

## **RESIDENTIAL LAWN SPRINKLERS**

This handout addresses the frequently asked questions regarding a lawn irrigation system.

- A \$50.50 building permit fee is required prior to installing a lawn sprinkling system. If a new electrical circuit is needed to accommodate an outlet for a timer, a \$40.40 electrical permit is also required. A homeowner may obtain the required permits. If a contractor is hired, they must be licensed in the City of Brecksville and obtain the required lawn sprinkling permit.
- To obtain the building permit, two copies of a scaled site plan must be submitted to the Building Department.

**The drawings must indicate:**

- **Location of all sprinkler heads**
- **Locate the required backflow device and specify ASSE Number and Model Number and manufacturer. Locate shut-off valves and specify the depth of water lines, as well as the material.**
- **ASTM number for piping including Poly and PVC, of the water lines used.**
- **Pipe Size**
- **Spray nozzles of a permanently installed water sprinkling system shall be so located and oriented as to prevent sprinkling over the sidewalk under normal wind conditions.**

The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric type vacuum breaker, a pressure type vacuum breaker or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

There are typically three types of backflow control devices which can be used in a lawn irrigation system:

1. Atmospheric vacuum breakers are adequate as long as there are no downstream valves including zone valves. They have to be a minimum of 7" above the highest sprinkler head they serve.
2. A pressure-type backflow device properly installed between the master shut-off valve and all manual or automatic zone valves and at least 12" above the highest sprinkler head in that zone.
3. A reduced pressure principle device must be a minimum of 12" and maximum of 36" above floor or grade.

Proper irrigation system backflow control has long been recognized as vitally necessary to protect both your own plumbing and the city water system from potentially toxic contaminants. Your efforts to insure a safe irrigation system will be appreciated by all who drink our water.

Please contact the Building Department when the system is completed for a final inspection at 440-526-2630, Monday through Friday, 8:30 a.m. to 4:30 p.m.

NOTE: Backflow devices must be tested after installation and all test report paper work must be submitted to local water purveyor.