CITY OF ALLEN

305 Century Parkway
Allen, Texas 75013
214-509-4130

For Office Use Only:

Permit Number: _____

Received Date: _____

Approved Date:_____By:_____

Fee Paid: $_____

Lot: _____Block: _____Sub:_____

IRRIGATION

Number of Zones:_____

RESIDENTIAL _____ **COMMERCIAL** _____

Property Address: _____

Name of Business:_____

Owner of Land: _____Address:_____

Owner of Building (if not the same as owner of land):_____

Address: _____

Contractor Name: _____ Address: _____

Plans By: _____

COST OF ALL LABOR & MATERIAL $_____

I have carefully examined and read the completed application and know the same is true and correct and hereby agree that if a permit is issued, all the provisions of the Building Ordinances and State Laws will be complied with, whether herein specified or not. I further agree to comply with all property restrictions. I am the owner of the above property or his duly authorized agent. I agree to conform to and to abide by all regulations and restrictions imposed upon construction by agencies of the United States Government.

*** For all City of Allen locates please call 214-509-4583 and for all non-municipal utility locates please call Texas One at 811**

Email Address: _____

Signature: _____**Address:** _____

Print Name: _____**Phone Number:** _____

Date: _____**Fax Number:** _____

REQUIRED SUBMITTALS: 2 Copies of Application, 1 Copy of Sealed Plan Review Checklist, 2 Copies of Signed/Sealed/Marked Plans, & 1 Subcontractor Voucher

CITY OF ALLEN
www.cityofallen.org

Permit Number _____-_____

CONTRACTOR TRADES

Company Name_____

Master's Name _____

License Number _____

Address _____

Phone Number _____

Company Name_____

Master's Name _____

License Number _____

Address _____

Phone Number _____

Company Name_____

Master's Name _____

License Number _____

Address _____

Phone Number _____

Company Name_____

Master's Name _____

License Number _____

Address _____

Phone Number _____

CITY OF ALLEN

CITY OF ALLEN COMMUNITY SERVICES DEPARTMENT
BACKLFOW PREVENTION ASSEMBLY TEST REPORT
PWS I.D. 0430025
305 Century Parkway Allen , Texas 75013
214-509-4530 * Fax: 972-390-8418

*****This form must be submitted to Building Inspections Dept prior to scheduling Final Inspection.**

MAKE SURE ALL LINES ARE FILLED IN OR THE FORM IS NOT COMPLETE

Name of Business_____ ☐ Residential ☐ Commercial

Address of Assembly:_____ ☐ Domestic ☐ Irrigation ☐ Fireline

Mailing Address:_____

Contact Person:_____

☐ **New Installation or replacement** ☐ **Annual Test**

The backflow prevention assembly detailed below has been tested and maintained as required by TCEQ (Formerly TNRCC) regulations and is certified to be operating within acceptable parameters

TYPE OF ASSEMBLY

1) ☐ Reduced Pressure Principle ☐ Reduced Pressure Principle-Detector
2) ☐ Double Check Valve ☐ Double Check-Detector
3) ☐ Pressure Vacuum Breaker ☐ Spill Resistant Pressure Vacuum Breaker

Manufacturer: _____ Size: _____

Model Number: _____ Serial Number: _____

Located At: _____
Is the assembly installed in accordance with manufacturer recommendations and/or local codes? _____

	Reduced Pressure Principle Assembly			Pressure Vacuum Breaker	
	Double Check Valve Assembly			Air Inlet	Check Valve
	1st check	2nd check	Relief Valve		
Initial Test	Held at ____psid Closed Tight ☐ Leaked ☐	Held at ____psid Closed Tight ☐ Leaked ☐	Opened at___psid Did not open ☐	Opened at ___psid Did not open ☐	Held at ____psid Leaked ☐
Repairs and Materials Used					
Test after Repair	Held at ____ psid	Held at ____psid Closed Tight ☐	Opened at __psid	Opened at __psid	Held at ____psid

Remarks: _____

The above is certified to be true at the time of testing. Tester signature: _____

