**Irrigation Project Questions and Answers**. 13th June 24.

Shiskine Golf and Tennis Club (SGTC) has been looking into irrigating the greens and tees on the course. The Captain has asked myself (John Salton), Willie Robertson (Greens Convenor) and Robert Waine (Finance) to produce a Q and A, allowing members a greater understanding of the decision making, and encouraging a good voting response to support the committee’s decision.

1. **Why do we need to irrigate the course at all?**

Climate change has provided us with different weather patterns from previous years, with increased wild wet weather and longer dryer periods. This is only expected to increase and therefore efficient irrigation around the course will ensure the course is maintained in good condition all year round.

1. **What’s wrong with the existing water system around the course and supplying the clubhouse?**

The biggest issue with the existing water system is low pressure and quantity. This means during dry periods only one green at a time can be serviced and at the furthest parts of the course (5th Green) the water flow is very low and can be near zero when clubhouse water is being utilised. Water pressure in clubhouse 33 psi, water pressure 5th green 15 psi and average household mains water supply 60 psi. Water charges are increasing and likely to increase further in the future. Water used is chlorinated drinking water which is not ideal for course watering. Additional properties being built near the course with SGTC at the end of the line won’t help with pressure/flow in the future. Arran in general runs out of drinking water in busy summer months with tankers bringing treated potable water taking up valuable ferry space. The R and A reported last year that some courses in the south of the country have been banned from using drinking water at times of drought. This may be an issue in later years nationwide.

1. **Why did the committee decide on the bore hole only option**?

The primary reason was financial with the club not able to support the entire cost of the full system, some of the cost would have to be passed on to the membership, and with current financial squeeze on all households this was deemed unacceptable. Regarding the club’s financial reserve previous committees have had a policy to retain a level of reserves to ensure we are in a position to react quickly to any emergency on the course allowing us to protect our core asset. This is a view of the present Committee of which the irrigation project is a step in this process but the committee feels we must still keep a level of reserves for other contingencies.

1. **Will the bore hole supply us with enough water for now and future requirements. Future proofing?**

The borehole study is available for members to read on our website at:

[Irrigation Project - Shiskine Golf And Tennis Club](https://www.shiskinegolf.com/?page_id=1673&preview=true)

In summary four areas were found to be suitable for the Borehole and were marked on the course with blue stakes. BH1 and BH 2 right hand side of the 2nd fairway, BH 3 between 2nd fairway and 9th green and BH 4 left of the 12th green and beside tennis courts. In discussions with surveyors, consultants, Greens convenor, Greenkeeper and agronomist, BH1 situated right hand side of 2nd fairway would provide more than enough water and have least disruption both at installation and ongoing to golfers. BH1 could provide up to 10 m3 an hour although this is way more than is required.

1. **Where will the water come from and where will it be stored**

A pump will be situated at the top of the borehole and will be enclosed in a steel or plastic box similar in size to a chest freezer. This pump will supply water through a buried pipe to a tank built in the area of the Greenkeepers sheds. The tank capacity has been measured to be around 20 m3 however in order to future proof the system for years to come we have looked at increasing the tank capacity to 40 m3. Tank size roughly 3.5 mtr wide 6 mtrs long and 2 mtrs high. Roughly the size of a modern motorhome.

1. **How will the course be watered with bore hole water**.

Beside the 40 m3 tank will be a small pump house holding the course pump and control system. This will feed water to the main course manifold situated next to the greenkeepers shed. This will pump water around the existing pipe network at 60-70 psi allowing many greens and tees to be water simultaneously with adequate non chlorinated water. Pipework around the course was upgraded to alkathene blue approx. 15 years ago.

1. **What will be the cost to the member for the borehole works**.

Costs for the borehole works including a tank, pumps and pipe burying will be in the region of £130,000. The committee are still in discussion whether this should come entirely from club funds.

1. **When will the works take place and what will the disruption be to the course**.

It was hoped that the works could start over the 2024-25 winter period but this can only be confirmed when an order is placed for the works. There are a limited number of installers and if they are busy on other projects then this winter’s work may slip.

1. **What will be the advantages of watering the course with borehole water**

Borehole water is as natural as it comes. Chlorine is toxic to grass and can disrupt growth. Chlorine can also decrease microbial activity and nutrient absorption in soil affecting the overall ecological balance.

1. **Can we use the borehole water to supply the clubhouse and what is our annual water bill.**

Once the borehole is drilled, we can get a sample test carried out and if (as expected) it proves fit for consumption then yes, we could back-feed to the clubhouse and supply water (treated through filtration and UV) for general use. Our water bill average daily rate at Jan 2019 was £5.30 a day. Our present water bill for Jan 24 average day rate was £14 a day or £5203 annually. Again, this is likely to rise in the future