CITY OF CELINA, TEXAS
ORDINANCE 2020-18

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CELINA, TEXAS, AMENDING THE CITY'S CODE OF ORDINANCES, CHAPTER 13: UTILITIES, BY ADDING A NEW ARTICLE 13.10 IRRIGATION SYSTEMS; PROVIDING FOR INCORPORATION OF PREMISES; PROVIDING FINDINGS; PROVIDING FOR AMENDMENT TO THE CODE OF ORDINANCES; PROVIDING A CUMULATIVE REPEALER CLAUSE; PROVIDING FOR SAVINGS; PROVIDING FOR SEVERABILITY; PROVIDING FOR PENALTY, PROVIDING FOR PUBLICATION; PROVIDING FOR ENGROSSMENT AND ENROLLMENT; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Celina, Texas, is a Home Rule Municipality located in Collin County and Denton County, Texas, created in accordance with provisions of the Texas Local Government Code the Texas Constitution and operating pursuant to the enabling legislation of the State of Texas; and

WHEREAS, the City of Celina, Texas is a home rule municipality empowered under the Texas Local Government Code, Section 51.001, to adopt an ordinance or rule that is for the good government of the City; and

WHEREAS, the City Council does hereby find and determine that the adoption of this Ordinance is in the best interest of the public health, safety, morals and general welfare of the City to adopt rules for irrigation systems as set forth herein;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CELINA, TEXAS

SECTION 1

INCORPORATION OF PREMISES

The above and foregoing premises are true and correct and are incorporated herein and made a part hereof for all purposes.

SECTION 2

FINDINGS

After due deliberations the City Council has concluded that the adoption of this Ordinance is in the best interest of the City of Celina, Texas and of the public health, safety and welfare.

SECTION 3
AMENDMENTS

Article 3.01. That the Code of Ordinances of the City of Celina, Texas Chapter 13; Utilities is hereby amended by adding a new Article 13.10 Irrigation Systems which shall read as follows:

"**Article 13.10. Irrigation Systems**

Sec. 13.10.001 Definitions

All technical industry words or phrases related to the irrigation systems not specifically defined in this section shall have the meanings customarily attributable in the irrigation industry. The following words and terms, when used in this division, have the following meanings, unless the context clearly indicates otherwise.

Air gap. A complete physical separation between the free flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel.

Atmospheric vacuum breaker. An assembly containing an air inlet value, a check seat, and an air inlet port. The flow of water into the body causes the air inlet valve to close the air inlet port. When the flow of water stops the air inlet valve falls and forms a check against back-siphonage. At the same time it opens the air inlet port allowing air to enter and satisfy the vacuum. Also known as an atmospheric vacuum breaker back-siphonage prevention assembly.

Automatic controller. A solid state timer capable of operating valve stations to set the days, time of day, and length of time water is applied.

Backflow prevention. The mechanical prevention of reverse flow, or back siphonage, of non-potable water from an irrigation system into the potable water source.

Backflow prevention assembly. Any assembly used to prevent backflow into a potable water system. The type of assembly used is based on the existing or potential degree of health hazard and backflow condition.

Completion of irrigation system installation. When the landscape irrigation system has been installed, all minimum standards met, all tests performed, and the irrigator is satisfied that the system is operating correctly.

Consulting. The act of providing advice, guidance, review or recommendations related to landscape irrigation systems.

Cross-connection. An actual or potential connection between a potable water source and an irrigation system that may contain contaminates or pollutants or any source of water that has been treated to a lesser degree in the treatment process.

Design. The act of determining the various elements of a landscape irrigation system that will include, but not be limited to, elements such as collecting site specific information, defining the scope of the project, defining plant watering needs, selecting and laying out emission devices, locating system components, conducting hydraulic calculations, identifying any local regulatory requirements, or scheduling irrigation work at a site. Completion of the various components will result in an irrigation plan.

Design pressure. The pressure that is required for an emission device to operate properly. Design pressure is calculated by adding the operating pressure necessary at an emission device to the total of all pressure losses accumulated from an emission device to the water source.

Double check valve. An assembly that is composed of two independently acting, approved check valves, including tightly closed resilient seated shutoff valves attached at each end of the assembly and fitted with properly located resilient seated test cocks. Also known as a double check valve backflow prevention assembly.

Emission device. Any device that is contained within an irrigation system and that is used to apply water. Common emission devices in an irrigation system include, but are not limited to, spray and rotary sprinkler heads, and drip irrigation emitters.

