CHOOSING A LANDSCAPE IRRIGATION CONTRACTOR



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Selecting a qualified irrigation contractor is very important. There are many irrigation products available, and the installation process requires skill, knowledge, and equipment.

Choosing an irrigation contractor to install a home irrigation (sprinkler) system can be very challenging. Few homeowners begin the process with a detailed knowledge of irrigation products or installation procedures.

Resist the temptation to install the system yourself unless you have the appropriate skills and experience. An efficient, automatic irrigation system is complex. A poor installation rarely saves money and may quickly increase your repair and water costs.

General Considerations

These suggestions and considerations will help ensure a good installation. It is also important that the purchaser understands the system being installed.

Ask the contractor to visit the site before providing an estimate. The contractor should make a careful inspection of the site. Elevation changes, plant types, or potential obstructions may not be visible from photos or satellite pictures. Be present so the contractor can ask questions.

Ask the contractor questions about his or her business. Irrigation businesses are relatively easy to start. A business license and a low voltage electrician's license are all that's needed to meet Georgia's requirements. Make sure the business is bonded and insured. Be aware that contractors new to the industry may have little experience. Inexperience increases the risk of a poor installation. Any commitment for service is only good for the life of the company, and turnover of new businesses may be happen fast.

Ask if the contractor has professional certifications. Certified contractors have demonstrated experience, passed a rigorous exam, and made a commitment to continuing education. The Irrigation Association, a national trade organization, offers several certifications that are appropriate (Certified Irrigation Contractor, Certified Irrigation Designer, Certified Landscape Irrigation Auditor, Certified Landscape Water Manager, and Certified Irrigation Technician). Some companies also offer certification programs. Environmental Protection Agency WaterSense partner contractors are recognized as leaders in water efficiency. Getting certified requires a firm commitment of time, energy, and resources. It speaks to a contractor's commitment to excellence.

Ask if the system will provide 100% water coverage (also called "head-to-head coverage").

Does coverage include grass areas, flower beds, and other unique areas of the landscape? On lawns it is important that the system provide water evenly from one sprinkler head to another, leaving no dry areas or excessively wet areas. Head-to-head coverage encourages consistent color and health across the lawn.

Ask how many zones the system will have.

Zones are areas of the landscape that are watered independently. Each zone has its own valve and line of irrigation from the water source into the landscape. Lawn areas should be on separate zones from flowers or shrubs. All of the heads in one zone should be of the same make and model. Mixed heads of different types may result in uneven watering.



Ask if there are specific requirements for your county or municipality. The state of Georgia requires a backflow preventer and a rain shutoff device. Some municipalities and counties have other requirements that must be followed.

Ask for references. Contact the references and ask about the contractor's work. Do not hesitate to call everyone on the list that the contractor provides.

Ask if any of the following services will be included in the installation price:

- Complete, written operating and maintenance instructions, including the watering schedule, winterizing, and spring reactivation instructions.
- A demonstration of how to set watering schedules and implement recommended seasonal schedule changes.
- "As-built" drawings for your records, which should include the layout of the system as it was installed and any handwritten changes noted on the original copies of the design.
- All manufacturer warranty information on materials with make, model, serial number, and sizes noted.
- Proof of payment for the materials used by the contractor.
- Sodding or reseeding costs to repair the lawn after installation.
- Any follow-up visits for system maintenance and/or troubleshooting.

Get all the details in the contract. Never accept a verbal agreement. Read the entire contract and make sure that all terms and conditions are fully understood. Finally, make sure all questions are answered to your satisfaction before signing the contract. It is always good to keep a job file with copies of all documentation for future use.

Consider the Cost of Water

Keep in mind that the cost of installation is only part of the cost of an irrigation system. Unless the owner of a home sprinkler system is on a well, he or she will pay for the water applied by the system. In many cases the homeowner will also pay the sewer charge associated with the water. These costs can quickly add up and can dwarf the cost of the installation over time.

In short, a system that uses water wisely is almost always the best buy, even if up-front costs are higher. To illustrate this point, consider a system that uses a total of 71,050 gallons per season. That is a reasonable estimate of water used by an efficient system in a landscape with 5,000 sq ft of grass and 480 sq ft of azaleas. Using price calculators available online for Cobb County (low-cost water) and the City of Atlanta (high-cost water), cumulative water costs can be calculated (Table 1).

Table 1. Comparison of cumulative water costs for an irrigation system that uses 71,050 gallons of water per year.

Location of System	Cumulative Water Costs (\$)			
	Year 1	Year 3	Year 5	Year 10
Cobb County	816	2,448	4,080	8,160
Atlanta	2,170	6,510	10,850	21,700

The average installation cost of a system serving the landscape described above is approximately \$2,400. Even with relatively inexpensive water (Cobb County), the cost of water exceeds installation costs by the third year.

Table 1 does not consider rising water prices. The price of water is variable throughout Georgia, but like most prices, it goes up over time. For example, between 2005 and 2012, the cost of water in Cobb County increased 333%, from \$0.003/gal to \$0.01/gal.

Ask potential contractors about their system and water use. If water conservation is not a consideration for the contractor, the installed system may reflect that, resulting in high water costs.

Georgia state law requires a water-saving rain shutoff device. Be wary of contractors who do not include a rain shutoff device or who water areas that do not need water. Contractors may save a couple hundred dollars on installation, but may cost thousands of dollars more in water over time.

A contractor should be able to offer water-saving technologies, such as smart controllers, drip irrigation, soil moisture sensors, and other options. Given the cost of water, it is advisable to consider and purchase appropriate technology up front. As with many other purchases, the least expensive system may not be the best.

Protect Trees

The contractor will dig trenches in the landscape to install irrigation pipes. The trenches should not slice through the critical root zone of desirable trees.

The critical zone varies by tree species and tree health. To estimate the critical root zone, measure the diameter of the tree 4.5 ft from the ground. The critical zone will range from 0.5 ft to 1.5 ft per inch of trunk diameter (e.g. 10 ft to 30 ft for a tree with a 20-in. trunk).

Trenching cuts roots and can initiate the slow decline that ultimately results in tree death. Make sure the contractor considers the location of desirable trees in the system design. Directional boring of underground utilities and irrigation pipes is a possible alternative to trenching.

Conclusion

A home irrigation system is a home improvement with multiple benefits. It can save time, money, and aid in water conservation by providing efficient water coverage to the landscape. An efficient irrigation system, installed by a qualified contractor, will provide benefits for many years.

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