Test gauge used: Make/Model _____SN:_____Calibration Date:_____

Firm Name: _____ Certified Tester (print): _____

Firm Address: _____ Cert. Tester No. _____Exp. Date_____

Firm Phone #: _____ Test Date _____ Time:_____

- **TEST RECORDS MUST BE KEPT FOR AT LEAST THREE YEARS.**
- **USE ONLY MANUFACTURER`S REPLACEMENT PARTS.**
- **IF REPLACEMENT DEVICE IS NEEDED PLEASE NOTE OLD DEVICE NUMBER ON FORM.**

City of Allen

Irrigation System Plan Review and Inspections

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. These rules are available on TCEQ website:

http://www.tceq.state.tx.us/assets/public/compliance/compliance_support/regulatory/irrigation/forms_li/rulesforregguid_063008.pdf

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

- Plans shall be sealed by a licensed irrigator to standards listed in 30 TAC 344 rules **or** by a Texas registered landscape architect.
- Plans must include and show location of an automatic controller and sensors that prevent the operation of irrigation during rainfall or in freezing weather.
- 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 DU_{LQ} or better.
- The irrigation design shall prevent overspray on impervious surfaces and excessive runoff.
- All new irrigation systems for ***single-family homes*** shall have separate zones for a drip system around the foundation and must be noted on the plan.
- 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.

All new irrigation systems for *non-single family developments* shall meet the following requirements:

- All landscape areas that are less than ten feet in width and adjacent to impervious surfaces, and landscape islands 200 square feet or less in area shall be designed with drip irrigation and/or pressure compensating tubing (no above-ground spray)

Commercial Installations:

A certified landscape irrigation auditor shall conduct irrigation inspections after installation and a completed audit form must be submitted along with the backflow test report before scheduling inspection.

- Documentation of the inspection shall be submitted to the City prior to issuing a certificate of occupancy. The inspection must include an evaluation of the system distribution uniformity and the design and installation requirements of this Code. An irrigation inspection form shall be made available by the City of Allen.

When existing irrigation systems are expanded by more than 25% (25% of the land area covered by the system); or more than 25% (25% of the land area covered by the system) of the irrigation system is replaced, the portion being expanded or replaced shall meet the current Code requirements.

After Installation, an Irrigation System Inspection is required:

After the backflow prevention device is tested, a certified landscape irrigation audit form must be submitted to Community Services, Attention: Gail Donaldson, gdonaldson@cityofallen.org, Fax: 214-509-4590, or the Building Inspection Department at: permits@cityofallen.org, Fax: 214-509-4139 before inspection can be requested. A City inspection of the irrigation system must be requested through the Building Inspection Department by calling 214-509-4149. The permit, approved plans, a copy of the required maintenance checklist with owner or owner representative signature, and a licensed irrigator or licensed installer/technician who provided supervision of installation must be on site for the inspection. In the case of ***non-single family developments***, the inspection form documenting the evaluation of the system distribution uniformity must also be on site for the inspection. The system inspection will consist of "open trench" inspection of all piping, wiring, and components of the mainline from the point of connection of the water supply, up to and including the first electric remote valve with electrical wire and connection exposed. All lateral lines, pop-up heads and other mainline or valves do not need to be exposed for this inspection. In areas, where required, a portion of the drip line or pressure compensating tubing shall be left exposed for inspection. The inspection will include a visual check of each zone for performance during a brief operation run time.

Property Address:

_____

City of Allen

Irrigation System Plan Review Check List

_____ Plan is designed according to all standards as defined by Texas Commission on Environmental Quality (TCEQ) 30 TAC 344-Landscape Irrigation. Plans need to be scaled 1" = 10' or larger.

_____ Scale, north arrow, legend, irrigator's seal and signature present on plan.

_____All irrigated and non-irrigated areas clearly shown on plan.

_____Irrigation system has separate zones based on plant material type, microclimate, topography, soil and hydrological requirements.

_____All non-turfgrass areas are designed with drip irrigation and/or pressure compensating tubing.

_____ All landscaped areas (including turfgrass) located between the sidewalk and curb/pavement edge are designed with drip irrigation and/or pressure compensating tubing.