Employed. Engaged or hired to provide consulting services or perform any activity relating to the sale, design, installation, maintenance, alteration, repair, or service to irrigation systems. A person is employed if that person is in an employer-employee relationship as defined by Internal Revenue Code, 26 United States Code Service, Sec. 3212(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

Head-to-head spacing. The spacing of spray or rotary heads equal to the manufacturer's published radius of the head.

Health hazard. A cross-connection or potential cross-connection with an irrigation system that involves any substance that may, if introduced into the potable water supply, cause death or illness, spread disease, or have a high probability of causing sucheffects.

Hydraulics. The science of dynamic and static water; the mathematical computation of determining pressure losses and pressure requirements of an irrigation system.

Inspector. A licensed plumbing inspector, water district operator, other governmental entity, or irrigation inspector who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor.

Installer. A person who actually connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to V.T.C.A., Texas Administrative Code, Title 30, Chapter 30 (relating to occupational licenses and registrations).

Irrigation controller. A programmable device capable of providing multiple irrigation programs with a least three
(3) start times per program and capable of limiting the irrigation frequency to once every seven (7) days.

Irrigation inspector. A person who inspects irrigation systems and performs other enforcement duties for a municipality or water district as an employee or as a contractor and is required to be licensed under V.T.C.A., Texas Administrative Code, Title 30, Ch. 30 (relating to occupational licenses and registrations).

Irrigation plan. A scaled drawing of a landscape irrigation system which lists required information, the scope of the project, and represents the changes made in the installation of the irrigation system.

Irrigation services. Selling, designing, installing, maintaining, altering, repairing, servicing, permitting, providing consulting services regarding, or connecting an irrigation system to a water supply.

Irrigation system. An assembly of component parts that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, and/or to reduce dust or control erosion. This term does not include a system

that is used on or by an agricultural operation as defined by V.T.C.A., Texas Agricultural Code, Sec. 251.002.

Irrigation technician. A person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an irrigation system, including the connection of such system in or to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under V.T.C.A., Texas Administrative Code, Title 30, Chapter. 30 (relating to occupational licenses and registrations).

Irrigation zone. A subdivision of an irrigation system with a matched precipitation rate based on plant material type (such as turf, shrubs, or trees), microclimate factors (such as sun/shade ratio), topographic features (such as slope) and soil conditions (such as sand, loam, clay, or combination) or for hydrological control.

Irrigator. A person who sells, designs, offers consultations regarding, insta lls, maintains, alters, repairs, services or supervises the installation of an irrigation system, including the connection of such system to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under V.T.C.A., Texas Administrative Code, Title 30, chapter 30.

Irrigator-in-charge. The irrigator responsible for all irrigation work performed by an exempt business owner, including, but not limited to obtaining permits, developing design plans, supervising the work of other irrigators or irrigation technicians, and installing, selling, maintaining, altering, repairing, or servicing a landscape irrigation system.

Landscape irrigation. The science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.

License. An occupational license that is issued by the Texas Commission on Environmental Quality, under V.T.C.A., Texas Administrative Code, tit. 30, Ch. 30, to an individual that authorizes the individual to engage in an activity that is covered by V.T.C.A., Texas Administrative Code, title 30, Chapter 30.

Mainline. A pipe within an irrigation system that delivers water from the water source to the individual zone waives.

Maintenance checklist. A document made available to the irrigation system's owner or owner's representative that contains information regarding the operation and maintenance of the irrigation system, including, but not limited to: checking and repairing the irrigation system, setting the automatic controller or smart contractor, weather monitor, checking the rain or moisture sensor, cleaning filters, pruning grass and plants away from irrigation emitters, using and operating the irrigation system, the precipitation rates of each irrigation zone within the system, any water conservation measures currently in effect from the water purveyor, the name of the water purveyor, a suggested seasonal or monthly watering schedule based on current evapotranspiration data for the geographic region, and the minimum water requirements for the plant material in each zone based on the soil type and plant material where the system is installed.

Major maintenance, alteration, repair, or service. Any activity that involves opening to the atmosphere the irrigation main line at any point prior to the discharge side of any irrigation zone

control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve, or repairing a zone control valve in a manner that opens the system to theatmosphere.

Master valve. A remote control valve located after the backflow prevention device that controls the flow of water to the irrigation system mainline.

Matched precipitation rate. The condition in which all sprinkler heads within an irrigation zone apply water at the same rate.

New installation. An irrigation system installed at a location where one did not previously exist.

Pass-through contract. A written contract between a contractor or builder and a licensed irrigator or exempt business owner to perform part or all of the irrigation services relating to an irrigationsystem.

Potable water. Water that is suitable for human consumption.

