

COMMERCIAL FACILITY IRRIGATION ASSESSMENT GUIDELINES

Commercial, multi-family, and city of Austin properties that are one-acre in size or larger must complete an irrigation system inspection every two years. An Austin Water Authorized Irrigation Inspector must perform the evaluation.

CRITICAL PROBLEMS

These will result in a property failing the inspection and being prohibited from operating its irrigation system:

- 1. **Leak** a break or other water containment failure in the irrigation main line, lateral line, or station valve. A mainline leak will fail the entire irrigation system. A lateral line or station valve leak will fail the associated station.
- 2. **Broken Head** a missing, cracked, or punctured sprinkler head, sprinkler body, swing joint, or drip line often, but not always, resulting in significant loss of water.
- 3. **Spray Landing in Street or Parking Lot** a misaligned or inappropriately sized sprinkler head resulting in a spray pattern shooting outside of the landscaped area and falling onto a street or a parking lot.
- 4. **Runoff / Ponding** in a street or parking lot, water originating from the irrigation system traveling a distance of 50 feet or more, or creating a puddle with a depth measuring ½" or more.
- 5. **High pressure / Misting** a sprinkler head operating above its recommended pressure limit resulting in excessive atomization of the spray pattern often resulting in the presence of a mist or fog effect.

During an inspection: if misting is present during the visual inspection, the inspector will measure the dynamic outlet pressure of the sprinkler head. Pressure ceilings for different emitter types are below:

- a. Spray Nozzles: 40 psi
- b. MP or Multi-stream Rotators: 50 psi
- c. Rotors: 60 psi

Pressure measurements above these ceilings result in failure of that irrigation station.

NON-CRITICAL PROBLEMS

These are noted solely to inform owners of potential efficiency improvements they could make:

- 1. **Not Hydrozoned** irrigation stations are not segregated into zones based upon plant material water requirements or sun exposure.
- 2. Clogged Nozzle uniformity of spray pattern is impaired or prevented due to build-up of debris.
- 3. **Obstructed Head** spray pattern is interrupted by an object such as vegetation or other physical object.
- 4. **Low Pressure** water pressure at sprinkler head is not adequate to maintain full throw of spray.
- 5. **Low Head** a sprinkler head that has sunk into the ground or does not rise high enough to spray over the vegetation.
- 6. **Poor Coverage** sprinkler spray pattern does not supply water evenly over the entire landscape.
- 7. **Stuck Head** sprinkler head either does not pop-up, rotate, or fails to go down after operation.
- 8. **Tilted Head** sprinkler head is not vertically aligned at ninety degrees from grade.
- 9. **Mixed Sprinkler Technologies** use of multiple sprinkler technologies (*sprays with rotors*) in a single irrigation station.