_____Turf areas utilizing spray irrigation are designed using low-angle spray heads.

_____All components are designed to not exceed manufacturers published performance limitations.

_____All components are clearly noted on plan:

___Backflow prevention device ___Controller ___Rain/freeze sensor

___All water emission devices ___Zone Valves ___Isolation Valve

___Pressure regulating component ___Main line and lateral piping ___ Y-Type Strainer

Applies to S***ingle-Family Homes Only:***

____ System has separate zone for a drip system around the foundation.

____For all residential plans, all zones must be identified such as:

1. Front Yard
2. Right Side
3. Foundation Drip
4. Parkway Drip, etc.

Applies to ***Non-Single Family Developments Only:***

____ All landscape areas that are less than ten feet in width and adjacent to impervious surfaces, and landscape islands 200 square feet or less in area are designed with drip irrigation and/or pressure compensating tubing.

Signature of Irrigator: _____ Date: _____

Print Name: _____ Phone Number:_____ License #: _____

****If licensed irrigator is found to be falsifying information, a report will be made to TCEQ.***

Affix LI Seal Here:

City of Allen

Landscape Irrigation Systems Information Sheet

City Water Pressure:	"Varies; if more than 80 psi, a pressure reducing valve shall be installed"
Meter Size:	Systems should be sized with a 5/8" meter not to exceed 15 GPM flow
Line to House:	¾" (usually)
Location of Line from Street:	Contact your builder

Inspections Required by the Building Inspection Department:

- Backflow Assembly Test (Forms will be given with permit and must be turned in prior to scheduling Final Inspection.)
- Irrigation final at site
- ***For non-single family developments only:*** The inspection must include an evaluation of the system distribution uniformity and the design and installation requirements of this Code. (audit forms will be given with permit)

***Fee for Commercial Permit:** $10 per Zone, Maximum $500
***Fee for Residential Permit:** $75

Plumbing Requirements:

- Materials shall be those which are included in the 2009 International Plumbing Code or in the 2009 International Residential Code
- Atmospheric vacuum breakers shall not be subject to continuous pressure and must be installed at least 6" above grade. If pressure type vacuum breakers are used, they must be installed at least 12" above grade
- Other listed backflow preventers (such as double check valve assemblies), shall be installed in accordance with their listing and according to 30 TAC 344 from TCEQ.
- Minimum of 2" space from gravel to double check
- Minimum of 6" gravel base in bottom

Plan Review: Plans must be approved before permit is granted. No work shall begin until permit is granted. All plans must be scaled 1" = 10' or larger.

Landscape Irrigation diagram (plans) indicating piping, location of heads, coverage (radius) diagram, type of system for backflow prevention, should be taken to all utility companies for review as to the locations of their lines before trenching. Before excavation or boring call: Dig Tess at 1-800-344-8377.

City of Allen

Landscape Irrigation Final Inspection Check List
(Field Inspection Checklist for the City of Allen Irrigation Inspector)

____The permit, approved plans, backflow test report, a copy of the required maintenance checklist with owner or owner representative signature, and a licensed irrigator or licensed installer/technician who provided supervision of installation is on site for the inspection.

___N/A ___Pressure reducer has been installed in areas over 80 PSI (applies according to City PSI map)

___Isolation valve at point of connection of water supply is installed.

___Backflow prevention device (double check assembly) installed with 2" clearance to gravel base.

___Y-type strainer is installed on inlet side of the double check assembly.

___Mainline piping is minimum depth of 6 inches from natural grade.

___PVC pipe primer solvent- pipe is primed with colored primer prior to PVC cement.

___Electrical wire splices at valve have waterproof connectors.

___Automatic controller and rain/freeze sensor are operational.

___All zones are operational through the controller.

___No water emission device intentionally spraying on/over impervious surface.

___If spray heads are used, no misting of heads is occurring during operation.

___ Irrigation system has separate zones based on plant material type, microclimate, topography, soil and hydrological requirements.

___ All non turfgrass areas are designed with drip irrigation and/or pressure compensating tubing.

___ All landscaped areas(including turfgrass) located between the sidewalk and curb/pavement edge are designed with drip irrigation and/or pressure compensating tubing.

Comments: _____

_____

_____

_____ _____

Signature of Inspector Date of Inspection

CITY OF ALLEN

Irrigation Inspection Form

Please return completed form to address listed on the bottom of page.