Pressure vacuum breaker. An assembly containing an independently operating internally loaded check valve and an independently operating loaded air inlet valve located on the discharge side of the check valve. Also known as a pressure vacuum breaker back-siphonage prevention assembly.

Reclaimed water. Domestic or municipal wastewater which has been treated to a quality suitable for beneficial use, such as landscape irrigation.

Records of landscape irrigation activities. The irrigation plans, contracts, warranty information, invoices, copies of permits, and other documents that relate to the installation, maintenance, alteration, repair, or service of a landscape irrigation system.

Reduced pressure principle back/low prevention assembly. An assembly containing two independently acting approved check valves together with a hydraulically operating mechanically independent pressure differential relief valve located between the two check valves and below the first check valve.

Smart (ET) controller. A device capable of receiving and monitoring weather data using evapotranspiration technology or measuring soil moisture directly to calculate or determine the amount of moisture lost from the soil to automatically create or make adjustments to the irrigation schedule to apply only the amount of water that is necessary to replace what has been lost.

Static water pressure. The pressure of water when it is not moving.

Supervision. The on-the-job oversight and direction by a licensed irrigator who is fulfilling his or her professional responsibility to the client and/or employer in compliance with local or state requirements. Also a licensed installer working under the direction of a licensed irrigator or beginning January 1, 2009, an irrigation technician who is working under the direction of a licensed irrigator to install, maintain, alter, repair or service an irrigation system.

Water conservation. The design, installation, service, and operation of an irrigation system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies

the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust, and control erosion.

Zone flow. A measurement, in gallons per minute or gallons per hour, of the actual flow of water through a zone valve, calculated by individually opening each zone valve and obtaining a valid reading after the pressure has stabilized. For design purposes, the zone flow is the total flow of all nozzles in the zone at a specific pressure.

Zone valve. An automatic valve that controls a single zone of a landscape irrigation system.

Sec. 13.10.002 License and permit required

(a) License required. Any person who connects an irrigation system to the water supply within the city or the city's extraterritorial jurisdiction, commonly referred to as the ETJ, must hold a valid license, as defined by V.T.C.A., Texas Administrative Code, Title 30, Chapter 30 and required by V.T.C.A., Texas Occupations Code Chapter 1903 or as defined by V.T.C.A., Texas Administrative Code Title 22, Chapter 365 and required by V.T.C.A., Texas Occupations Code Chapter 1301.

Exemption: A property owner is not required to be licensed in accordance with V.T.C.A., Texas Occupations Code Title 12, Sec. 1903.002(c)(l) if he or she is performing irrigation work in a building or on a premises owned or occupied by the person as the person's home. A home or property owner who installs an irrigation system must meet the remaining standards contained in this division. V.T.C.A., Texas Administrative Code Title 30, Chapter 344 regarding spacing, water pressure, spraying water over impervious materials, rain or moisture shut-off devices or other technology, backflow prevention and isolation valves. The city may, at any point, adopt more stringent requirements for a home or property owner who installs an irrigation system. See V.T.C.A., Texas Occupations Code Sec. 1903.002 for other exemptions to the licensing requirement.

(b) Permit required. Any person installing an irrigation system and or replacing a backflow prevention device within the territorial limits or extraterritorial jurisdiction of the city is required to obtain a permit from the city. Copy of an irrigation plan must be submitted to the building official or the official city representative in conjunction with the permit application with plan set being in ***PDF format***. A set of plans is required must be given to the property owner on completion of the irrigation system. Any plan approved for a permit must be in compliance with the requirements of this division.

Exemptions:

(1) An irrigation system that is an onsite sewage disposal system, as defined by V.T.C.A., Health and Safety Code Sec. 355.002; or

(2) An irrigation system used on or by an agricultural operation as defined by V.T.C.A., Agriculture Code Sec. 251.002.

Sec. 13.10.003 Backflow prevention methods and devices

(a) General. Any irrigation system that is connected to the potable water supply must be connected through a back flow prevention method approved by the Texas Commission on Environmental Quality (TCEQ). The backflow prevention device must be approved by the American Society of Sanitary Engineers, the Foundation for Cross- Connection Control and Hydraulic Research, the University of Southern California, the Uniform Plumbing Code; or any other laboratory that has equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies. The backflow prevention device must be installed in accordance with the laboratory approval standards or if the approval does not include specific installation information, the manufacturer's current published recommendations.

(1) If conditions that present a health hazard exist, one of the following methods must be used to prevent backflow:

A. An air gap may be used if:

i. There is an unobstructed physical separation; and

ii. The distance from the lowest point of the water supply outlet to the flood rim of the fixture or assembly into which the outlet discharges is at least one inch or twice the diameter of the water supply outlet, whichever is greater.

