

GOLF IRRIGATION DESIGN SERVICES

With decades of experience in golf course irrigation design, Cadsult is uniquely positioned to offer our clients bespoke solutions to their golf irrigation requirements. Partnering alongside many exceptional golf course architects, we have worked on golf courses in over 30 countries around the world. Each course is approached with an understanding of the site limitations, ecological impact and cost constraints that may present themselves, and by considering each projects particular needs and architects desired look, we are able to design sustainable, efficient systems within the clients' budget.

Master Planning

In this critical phase we meet with the client and discuss project objectives, limitations, budget, proposed system, phasing and standards anticipated. If there is an existing system, we analyze the existing component to determine how to best incorporate and phase future design works into the project with the least amount of interference to the course.

Detailed Design and Documentation

This phase includes the complete head layout, pipe routing with hydraulic calculations, electrical routing, pump station design and/or coordination, scheduling and water usage requirements as well as specifications and tender documents for contractors to successfully tender and build the irrigation system from.

Construction Services

Each project has its own level of complexity and often our clients require oversight of the construction process to provide quality assurance as well as be able to mitigate any potential challenges. Within this phase we visit the site to monitor the construction process, provide detailed site reports of each visit to clients representative and to liaise with site Superintendent to review the critical day to day issues.

GPS Data Acquisition

CADSULT has in-house GPS capabilities which we can utilize to provide clients detailed as-staked and as-built plans for the irrigation system, as well as all project related items if necessary. Our GPS hardware and software is the latest technology which is particularly important when GPS'ing for as-stakes that will then need to be relocated during installation and as-part of the as-builts. It saves a superintendent time and money by pinpointing locations in the future, minimizing disturbances to the golf courses.

Audits

Audits are used to evaluate the efficiency and effectiveness of an existing irrigation system. It involves the collection of data on the system's performance to help identify areas where water is being wasted, and provide recommendations for improving the system's efficiency, ultimately conserving water and reducing costs. The process would typically include:

- Visual Inspection: Checking for broken, damaged, or leaking components, and ensuring sprinklers are properly positioned and spaced
- Distribution Uniformity (DU) Evaluation: Using catch cans to measure how evenly water is distributed across the irrigated area.
- Precipitation Rate Determination: Calculating the rate at which water is applied to ensure it matches the golf course's needs.