

CITY OF FORNEY, TEXAS

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF FORNEY, TEXAS, AMENDING CHAPTER 3 OF THE CODE OF ORDINANCES OF THE CITY OF FORNEY, TEXAS, BY AMENDING ARTICLE 3.02, DIVISION 3, "RESIDENTIAL CODE," ADOPTING THE 2018 EDITION OF THE *INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS* BY THE AMENDMENT OF SECTION 3.02.101, "ADOPTION," AND ESTABLISHING AMENDMENTS TO THE 2018 EDITION OF THE *INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS* IN ACCORDANCE WITH THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS' RECOMMENDED AMENDMENTS, LOCAL AMENDMENTS AND INDUSTRY STANDARDS THROUGH THE AMENDMENT OF SECTION 3.02.102, "AMENDMENTS"; PROVIDING A PENALTY; REPEALING ALL CONFLICTING ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the International Code Council ("ICC") has developed a set of comprehensive and coordinated national model construction codes (known as the "International Codes"), and the City of Forney, Texas ("City") has been involved throughout the development process of the International Codes, through the North Texas Chapter of the International Code Council and through the regional review process by the Regional Codes Coordinating Committee of the North Central Texas Council of Governments ("NCTCOG"); and

WHEREAS, the 77th Texas Legislature passed Senate Bill 365 (SB 365) in 2001 adopting the *International Residential Code for One- and Two-Family Dwellings* for municipalities of the state; and

WHEREAS, SB 365 provides that municipalities may adopt local amendments to the *International Residential Code for One- and Two-Family Dwellings*; and

WHEREAS, the *International Residential Code for One- and Two-Family Dwellings, 2018 edition*, has been prepared by the ICC, and in addition to review by the NCTCOG, has been reviewed by City staff; and

WHEREAS, the City's residential building code is intended to be updated periodically, and the 2018 edition of the *International Residential Code* is the most current, published code at this time; and

WHEREAS, the 2018 edition of the *International Residential Code for One- and Two-Family Dwellings* addresses the general design and construction aspects of all residential buildings in the City; and

WHEREAS, the current residential code in the City is the 2015 edition of the *International Residential Code*, and the City's residential building code should be updated to the most current, published building code available; and

WHEREAS, the City Council of the City of Forney, Texas ("City Council") has determined that it is in the best interest of the citizens of the City of Forney to update and adopt the 2018 edition of the *International Residential Code for One- and Two-Family Dwellings* as the minimum

standard for residential construction, use, occupancy, and maintenance of buildings and structures within City limits, as set forth herein and as that code is specifically modified by this Ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FORNEY, TEXAS, THAT:

Section 1. FINDINGS INCORPORATED

All of the above premises are found to be true and correct factual and legislative determinations of the City of Forney and are hereby approved and incorporated into the body of this Ordinance as if copied in their entirety.

Section 2. AMENDMENT OF ORDINANCE

From and after the effective date of this Ordinance, Chapter 3, Article 3.02, Division 3, of the Code of Ordinances of the City of Forney, Texas, entitled “Residential Code,” is hereby amended by amending Sections 3.02.101, entitled “Adoption,” and 3.02.102, entitled “Amendments,” in their entirety and replacing said provisions with new Sections 3.02.101, entitled “Adoption of *International Residential Code*,” and 3.02.102, entitled “*International Residential Code* Amendments,” to read as follows:

“Sec. 3.02.101 Adoption of *International Residential Code*.

The *International Residential Code for One- and Two-Family Dwellings*, 2018 edition, including Appendix H and Appendix Q, (the “International Residential Code”) a copy of which is on file in the offices of the City of Forney, is hereby adopted and designated as the Residential Code of the City, the same as though the provisions of the *International Residential Code*, 2018 edition, were copied at length in this section, subject to the deletions, amendments, and additions provided in section 3.02.102.

Sec. 3.02.102 *International Residential Code* Amendments.

The following amendments repeal and reenact or add sections to the *International Residential Code*, 2018 edition, adopted by Section 3.02.101 of this Code for the purpose of consistency with specific past practices and the recommendations of the North Central Texas Council of Governments, and all sections not expressly amended remain in full force and effect as adopted.

- (1) Section R101.1 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

Section R101.1. Title. These regulations shall be known as the Residential Code for One- and Two-family Dwellings of the City of Forney and shall be cited as such. It is referred to herein as the “this code.”