B. Reduced pressure principle backflow prevention assemblies may be used if:

i. The device is installed at a minimum of 12 inches above ground in a location that will ensure that the assembly will not be submerged; and

ii. Drainage is provided for any water that may be discharged through the assembly relief valve.

iii. Freeze protection is provided with insulated enclosure or other method approved by Building Official or Chief Building Inspector

C. Pressure vacuum breakers may be used if:

i. No back-pressure condition will occur; and

ii. The device is installed at a minimum of 12 inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler.

iii. Freeze protection is provided with insulated enclosure or other method approved by Building Official or Chief Building Inspector

D. Atmospheric vacuum breakers may be used if:

i. No back-pressure will be present;

ii. There are no shutoff valves downstream from the atmospheric vacuum breaker;

iii. The device is installed at a minimum of six inches above any downstream piping and the highest downstream opening. Pop-up sprinklers are measured from the retracted position from the top of the sprinkler;

iv. There is no continuous pressure on the supply side of the atmospheric vacuum breaker for more than 12 hours in any 24-hour period; and

v. A separate atmospheric vacuum breaker is installed on the discharge side of each irrigation control valve, between the valve and all the emission devices that the valve controls.

(2) Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.

(3) If there are no conditions that present a health hazard, double check valve backflow prevention assemblies may be used to prevent backflow if the device is tested upon installation and test cocks are used for testing only.

(4) If a double check valve is installed belowground:

A. Test cocks must be plugged, except when the double check valve is being tested;

B. Test cock plugs must be threaded, watertight, and made of nonferrous material;

C. A y-type strainer is installed on the inlet side of the double check valve;

D. Must be installed a minimum of 12 " (inches) below grade, measured from top of assembly to grade level and there must be a minimum twelve (12) inch clearance between any fill material and the bottom of the double check valve to allow for testing and repair; and

E. There must be space on the side of the double

check valve to test and repair the double check valve.

(5) If any existing irrigation system without a backflow-prevention assembly requires maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention assembly or devise before any major maintenance, alteration, repair, or service is performed.

(6) If an irrigation system is connected to a potable water supply through a double check valve, pressure vacuum breaker, or reduced pressure principle backflow assembly and includes an automatic master valve on the system, the automatic master valve must be installed on the discharge side of the backflow prevention assembly.

(7) The irrigation contractor shall ensure the backflow prevention device is tested by a licensed backflow prevention assembly tester through our provider SC Tracking Solutions, prior to being placed in service and the test results provided to the city and the irrigation system's owner or owner's representative within ten business days of testing of the backflow prevention device.

Sec. 13.10.004 Specific conditions and cross-connection control

(a) Before any chemical is added to an irrigation system connected to the potable water supply, the irrigation system must be connected through a reduced pressure principle backflow prevention assembly or air gap.

(b) Connection of any additional water source to an irrigation system that is connected to the potable water supply can only be done if the irrigation system is connected to the potable water supply through a reduced- pressure principle backflow prevention assembly or an air gap.

(c) Irrigation system components with chemical additives induced by aspiration, injection, or emission system connected to any potable water supply must be connected through a reduced pressure principle backflow device.

(d) If an irrigation system is designed or installed on a property that is served by an onsite sewage facility, as defined in V.T.C.A., Texas Administrative Code Title 30, Chapter 285, then:

(1) All irrigation piping and valves must meet the separation distances from the onsite sewage facilities system as required for a private water line in V.T.C.A., Texas Administrative Code, tit. 30, sec. 285.91(10);

(2) Any connections using a private or public potable water source that is not the city's potable water system must be connected to the water source through a reduced pressure principle backflow prevention assembly as

defined in V.T.C.A., Texas Administrative Code, Title 30, Sec. 344.50; and

(3) Any water from the irrigation system that is applied to the surface of the area utilized by the onsite sewage facility system must be controlled on a separate irrigation zone or zones so as to allow complete control of any irrigation to that area so that there will not be excess water that would prevent the onsite sewage facilities system from operating effectively.

Sec. 13.10.005 Water conservation

All irrigation systems shall be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation as defined in the definitions section of this division.

Sec. 13.10.006 Irrigation plan design; minimum standards

A. An irrigation shall prepare an irrigation plan for each site where a new irrigation system will be installed. A paper or electronic copy of the irrigation plan must be on the job site at all times during the installation of the irrigation system. A drawing showing the actual installation of the system is due to each irrigation system owner after all new irrigation system installations. During the installation of the irrigation system, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

(1) Diminish the operational integrity of the irrigation system;

(2) Violate any requirements of this division; and

(3) Go unnoted in red on the irrigation plan.

