

PLEASE PRINT CLEARLY!


**CITY OF BRYAN IRRIGATION BUILDING PERMIT APPLICATION**  
 P.O. BOX 1000 – BRYAN, TEXAS 77801 - PHONE 979-2095010 – FAX 979-209-5035 – [WWW.BRYANTX.GOV](http://WWW.BRYANTX.GOV)

Approved by:  
Date:

<b>ADDRESS / LOCATION OF WORK:</b>			<b>DATE OF APPLICATION:</b>		
SUBDIVISION:		<b>IRRIGATION CONTRACTOR INFORMATION:</b>			OFFICIAL USE ONLY:
PHASE:	LOT:	BLOCK:	NAME:		PERMIT NO:
<b>PROPERTY OWNER INFORMATION:</b>			ADDRESS:		WTR / SWR:
NAME:			CITY/STATE/ZIP:		R-NUMBER:
(Complete ONLY if address is different from location of work)			EMAIL:		WORKING WITHOUT PERMIT PENALTY FEE:
ADDRESS:			FAX:		<b>TOTAL PERMIT FEE:</b> permit fee+ tap fees+any misc. fees):
CITY/STATE/ZIP:			PHONE:		
EMAIL:			CELL:		
FAX:			Please Read! 1. The Permit issued for this application becomes null and void if work or construction authorized is not commenced within six months, or if construction work is suspended or abandoned for a period of one year at any time after work is commenced. 2. Revised construction plans must be submitted for city review and approval is required for <u>any</u> changes made after City of Bryan building permit issuance PRIOR TO CONSTRUCTION. 3. Permittee or Applicant is responsible for compliance with Deed and/or HOA restrictions.		
PHONE:					
CELL:					

**IRRIGATION Plan Requirements:**  
*Irrigation plan design: Minimum standards*  
 (a) See TCEQ (& City Ordinance) for item (a)  
 (b) The irrigation plan must include complete coverage of the area to be irrigated. If a system does not provide complete coverage of the area to be irrigated, it must be noted on the irrigation plan.  
 (c) All irrigation plans used for construction **must be drawn to scale.** The plan must include, at a minimum, the following information:  
 (1) the irrigator's seal, signature, and date of signing;  
 (2) all major physical features and the boundaries of the areas to be watered;  
 (3) a North arrow;  
 (4) a legend;  
 (5) the zone flow measurement for each zone;  
 (6) location and type of each:  
 (A) controller; and  
 (B) sensor (for example, but not limited to, rain, moisture, wind, flow, or freeze);  
 (7) location, type, and size of each:  
 (A) water source, such as, but not limited to a water meter and point(s) of connection;  
 (B) backflow prevention device;  
 (C) water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;  
 (D) valve, including but not limited to, zone valves, master valves, and isolation valves;  
 (E) pressure regulation component; and  
 (F) main line and lateral piping.  
 (8) the scale used; and  
 (9) the design pressure.

Beginning January 1, 2010, either a licensed irrigator or a licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not on-site, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.



**CITY OF BRYAN**  
*The Good Life, Texas Style.*

**APPLICATION IS HERBY MADE TO INSTALL THE FOLLOWING IRRIGATION FIXTURES AT THE ABOVE LOCATION:**

New Construction?	Repair?
<b>NUMBER OF IRRIGATION HEADS:</b>	
<b>NUMBER OF BACKFLOWS:</b>	
Engineer (name & phone):	
Landscape Architect/Licensed Irrigator (name & phone):	
<b>City is under T. C.E.Q. Compliance: <a href="http://www.tceq.state.tx.us">www.tceq.state.tx.us</a></b>	
<b>ESTIMATED VALUATION</b> <i>(Cost of labor and materials for the project):</i>	\$
<b>IRRIGATION TAP SIZE (if new tap is requested):</b>	
<b>Applicant's Printed Name:</b>	
<b>Applicant's Signature</b> (by signing, you have read all items on this application and will comply with city ordinance and TCEQ requirements):	
<b>Date:</b>	
<b>Note: Complete applications and two copies of the irrigation plan are required for permit issuance. Incomplete applications and plans will delay permit issuance!</b> Please see back page for city ordinance and TCEQ requirements – signing this application is acknowledgement of city ordinance and TCEQ requirements.	

**TCEQ Requirements : (Also see City adopted plumbing ordinance)  
Minimum Design and Installation Requirements.**

- (a) No irrigation design or installation shall require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.
- (b) Spacing.
- (1) The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.
  - (2) New irrigation systems shall not utilize above-ground spray emission devices in landscapes that are less than 48 inches not including the impervious surfaces in either length or width and which contain impervious pedestrian or vehicular traffic surfaces along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in a new irrigation system, the sprinkler heads must direct flow away from any adjacent surface and shall not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.
  - (3) Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area.
- (c) Water pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.
- (d) Piping. Piping in irrigation systems must be designed and installed so that the flow of water in the pipe will not exceed a velocity of five feet per second for polyvinyl chloride (PVC) pipe.
- (e) Irrigation Zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.
- (f) Matched precipitation rate. Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.
- (g) Irrigation systems shall not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar, or any other impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.
- (h) Master valve. When provided, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.
- (i) PVC pipe primer solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a colored primer prior to applying the PVC cement in accordance with the Uniform Plumbing Code (Section 316) or the International Plumbing Code (Section 605).
- (j) Rain or moisture shut-off devices or other technology. All new automatically controlled irrigation systems must include sensors or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall. Rain or moisture shut-off technology must be installed according to the manufacturer's published recommendations. Repairs to existing automatic irrigation systems that require replacement of an existing controller must include a sensor or other technology designed to inhibit or interrupt operation of the irrigation system during periods of moisture or rainfall. El Paso, Hudspeth, Culberson, Jeff Davis, Presidio, Brewster, Terrell, Loving, Winkler, Ward, Reeves, Ector, Crane and Pecos are excluded from this requirement.
- (k) Isolation valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device.
- (l) Depth coverage of piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping.
- (1) If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill, between the top of the pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at a depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.
  - (2) If a utility, man-made structure, or roots create an unavoidable obstacle, which makes the six-inch depth coverage requirement impractical, the piping shall be installed to provide a minimum of two inches of select backfill between the top of the pipe and the natural grade of the topsoil.
  - (3) All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.
- (m) Wiring irrigation systems.
- (1) Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.
  - (2) Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation.
  - (3) Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer.
  - (4) Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.
- (n) Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout) is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box and the hose bib and any hoses connected to the bib must be labeled "non-potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.

**See City Ordinance adopting 2009 International Plumbing Code for complete requirements.**