



## New Drainage Scheme & Renovations to Stadium Pitch

Design: Duncan Ross Ltd

### Project Brief:

Design and construction of a new intensive drainage system, complete with new drainage outfall, to the first team pitch at the club's New Sirs ground.



### Project Overview

Daisy Hill Football Club's New Sirs ground is located on a former market garden site in Westhoughton, near Bolton, Lancashire. The first team pitch, or Stadium Pitch, prior to our involvement was undrained and was found to be constructed on stagnogleyic, slowly permeable subsoils that impede the downward movement of water. These soils are described as fine loamy over clayey. Surface waterlogging was consequentially common due to the combination of slowly permeable subsoil and slow runoff from the relatively flat playing surface. The local climate typically saw excess rainfall during the winter playing season and this combination of factors therefore demanded action in order to address the imposition of fixture restrictions due to wet underfoot conditions.

After assessing a report on a pitch investigation undertaken by Professional Sportsturf Design (NW) Ltd, Duncan Ross Limited provided design and construction services for a new piped drainage system, complete with drainage intensification works and construction of a new drainage outfall. The drainage scheme involved:

- Piped drainage infrastructure comprising 160mm diameter main drains and 1,500m of 80mm lateral drains spaced at 4.0m centres.
- Drainage intensification works comprising the installation of 6,000m of 250mm deep sand slits at 1.0m centres across the pitch and touch line areas.
- Various renovations including grading, filling, vertidrainage, cultivations, sand topdressing, fertilising and overseeding to improve the quality and consistency of the playing surface generally and maximise surface and topsoil drainage rates.