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. For all irrigation systems other than irrigation systems installed on single-family lots, a certified landscape irrigation auditor shall conduct the following required irrigation audits and inspections

1. Installation audit and inspection: Immediately following installation, an irrigation system audit and inspection shall be required for all new commercial irrigation systems. For new developments, documentation of the audit and inspection shall be submitted to the city prior to issuing a certificate of occupancy. The audit and inspection must include an evaluation of the system distribution uniformity and actual zone precipitation rate. The audit shall be performed according to the latest edition of the Recommended Audit Guidelines, published by the Irrigation Association, 6540 Arlington Boulevard, Falls Church, Virginia 22042-6638. Distribution uniformity shall be measured on the largest turf grass area zone of the irrigation system. Forms for submission and documentation of audit and inspection information shall be made available by the city.

2. Recurring inspections: An irrigation system audit and inspection shall be required for irrigation systems, new and existing, shall be submitted to the city once every three years, and shall be conducted in the same manner as set forth in subparagraph 1, above, regarding the installation audit and inspection. The city shall establish a timeline and procedures for all developments to submit irrigation system audit and inspection documentation to the city for review. Forms for submission and documentation of inspection information shall be made available by the city.

F. All irrigation plans used for construction must be legible. 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 eachzone;

(6) Location and type of each:

A. Irrigation controller and sensor that has the capability to set thresholds for both rain and freeze at 40 degrees or above.

B. Commercial and Right of Way installation will require that controller and sensors be located above ground and shall be decorative or on a decorative post stand, and sited inconspicuously.

(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, tree bubblers, foundation drip, non-turf drip or micro-sprays;

D. Valve, including but not limited to, zone valves, master valves, and isolation valves;

E. Pressure regulation component;

F. Main line and lateral piping; and

G. Wiring splice locations.

(8) The engineer's scale used; and areas from heads showing head-to-head cover coverage.

(9) The design pressure; and

(10) Total landscape area (excluding all impervious surfaces) served by the irrigation system.

Sec. 13.10.007 Design and installation; minimum requirements

(a) Manufacturer's limitations. 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; and

(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. Turf area eight (8) feet or wider must have heads spraying back to achieve head to head coverage.

(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.

(4) Each double check backflow prevention device must be located no more than three (3) feet from the water meter, if not applicable install shall be no more than (3) feet from private side of public sidewalk or property line. In cases where RPZ or PVB assemblies are used, the device shall be located on the side of the building and integrated into the building envelope or consolidated into an enclosed service areas and screened with primary building materials used on the building or living vegetative screens.

(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 either a city-approved pressure regulator or pressure-compensating heads. Commercial irrigation must use pressure-regulating heads on all turf 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, foundation protection, soil conditions, and hydrological requirements. All non-turf landscape areas shall be designed with drip irrigation to include pressure-compensating, non-draining emitters and a 120 mesh filter. Parkway areas within ten (10) feet from the curb must have either drip irrigation or high- efficiency, low-precipitation nozzles, as approved in writing by the city. No single stream rotors permitted in front yards unless approved in writing by the city.

(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) No-spray surface. 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) Foundations. A separate station shall be installed and dedicated only for drip irrigation for the purpose of watering a structure's foundation.

(i) Master valve. A master valve shall be installed on the discharge side ofthe backflow prevention device on all new installations and located within twelve (12) inches of the backflow prevention device.

(j) Check valves. Check valves are required where elevation differences may result in low head drainage. Check valves may be located at the sprinkler head(s) or on the lateral line. Any slope greater than a 4:1 ratio must be irrigated by drip irrigation.

(k) Bubblers shall be installed at all trees

(l) Pop-up heads. Pop-up heads shall be installed and operated to extend above all landscape turf grass.

(m) PVC pipe primer solvent. All new irrigation systems that are installed using PVC pipe and fittings shall be primed with a purple primer prior to applying the PVC cement in accordance with the International Plumbing Code and local amendments.

(n) Irrigation controllers. All new irrigation systems must include a programmable irrigation controller capable of providing the minimum following features:

1) Multiple irrigation programs with at least three start times perprogram;
2) Limiting the irrigation frequency to once every seven (7) days and once every fourteen (14) days; and
3) Water budgeting features.

(o) Operational rain and freeze shut-off devices capable of setting thresholds for rain and freeze at or above 40 degrees. All new automatically controlled irrigation systems must include an operational sensor with the capability to set thresholds for both rain and freezing temperatures at or above 40 degrees or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freezing weather at or above 40 degrees and rainfall. Freeze and rain 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 an operational sensor with the capability to set thresholds for both rain and freezing temperatures at or above 40 degrees or other technology designed to inhibit or interrupt operation of the irrigation system during periods of freezing weather at or above 40 degrees and rainfall.