Property Information:

Name of Property: _____

Address of Property: _____

Allen, Texas Zip: _____

Water utility account number: _____

Responsible Party (Person with decision making authority regarding property)

Name: _____

Address: _____

City:_____ State: ____ Zip: _____

Phone number: _____

Email: _____

Information of person conducting irrigation system inspection:

Name: _____

Address: _____

City: _____ State: ____ Zip: _____

Phone number: _____ TX LI # _____

Email: _____

*****Certified Irrigation auditor with: ____ Texas A&M ____ Irrigation Association

**** A copy of certification document from either Texas A&M or the Irrigation Association must be on file. If this is your first time to perform an audit, enclose one copy with this form.***
If licensed irrigator is found to be falsifying information, a report will be made to TCEQ.

Community Services 305 Century Parkway Allen, Texas 75013 214-509-4500
Attn: Gail Donaldson gdonaldson@cityofallen.org Fax: 214-509-4590

CITY OF ALLEN

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 (circle 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_{LQ}): _____

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.

Community Services 305 Century Parkway Allen, Texas 75013 214-509-4500
Attn: Gail Donaldson gdonaldson@cityofallen.org Fax: 214-509-4590

CITY OF ALLEN

STORM WATER POLLUTION PREVENTION AND CONSTRUCTION SITE WASTE

CONSENT FORM FOR CONTRACTORS / BUILDERS / DEVELOPERS

Project:_____ Developer:_____

Pollution prevention from a construction site is not only about controlling sedimentation and siltation by means of erosion control. All construction site waste that leaves a construction area will eventually make it into the storm water system. Siltation and the contribution of other pollutants from construction sites can cause physical, chemical and biological harm to our nation's waters.

Pollutants Most Commonly Discharged from Construction Sites
Sediment
Solid and Sanitary Wastes
Fertilizer
Pesticides
Oil and Grease
Concrete Truck Washout
Construction Chemicals
Misc. Construction Debris

ILLICIT DISCHARGE:
Any discharge from a site that is not entirely composed of storm water is known as an illicit discharge.

Please identify that you have read and understand the following construction waste guidelines by initialing each item below.

____ During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The City of Allen requires that erosion control measures be placed and maintained regularly at all construction sites.

____ If a construction site disturbs more than one (1) acre of land, it must be covered by the State's TPDES Permit TXR150000 that regulates storm water discharges to state waters.

____ All building construction debris must be gathered up and removed by the end of each day of construction or just before any projected rain event. This includes, but is not limited to excavation material, vegetation, bricks, concrete, timber, metals, glass, tiles, paper and food waste.

____ Waste, construction materials and pollutant materials must be kept in the proper City approved containers at designated waste storage areas throughout construction activities.

____ Weeds, grass, shrubs or brush shall not be deposited in any area that will allow drainage to the storm sewer system or waters of the State.

____ Any potential storm sewer pollutant (pesticides, grease, petroleum products, paints, toxic chemicals, etc.) must be stored in the upright position and on racks/stands during construction.

____ Access shall be provided at all times during construction or demolition for waste collection vehicles.

____ All of the following are indications that storm water leaving a construction site contains an illicit discharge. *The contractor must keep a constant check that any water leaving a construction site is free of these indicators*:

Unusual Color or Cloudiness	Strong Musty or Pungent Odor	Floating Debris
Surface Scum or Foam	Oil Sheen	Algae

____ If the site contains construction trash, does not maintain its erosion control measures, is releasing illicit discharges or is not in compliance with any portion of the City of Allen Code of Ordinances (incl. Article IV, Property Maintenance Code) it can be issued a Notice of Violation.

My signature below indicates that I have read and understand the above information.

Signature: _____ Date: _____

Print Name: _____

Recommended Audit Guidelines

The Irrigation Association has developed a set of minimum guidelines to create a standardized procedure to perform an audit of a landscape irrigation system. ASABE standards have been reviewed and incorporated wherever possible. Consultation and review of the guidelines has been conducted with many irrigation auditors, contractors, statisticians, educators, irrigation consultants and the Irrigation Association Certification Board. The usage and application of these guidelines is at the discretion of others. The Irrigation Association offers the guidelines without warranty or obligation.