainage is essential in maintaining a good quality playing surface.

Loss of use due to water logging or damage to the grass can result in cancellation of games, lost fixtures, dissatisfied sports people and supporters and potentially financial losses.

An efficient drainage system which is capable of eliminating standing groundwater and which maintains steady moisture content within the ground even after the heaviest downpour, will vastly improve both the quality of the playing surface and the experience of those playing upon it.

Improved drainage also enables grounds people to deliver easier and more effective maintenance on time and on schedule.

Groundwater Dynamics fully understand the needs and pressure on sports clubs and local authorities to provide high quality, high yielding playing surfaces all year round. Our philosophy is to give honest and practical advice at all levels. We use our experience and technical knowledge to provide our clients solutions with their specific needs in mind. We investigate and evaluate each proposed project and produce site-specific recommendations.

Our EGRP technology is ideal for the use of the following sports: Football, Golf, Cricket, Rugby, Race Courses, Equestrian Events, Motor sports and Sports Training Facilities.