(p) Rain/Freeze Installation: Residential rain freeze sensor must be installed on house and not under gutters. Commercial and Right of Way installations will require that controller and sensors be located on building or above ground and shall be decorative or on a decorative post stand, and sited inconspicuously for right-of-way installation.

(q) Isolation valve. All new irrigation systems must include an isolation valve between the water meter and the backflow prevention device.

(r) 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 for lateral lines and 12 inches for main lines, 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, manmade 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 thetopsoil.

(3) All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.

(s) Wiring irrigation systems.

(1) Underground electrical wiring used to connect an irrigation 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 irrigation controller to any electrical component of the irrigation system must be buried with a minimum of six (6) inches ofselect backfill.

(t) 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 couplerkey 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 irrigationsystem.

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

Sec. 13.10.008 Initial Inspection

The city will conduct an initial inspection of all piping, valves, emission devices, and other irrigation system components prior to backfilling any part of the system for Commercial and Right-of-Way installations only, spot checking will be allowed where connections are made, so all of trench is not open.

Sec. 13.10.009 Completion of irrigation system installation

Upon completion ofthe irrigation system, the irrigator or irrigation technician who provided supervision for the on- site installation shall be required to complete the followingitems:

a. A final "walk through" with the irrigation system's owner or the owner's representative to explain the operation ofthe system. The "walk through" must include, but not be limited to, visual inspection of all zones and emission devices operating for not less than two minutes, a review of the currently programmed, as well as seasonal, watering schedule, list of the components that require maintenance and the recommended frequency of service, location of the irrigation controller and associated manufacturer's manual, water meter, isolation valve, backflow preventer, sprinkler heads, drip or pressure compensating tubing irrigation, rain or moisture and freeze shut-off device, irrigation plan showingthe

installed system, maintenance checklist, etc.

(b) The maintenance checklist on which the irrigator or irrigation technician shall obtain the signature of the irrigation system's owner or owner's representative and shall sign, date, and seal the checklist. If the irrigation system's owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the irrigation system's owner or owner's representative's signature line. The irrigation system owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the irrigator and provided to the building official or the official city representative as part of final document step. The items on the maintenance checklist shall include but are not limited to:

1. Irrigator's name, license number, company name, telephone number, and the dates of the warranty period;

2. The manufacturer's manual for the irrigation controller;

3. A seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors, and site factors;

4. A list of components, such as the nozzle, or pump filters, and other such components; that require maintenance and the recommended frequency for the service; and

5. The statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested the system and determined that it has been installed according to the Irrigation Plan and is properly adjusted for the most efficient application of water at this time."

(c) A permanent sticker which contains the irrigator's name, license number, company name, telephone number and the dates of the warranty period shall be affixed to each irrigation controller installed by the irrigator or irrigation technician. The information contained on the sticker must be printed with waterproof ink.

(d) The irrigation "As-Built" plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.

(e) In the event that the irrigation system owner or owner representative is a residential home builder and the new residential home with the associated irrigation system will be sold for the first time to a new homeowner, a copy of the irrigation plan indicating the actual installation of the system and corresponding maintenance checklist must be placed within or attached to the irrigation controller. A copy of the irrigation plan and corresponding maintenance checklist must be placed within or attached to the irrigation controller if the irrigation system is sold or transferred from the new home owner or subsequent owners.

Sec. 13.10.010 Maintenance, alteration, repair, or service of irrigation systems

(a) The licensed irrigator is responsible for all work that the irrigator performed during the maintenance, alteration, repair, or service of an irrigation system during the warranty period. The irrigator or business owner is not responsible for the professional negligence of any other irrigator who subsequently conducts any irrigation service on the same irrigation system.

(b) All trenches and holes created during the maintenance, alteration, repair, or service of an irrigation system must be returned to the original grade with compacted select backfill.

(c) Purple PVC pipe primer solvent must be used on all pipes and fittings used in the maintenance, alteration, repair, or service of an irrigation system in accordance with the International Plumbing Code and local amendments.

(d) When maintenance, alteration, repair or service of an irrigation system involves excavation work at the water meter or backflow prevention device, an isolation valve shall be installed, if an isolation valve is notpresent.

