pipe and wire, communication cable to the halfway house, aerator wire and wire or piping to restrooms. If you want to include any of these items in your project, add them to the budget, but make sure you bid show them and bid them as separate items as again, they are not part of the irrigation system and can then be easily removed from the project if there is not enough money. And you might think about adding a lightning detection/protection system either with or without horns/sirens.

You also need to include your design fees, staking fees and engineering fees. And if you want a GPS as built, then that fee, as well. You may also have a programming fee for your central depending where you are located and who is providing the programming.

Lastly you need to think about rock.

If you're lucky enough to not have any on your course, you just saved a lot of money. Odds are you have some and it has to be carefully budgeted. You need to use your experience digging on the golf course and how much exposed ledge there is. If you have rock walls on the golf course that's a good sign that you have lots of rock because it had to come from somewhere.

Rock is the one big “if” and you can't afford to be very far off in its budgeting. You'd rather be over than under, trust me. I recently broke my course record with $560,000 of rock costs on an 18-hole system. That's not a number you can afford to miss in the budget.

Your budget should also have a contingency. I am not a believer in big contingencies for golf course irrigation systems. If you and your designer do your due diligence up front so you know all your costs, you won't have to carry a large contingency and will come in on budget.

Make sure you have good numbers when you go to the membership for funds and/or approvals. This means a hard design and if at all possible hard bid numbers, especially if your course has a reputation for being over budget on projects.

Members never think you will come in on budget so they automatically add in their head to whatever number you give them. They cannot argue with hard numbers, just estimated ones.