Requirements for Irrigation Systems

Town of Highland Park, Dallas County, Texas

1. Irrigation system plan shall bear the **seal of the irrigator** and **show the maximum precipitation rate (2"max) in inches per hour per zone.**

2. Separate water meter is required for irrigation system.

3. Copper line between water meter & irrigation back-flow prevention assembly.

4. Show rain & freeze sensor location on irrigation plan.

5. Irrigation system shut-off valve shall be placed within 5.0' of the water meter and located on private property & freeze/rain sensor installed.

6. Backflow prevention device shall be tested by a certified tester.

7. Backflow **test report shall be submitted** to the Town within thirty (30) days of the date of the permit and **prior** to the irrigation system final inspection.

8. Backflow test report shall be accompanied by:
   (1.) a certificate of calibration for the gauges used in the test,
   (2.) a registration form for the certified tester,
   (3.) a copy of the tester's certificate/license.

   ***NOTE*: The gauges must be shown to the building inspector for verification of calibration.**

9. A final inspection shall be requested by the irrigator and include:
   (1.) activation of related zones to verify that water does NOT spray directly on the public sidewalk, on the street, nor on the adjacent property,
   (2.) verification that copper water line was used between the meter and back-flow prevention assembly,
   (3.) verification that no public property is damaged due to the installation of the irrigation system,
   (4.) verification that backflow device test cocks are properly plugged with non-ferrous screws,
   (5.) verification of **12" air space clearance & 6" of gravel below DCA**,
   (6.) verification that no part of the irrigation system is located in the easement or alley right of way.

10. The irrigation system shall be designed and comply with Ordinance #1886 "Plumbing Ordinance" Section 614 regulating Irrigation Systems.

Ordinance No. 1886
(Adopting and Amending the 2021 IPC)

Section 614 - IRRIGATION SYSTEMS:

Subsection 614.1 - DEFINITIONS:

Irrigation System - Shall mean any system of underground pipes, valves, and irrigation heads (2 or more), designed for application of water to exterior landscaping; which is connected to the Town's water distribution system.

Substantially Rebuilt - Shall mean any irrigation system which existed prior to the date of this ordinance, and which is being rebuilt or modified to the extent that a new main service line is needed, or to the extent that any irrigation zone(s) is being reinstalled, or new pipes and/or heads are installed on such zone or zones. This definition does not include the repair of a broken pipe or repair of broken irrigation heads.

Main Service Line - Shall mean the pipe which extends from the water meter, on the customer side, and extends to the vacuum breaker which is installed on the customer's premises.

Subsection 614.2 - METERING:

Any new or substantially rebuilt irrigation system shall be connected to a separate water meter and shall be separately billed for water consumption.

Subsection 614.3 - DESIGN:

(a) Any new or substantially rebuilt irrigation system shall be designed by a registered professional engineer, architect, landscape architect, or licensed irrigator; except that a homeowner can design and perform work on property of which he is the lawful owner.

(b) A permit shall be required for any new or substantially rebuilt irrigation system, and the application for permit shall be accompanied by a drawing(s) of the proposed installation. The drawing(s) shall be to scale, and indicate the site boundaries, pipe location and sizes, and irrigation heads with design flow rate. The drawing(s) shall also indicate the design pressure at the water meter, maximum flow rate, and design application rate in inches per hour.

(c) No system shall be approved which has an application rate greater than two (2) inches of water per hour.

(d) Any new or substantially rebuilt irrigation system shall be designed to limit over spray onto adjacent properties, and to prevent run off during irrigation operation.

(e) Any substantially rebuilt irrigation system shall comply with all provisions of the International Plumbing Code which requires backflow prevention devices.

(f) Any new or substantially rebuilt irrigation system shall provide a freeze gauge of a type approved by the Town to prevent operation when temperature is at or below freezing.

(g) Any new or substantially rebuilt irrigation system shall provide a rain sensing device of a type approved by the Town to prevent operation during periods of precipitation.

