

Nothing transforms a golf course like water.

Too much or too little, its effects are clear for all to see. And like many clubs, water has played a big part in a transformative year for Auchterarder in Perth and Kinross.

For the past 40 years, the club's greenkeeping team has maintained its parkland course with a rudimentary system that was installed by a plumber. There were no irrigation heads, just one hydrant at each green. Everything was manually-operated and fed from a 1" mains supply.

It had been possible to operate up to six sprinklers with hoses, but deterioration of the pipework had reduced capacity to a single sprinkler. With almost complete reliance on the weather, trying to maintain a good golf course was virtually impossible, but relentless hand-watering had allowed them to get by.

"It was hard to achieve any consistency," explained Course Manager Archie Dunn. "Overseeding was too risky and applying products when the weather dictated, rather than when the turf needed them, meant we never felt in control of our maintenance."

Last year's unprecedented heatwave pushed them to the brink of closure. In May members were voicing discontent and by August the course was tinder dry with soil moisture readings on greens and tee surfaces at 0%. In peak season, and despite the desperate efforts of Archie and his team who hand-watered around the clock, the course was unplayable with virtually no grass cover. They lost every green and tee and all their visitor income, which was 70% repeat business. Surviving another year in that situation simply wasn't viable.

During his 26-year tenure, Archie had presented proposals for an irrigation system on numerous occasions, so when

Image by Phil Langdon of 2ic

the club agreed to the investment, he was able to move quickly. Irrigation consultants 2ic were appointed in September 2018 to secure a sustainable water supply and design a new system to irrigate the greens, tees and approaches.

Following a competitive tender, Archie and the club selected a Rain Bird IC
System with Stratus LT Central Control and secured the services of contractor MJ
Abbott to break ground in the New Year.

"Our priority was to install a system that delivers everything we need now and in the future in order to minimise cost and disruption," Archie said.

Client-centric solutions

MJ Abbott committed to having the system fully operational by the end of March, which required careful coordination by 2ic to bring each element of the project together.

A potential borehole location was identified years ago by the late Mike Cranfield. Using divining rods, Phil Langdon of 2ic was able to hone in, resulting in the availability of 32m³ per hour of water. While no additional mains water is needed, the consultants added the pipe and cable for mains water backup into the same trench in case of borehole pump failure.



Power and water were re-routed around the course and the same trenches used to extend WiFi from the clubhouse to the greenkeepers' compound. A new pump station and water tanks were located to the south side of the course with Rain Bird's IC CONNECT sensor

input devices installed, enabling pump performance and water levels to be monitored from the central control. The IC System minimises cable joints reducing possible faults, and Rain Bird suggested conducting sprinkler trials on individual tees, while nozzles were

selected for certain areas of the course to ensure optimal uniformity of coverage.

"The difference is night and day."
Archie said. "Finally, we're able to get the full benefit of the products and sand we apply and getting much quicker results.
We began our autumn renovations the first week in August, when in previous years we'd have waited until late
September or October. We've also received feedback about the improved playability and performance from our members and visitors, which is great for team morale.

"The Stratus LT central control allows us to monitor and manage the entire system in real-time from anywhere, and with our relatively modest budget I really didn't think that would be possible. I haven't had an automated system in my greenkeeping career so it has been a big change, but I've found it easier to use than I expected. The support and training we've received from Rain Bird and the installation team has been superb, and my deputy and I are looking forward to further fine-tuning over the winter."

Working in partnership wit

