



# IRRIGATION REVIEW & INSTALLATION REQUIREMENTS



## IRRIGATION SYSTEM DESIGN:

In order to ensure proper design and installation of irrigation systems and implement the City of Allen's water conservation initiatives, new and renovated landscape irrigation systems must comply with the City of Allen and State design and installation requirements as defined by Texas Commission on Environmental Quality (TCEQ) 30 TAC 344-Landscape Irrigation.

In addition to the requirements of 30 TAC 344, the City of Allen requires the following:

- Plans shall be sealed by a licensed irrigator, landscape architect or licensed plumber to standards listed in 30 TAC 344.
- Plans must include and show location of an automatic controller and sensors that prevent the operation of irrigation during rainfall or in freezing weather.
- Sprinkler head radius must be shown on plans.
- Plans must designate turf and non-turf areas. All non-turf landscape areas shall be designed with drip irrigation and /or pressure compensating tubing (no above-ground spray).
- All landscaped areas (including turfgrass), regardless of size, located between the sidewalk and curb/pavement edge for any development shall be designed with drip irrigation and/or pressure compensating tubing (no above-ground spray) and must be noted on plan.
- All drip irrigation and/or pressure compensating tubing shall be designed and installed according to manufacturer's specifications. For subsurface installation, application rate shall not exceed .21 inches per hour.
- Turfgrass areas utilizing irrigation rotors are to be designed and installed using low-angle nozzles.
- Plans must indicate the designed distribution uniformity for the system. Irrigation heads shall be installed to provide maximum distribution uniformity. The system shall be designed to provide a distribution uniformity of 63 percent  $DUI_q$  or better.
- The irrigation design shall prevent overspray on impervious surfaces and excessive runoff.
- **Single-family homes** shall have separate zones for a drip system around the foundation and must be noted on the plan.
- **Non-single family developments** All landscape areas that are less than ten feet in width and adjacent to impervious surfaces, and landscape islands 200 sq. ft. or less in area shall be designed with drip irrigation and/or pressure compensating tubing (no above-ground spray).
- Irrigation systems that vary from the standards of this Code and are designed to minimize water usage may be reviewed and approved by the Parks and Recreation Department.

***Under the water conservation plan and drought contingency plan there are limits to the use of sprinkler systems. If a new construction building or new home requires more than two days per week watering to establish new sod or landscape, the contractor/owner must apply for a variance. There is no guarantee the variance will be granted if under the drought contingency portion of the plan. To apply for a variance, visit: [cityofallen.org/watervariance](https://www.cityofallen.org/watervariance). For more information on water conservation: <https://www.cityofallen.org/929/Water-Conservation>***





## Irrigation Inspection Form Page 2

Meter Size: \_\_\_\_\_ Meter Number: \_\_\_\_\_ Irrigation only? YES NO

Controller Information\* (Brand, model):  
\_\_\_\_\_

Cross Connection Control device (Brand, type, size): \_\_\_\_\_

Rain/ Freeze Sensor Brand: \_\_\_\_\_ Working? YES NO

TOTAL Number of zones: \_\_\_\_\_ Irrigation day program (check all days) M T W Th F S Su

Type of irrigation on controller (all that apply): Spray Rotor Bubblers Drip

**System Analysis:** All sunken, clogged, misaligned, broken, blocked, or otherwise problem heads have been corrected to maximize efficiency **before** this system analysis was performed. All zones are in most efficient working order and a zone was chosen that most represents the irrigation coverage of 60% of the property turfgrass area. Pressure reading was performed on at least one irrigation head in the zone. An IA method catch-can test was performed to determine PR and DU and results are recorded below. *(Do not audit drip zones)*

### Representative Zone information:

Soil Type: \_\_\_\_\_ Plant Type(s): \_\_\_\_\_

Zone # \_\_\_\_\_ Type of irrigation heads (circle one): Spray Rotor Number of heads: \_\_\_\_\_

Nozzle type (specialty nozzle?): \_\_\_\_\_

Number of start times for zone: \_\_\_\_\_ Minutes programmed \_\_\_\_\_

Actual Pressure reading (on irrigation head) \_\_\_\_\_ psi

Precipitation Rate (PR): \_\_\_\_\_ Inches per Hour

Distribution Uniformity (DU<sub>LQ</sub>): \_\_\_\_\_

Signature of Certified Irrigation Auditor: \_\_\_\_\_ (include copy of certificate from either Texas A&M or Irrigation Association if not on file)

Date: \_\_\_\_\_

***\*If property has more than one controller, use additional form for each controller. A minimum of one zone per controller must be audited.***