Sec. 13.10.011 Reclaimed water

Reclaimed water may be utilized in landscape irrigation systems if:

(1) There is no direct contact with edible crops, unless the crop is pasteurized
before consumption;

(2) The irrigation system does not spray water across property lines that do not belong to the irrigation system's owner;

(3) The irrigation system is installed using purple piping and components;

(4) The domestic potable water line is connected using an air gap or a reduced pressure principle backflow prevention device, in accordance with V.T.C.A., Texas Administrative Code Title 30, Sec. 290.47(i)(relating to appendices);

(5) A minimum of an eight-inch by eight-inch sign, in English and Spanish, is prominently posted on/in the area that is being irrigated, that reads, "RECLAIMED WATER-DO NOT DRINK" and "AGUA DE RECUPERACION-NO BEBER"; and

(6) Backflow prevention on the reclaimed water supply line shall be in accordance with the regulations of the city's water provider.

Sec. 3.10.012 Advertisement requirements

(a) At least one vehicle must remain onsite and clearly visible when used in the performance of irrigation installation, maintenance, alteration, repair, or service must display the irrigator's license number in the form of "LI " in a contrasting color of block letters at least two inches high, on both sides of the vehicle.

(b) All forms of written and electronic advertisements for irrigation services must display the irrigator's license number in the form of "LI __ __ ." Any form of advertisement, including business cards, and estimates which displays an entity's or individual's name other than that of the licensed irrigator must also display the name of the licensed irrigator and the licensed irrigator's license number. Trailers that advertise irrigation services must display the irrigator's license number.

Sec. 3.10.013 Contracts

(a) All contracts to install an irrigation system must be in writing and signed by each party and must specify the irrigator's name, license number, business address, current business telephone numbers, the date that each party signed the agreement, the total agreed price, and must contain the statement, "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 13087, Austin, Texas 78711-3087. TCEQ's website is: www.tceq.state.tx.us." All contracts must include the irrigator's seal, signature, and date.

(b) All written estimates, proposals, bids, and invoices relating to the installation or repair of an irrigation system(s) must include the irrigator's name, license number, business address, current business telephone number(s), and the statement: "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ) (MC-178), P.O. Box 13087, Austin, Texas 78711-3087. TCEQ's web site is: www.tceq.state.tx.us."

(c) An individual who agrees by contract to provide irrigation services as defined in V.T.C.A., Texas Administrative Code tit. 30, sec. 344.30 (relating to License Required) shall hold an irrigator license issued under V.T.C.A., Texas Administrative Code Title 30, Chapter 30 (relating to occupational licenses and registrations) unless the contract is a pass-through contract as defined in V.T.C.A., Texas Administrative Code Title 30, Sec. 344.1(36) (relating to definitions). If a pass-through contract includes irrigation services, then the irrigation portion of the contract can only be performed by a licensed irrigator. If an irrigator installs a system pursuant to a pass-through contract, the irrigator shall still be responsible for providing the irrigation system's owner or through contract, the irrigator shall still be responsible for providing the irrigation system's owner or owner's representative a copy of the warranty and all other documents required under this chapter. A pass-through contract must identify by name and license number the irrigator that will perform the work and must provide a mechanism for contacting the irrigator for irrigation system warranty work.

(d) The contract must include the dates that the warranty is valid.

Sec. 3.10.014 Warranties for systems

(a) On all installations of new or major repair of irrigation systems, an irrigator shall

present the irrigation system's owner or owner's representative with a written warranty covering materials and labor furnished in the new installation of the irrigation system. The irrigator shall be responsible for adhering to terms of the warranty. If the irrigator's warranty is less than the manufacturer's warranty for the system components, then the irrigator shall provide the irrigation system's owner or the owner's representative with applicable information regarding the manufacturer's warranty period. The warranty must include the irrigator's seal, signature, and date. If the warranty is part of an irrigator's contract, a separate warranty document is not required.

(b) An irrigator's written warranty on new irrigation systems must specify the irrigator's name, business address, and business telephone number(s), must contain the signature of the irrigation system's owner or owner's representative confirming receipt of the warranty and must include the statement: "Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ), MC-178, P.O. Box 130897, Austin, Texas 78711-3087. TCEQ's website is: www.tceq.state.tx.us."

(c) On all maintenance, alterations, repairs, or service to existing irrigation systems, an irrigator shall present the irrigation system's owner or owner's representative a written document that identifies the materials furnished in the maintenance, alteration, repair, or service.

