

Bolton Golf Club

Greens Drainage Improvements

Design: Duncan Ross Ltd

Project Brief: Design and installation of a piped land drainage system to all 18 greens.



Project Overview

The greens drainage improvements carried out at Bolton Golf Club were undertaken over two phases, with Phase 1 addressing drainage issues on the greens of the front 9 holes of the course and Phase 2 on the back 9 holes. The 2 phases were implemented approximately 12 months apart; the Club was so pleased with our approach to competing the first phase and the results achieved that they were very happy to award us the contract for Phase 2.

The drainage issues being experienced on the greens were mainly due to the fact that the greens' sub-soils are primarily clay based and as such had a tendency to hold water. Although carrier drainage was already in place additional work was needed to install 80mm lateral drains beneath the greens to ensure that surface water could effectively drain into the main drainage infrastructure as efficiently as possible.

Employing effective protection systems during the work and utilising compact, low ground pressure equipment to minimise surface disturbance the work was completed with a minimum of disruption and Club members were able to continue play on temporary greens whilst the work was in progress. On completion of the drainage installation to each green all original turf was replaced and our team ensured that all traces of the work were removed.

To contain costs and to minimise the environmental impact, including carbon footprint, of the project all spoil arising from the drain trenching operations was tipped and graded locally wherever possible.

According to the Club's Head Greenkeeper the greens are the now the driest part of the course and the work has made a massive difference to the quality of play on the greens.

The main elements of the project included:

- Provision of drainage to greens totalling an area of nearly 9,000m², with new drainage carefully installed around existing irrigation systems.
- Installation of over 3,100m of piped land drainage at average depths of 600-700mm below the surface of the greens and 124 connections made to existing or newly installed carrier drains.
- All new lateral drainage to the greens backfilled with optimum ratio of stone and rootzone prior to carefully reinstating the original greens turf.