Subsection 614.4 - OPERATION:

(a) A person commits an offense if he knowingly or recklessly irrigates, waters, or causes or permits the irrigation or watering of a lawn or landscape located on premises owned, leased, or managed by the person in a manner that causes:

(1) a substantial amount of water to fall upon impervious areas instead of upon the lawn or landscape, such that a constant stream of water overflows from the lawn or landscape onto a street or other drainage area; or

(2) an irrigation system or other lawn or landscape watering device to operate during any form of precipitation.

(b) A person commits an offense if, on premises owned, leased, or managed by him, he operates a lawn or landscape irrigation system or device that:

(1) has any broken or missing irrigation head; or

(2) has not been properly maintained in a manner that prevents the waste of water.

(c) A person commits an offense if, on premises owned, leased, or managed by him, he causes a discharge or otherwise permits a discharge to adjacent property, or which causes ice to form on any public street, alley, or sidewalk.

Texas Commission on Environmental Quality

BACKFLOW PREVENTION ASSEMBLY TEST AND MAINTENANCE REPORT

The following form must be completed for each assembly tested. A signed and dated original must be submitted to the public water supplier for recordkeeping *purposes:

NAME OF PWS:	Town of Highland Park
PWS ID#:	0570049
PWS MAILING ADDRESS:	4700 Drexel Dr. Highland Park, TX 75205
PWS CONTACT PERSON:	Jennifer Deaver, Sr. Building Inspector
ADDRESS OF SERVICE:	

The backflow prevention assembly detailed below has been tested and maintained as required by commission regulations and is certified to be operating within acceptable parameters.

TYPE OF BACKFLOW PREVENTION ASSEMBLY (BPA):				
☐	Reduced Pressure Principle (RPBA)	☐	Reduced Pressure Principle-Detector (RPBA-D)	Type II ☐
☐	Double Check Valve (DCVA)	☐	Double Check-Detector (DCVA-D)	Type II ☐
☐	Pressure Vacuum Breaker (PVB)	☐	Spill-Resistant Pressure Vacuum Breaker (SVB)	

Manufacturer:	Main:	Bypass:	Size:	Main: Bypass:
Model Number:	Main:	Bypass:	BPA Location:	
Serial Number:	Main:	Bypass:	BPA Serves:	

Reason for test:	New ☐	Existing ☐	Replacement ☐	Old Model/Serial #
Is the assembly installed in accordance with manufacturer recommendations and/or local codes?	☐ Yes	☐ No		
Is the assembly installed on a non-potable water supply (auxiliary)?	☐ Yes	☐ No		

TEST RESULT PASS ☐ FAIL ☐	Reduced Pressure Principle Assembly (RPBA)			Type II Assembly	PVB & SVB	
	DCVA		Relief Valve	Bypass Check	Air Inlet	Check Valve
	1st Check	2nd Check***				
Initial Test Date: Time:	Held at ____ psid Closed Tight ☐ Leaked ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐	Held at ____ psid Closed Tight ☐ Leaked ☐	Opened at ____ psid Did not open ☐ Did it fully open (Yes ☐ /No ☐)	Held at ____ psid Leaked ☐
Repairs and Materials Used**	Main: Bypass:					
Test After Repair Date: Time:	Held at ____ psid Closed Tight ☐	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid Closed Tight ☐	Opened at ____ psid	Held at ____ psid

*** 2nd check: numeric reading required for DCVA only

Differential pressure gauge used:		Potable: ☐		Non-Potable: ☐	
Make/Model:		SN:		Date tested for accuracy :	

Remarks:

Company Name:		Licensed Tester Name (Print/Type):	
Company Address:		Licensed Tester Name (Signature):	
Company Phone #:		BPAT License #	
		License Expiration Date:	

The above is certified to be true at the time of testing.

* TEST RECORDS MUST BE KEPT FOR AT LEAST THREE YEARS [30 TAC §290.46(B)]

** USE ONLY MANUFACTURER'S REPLACEMENT PARTS