Sec. 3.10.015 Duties and responsibilities of city irrigation inspectors

A licensed irrigation inspector or plumbing inspector shall enforce the ordinance of the city, and shall be responsible for:

(1) Verifying that the appropriate permits have been obtained for an irrigation system and that the irrigator and installer or irrigation technician, if applicable, are licensed;

(2) Determining that the irrigation system complies with the requirements of this division;

(3) Determining that the appropriate backflow prevention device was installed, tested, and test results provided to the city through SC Tracking Solutions;

(4) Providing the final walk-through of the irrigation system, inspecting underground installation for commercial and Right-of-Way installations;

(5) Investigating complaints related to irrigation system installation, maintenance, alteration, repairs, or service of an irrigation system and advertisement of irrigation services; and

(6) Maintaining records according to this division

Sec. 3.10.016 Fees

Refer to the City of Celina master fee chart for fees on permits for Residential and Non-Residential irrigation installations.

Sec. 3.10.017 Enforcement and penalty

(a) The city shall have the power to administer and enforce the provisions of this section as may be required by governing law. Any person, firm, corporation or agent who shall violate a provision of this Code, or fails to comply therewith, or with any of the requirements thereof, is subject to suit for injunctive relief as well as prosecution for criminal violations. Any violation of the ordinance codified in this section is declared to be a nuisance.

(b) Any person violating any provision of this section shall, upon conviction, be fined a sum not exceeding
$2,000.00. Each day that a provision of this section is violated shall constitute a separate offense. An offense under this section is a class C misdemeanor, punishable by a fine of up to $2,000.00.

(c) Nothing in this section shall be construed as a waiver of the city's right to bring a civil action to enforce the provisions of this section and to seek remedies as allowed by law, including, but not limited to the following:

(l) Injunctive relief to prevent specific conduct that violates the ordinance or to require specific conduct that is necessary for compliance with this division; and

(2) Other available relief.

Sec. 13.10.018 Automatic updates

Provisions of this ordinance shall automatically update to reflect State law changes as they are made."

SECTION 4
CUMULATIVE REPEALER CLAUSE

This Ordinance shall be cumulative of all other Ordinances and shall not repeal any of the provisions of such Ordinances except for those instances where there are direct conflicts with the provisions of this Ordinance. Ordinances, or parts thereof, in force at the time this Ordinance shall take effect and that are inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with this Ordinance. Provided however, that any complaint, action, claim or lawsuit which has been initiated or has arisen under or pursuant to such other Ordinances on this date of adoption of this Ordinance shall continue to be governed by the provisions of such Ordinance and for that purpose the Ordinance shall remain in full force and effect.

SECTION 5
SAVINGS CLAUSE

All rights and remedies of the City of Celina, Texas are expressly saved as to any and all violations of the provisions of any other ordinance affecting fees which have secured at the time of the effective date of this ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances same shall not be affected by this Ordinance but

may be prosecuted until final disposition by the court.

SECTION 6
SEVERABILITY

The provisions of the Ordinance are severable. However, in the event this Ordinance or any procedure provided in this Ordinance becomes unlawful, or is declared or determined by a judicial, administrative or legislative authority exercising its jurisdiction to be excessive, unenforceable, void, illegal or otherwise inapplicable, in while in part, the remaining and lawful provisions shall be of full force and effect and the City shall promptly promulgate new revised provisions in compliance with the authority's decisions or enactment.

SECTION 7
PENALTY

Any person, firm or corporation violating any of the provisions or terms of this ordinance or of the Code of Ordinances as amended hereby, shall be subject to the same penalty as provided for in the Code of Ordinances of the City of Celina, and upon conviction shall be punished by a fine not to exceed Two Thousand Dollars ($2,000) for each offense, and a separate offense shall be deemed committed upon each day during or on which a violation occurs and continues.

If the governing body of the City of Celina determines that a violation of this Ordinance has occurred, the City of Celina may bring suit in district court to enjoin the person, firm, partnership, corporation, or association from engaging in the prohibited activity.

SECTION 8
PUBLICATION CLAUSE

The City Secretary of the City of Celina is hereby directed to publish in the Official Newspaper of the City of Celina the Caption, and Effective Date Clause of this Ordinance as required by Section 52.013 of the Local Government Code.

SECTION 9
ENGROSSMENT AND ENROLLMENT

The City Secretary is hereby directed to engross and enroll this Ordinance by copying the descriptive Caption in the minutes of the City Council and by filing this Ordinance in the Ordinance records of the City.

SECTION 10
EFFECTIVE DATE

This Ordinance shall become effective from and after its date of passage in accordance with law.

AND IT IS SO ORDAINED.

PASSED AND APPROVED by the City Council of the City of Celina, Texas this 14th day of April, 2020.

Sean Terry, Mayor
City of Celina, Texas

ATTEST:

Vicki Tarrant, City Secretary
City of Celina, Texas

[SEAL]

APPROVED AS TO FORM:

Lance Vanzant, City Attorney
City of Celina, Texas