- (2) Section R102.4 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

R102.4 Referenced codes and standards. The *codes*, when specifically adopted, and standards referenced in this *code* shall be considered part of the

requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference made to NFPA 70 or the *Electrical Code* shall mean the *Electrical Code* as adopted.

- (3) Sections R103 and R103.1 of the *International Residential Code*, 2018 edition, are hereby amended to read as follows:

CITY OF FORNEY COMMUNITY DEVELOPMENT DEPARTMENT

R103.1 Creation of enforcement agency. The City of Forney Community Development department is hereby created (for the purposes of this code) and the official in charge thereof shall be known as the *building official*.

- (4) Section R104.10.1, Flood Hazard areas, of the *International Residential Code*, 2018 edition, is hereby deleted.
- (5) Section R105.3.1.1 and Section R106.1.4 of the *International Residential Code*, 2018 edition, are hereby deleted.
- (6) Section R110 (R110.1 through R110.5) of the *International Residential Code*, 2018 edition, is hereby deleted.
- (7) Section R202 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

TOWNHOUSE. A single-family dwelling unit constructed in a group of three or more attached units separated by property lines in which each unit extends from foundation to roof and with a *yard* or *public way* on at least two sides.

- (8) Table R301.2 (1) of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^e	ICE BARRIER UNDER-LAYMENT ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	SPEED ^d (MPH)	Topographic Effects ^k	Special Wind Region ^l	Windborne Debris Zone ^m		Weathering ^a	Frost Line Depth ^b	Termite ^c					
5 lb/ft	115 (3 sec-gust)/ 76 fastest mile	No	No	No	A	Moderate	6"	Very Heavy	22° F	No	Local Code	150	64.9° F

Delete remainder of table Manual J Design Criteria and footnote N

- (9) Section R302.1 of the *International Residential Code*, 2018 edition, is hereby amended to add Exception #6 to read as follows:

Exceptions: {previous exceptions unchanged}

6. Open non-combustible carport structures may be constructed when also approved within adopted ordinances.
- (10) Section R302.3 of the *International Residential Code*, 2018 edition, is hereby amended to add Exception #3 to read as follows:

Exceptions:

1. {existing text unchanged}
 2. {existing text unchanged}
 3. Two-family dwelling units that are also divided by a property line through the structure shall be separated as required for townhouses.
- (11) Section R302.5.1 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

- (12) Section R303.3, Exception, of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

Exception: {existing text unchanged} Spaces containing only a water closet and a lavatory may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

- (13) Section R313.2, One and Two Family Dwellings, of the *International Residential Code*, 2018 edition, is hereby amended to delete the section and subsections in their entirety.

- (14) Section R315.2.2, Alterations, repairs and additions, of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

Exception:

2. Installation, alteration or repairs of all electrically powered mechanical systems or plumbing appliances. {remaining text unchanged}
- (15) Section R315.3 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

R315.3 Location. Carbon monoxide alarms in dwelling units shall be installed outside the door of each separate sleeping area in the immediate vicinity of the bedrooms. Where a fuel-burning appliance is located within a bedroom or its

attached bathroom, a carbon monoxide alarm shall be installed within the bedroom.

- (16) Section R322, Flood Resistant Construction, of the *International Residential Code*, 2018 edition, is hereby deleted.
- (17) Section R401.2 of the *International Residential Code*, 2018 edition, is hereby amended by adding a new paragraph following the existing paragraph to read as follows:

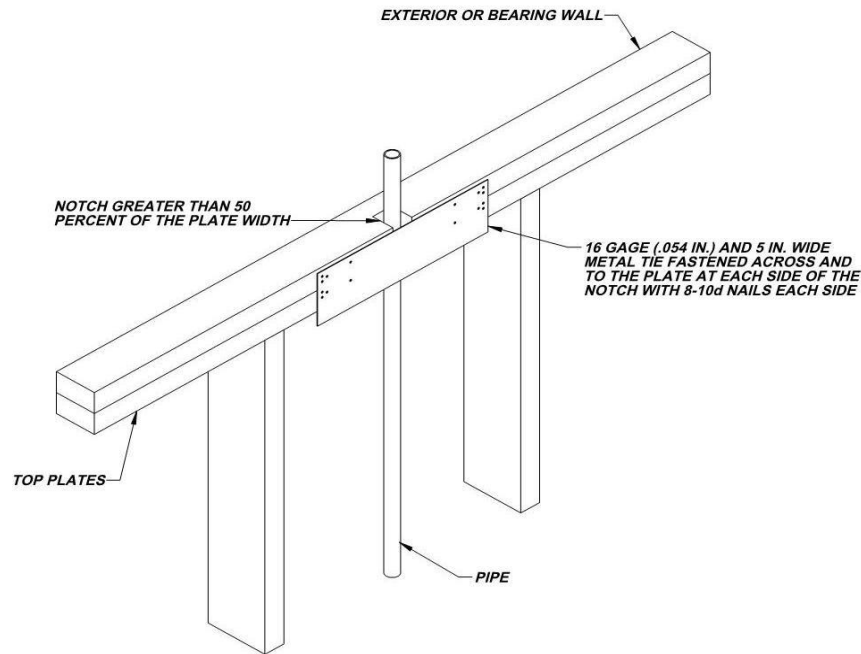
Section R401.2. Requirements. *{existing text unchanged}* ...

Every foundation and/or footing, or any size addition to an existing post-tension foundation, regulated by this code shall be designed and sealed by a Texas-registered engineer.

- (18) Section R602.6.1 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

R602.6.1 Drilling and notching of top plate. When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie not less than 0.054 inch thick (1.37 mm) (16 Ga) and 5 inches (127 mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) having a minimum length of 1 ½ inches (38 mm) at each side or equivalent. Fasteners will be offset to prevent splitting of the top plate material. The metal tie must extend a minimum of 6 inches past the opening. See figure R602.6.1. *{remainder unchanged}*

- (19) Figure R602.6.1 of the *International Residential Code*, 2018 edition, is hereby amended to delete the figure and insert the following figure:



(20) Section R703.8.4.1.2 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

R703.8.4.1.2 Veneer Ties for Wall Studs. In stud framed exterior walls, all ties may be anchored to studs as follows:

1. When studs are 16 in (407 mm) o.c., stud ties shall be spaced no further apart than 24 in (737 mm) vertically starting approximately 12 in (381 mm) from the foundation; or
2. When studs are 24 in (610 mm) o.c., stud ties shall be spaced no further apart than 16 in (483 mm) vertically starting approximately 8 in (254 mm)

(21) Section R902.1 of the *International Residential Code*, 2018 edition, is hereby amended to add Exception #5 to read as follows:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. Class A, B, or C roofing shall be installed. *{remainder unchanged}*

Exceptions:

1. *{text unchanged}*
2. *{text unchanged}*
3. *{text unchanged}*

4. {text unchanged}

5. Non-classified roof coverings shall be permitted on one-story detached *accessory structures* used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed (area defined by jurisdiction).

- (22) Chapter 11 [RE] – Energy Efficiency of the *International Residential Code*, 2018 edition, is hereby deleted in its entirety and replaced with the following:

N1101.1 Scope. This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code.

N1101.2 Compliance. Compliance shall be demonstrated by meeting the requirements of the residential provisions of 2018 International Energy Conservation Code.

- (23) Section M1305.1.2 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

M1305.1.2 Appliances in attics. *Attics* containing *appliances* shall be provided . . . {bulk of paragraph unchanged} . . . sides of the *appliance*. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest *appliance*. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb (136 kg) capacity.
3. An *access* door from an upper floor level.

Exceptions:

1. The passageway and level service space are not required where the *appliance* can be serviced and removed through the required opening.
2. Where the passageway is unobstructed... {remaining text unchanged}

- (24) Section M1411.3 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

M1411.3 Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to a sanitary sewer through a trap, by means of a direct or indirect drain. {remaining text unchanged}

- (25) Section M1411,3,1, Items 3 and 4 of the *International Residential Code*, 2018 edition, are hereby amended to read as follows:

M1411.3.1 Auxiliary and secondary drain systems. *{bulk of paragraph unchanged}*

1. *{text unchanged}*
2. *{text unchanged}*
3. An auxiliary drain pan... *{bulk of text unchanged}*... with Item 1 of this section. A water level detection device may be installed only with prior approval of the *building official*.
4. A water level detection device... *{bulk of text unchanged}*... overflow rim of such pan. A water level detection device may be installed only with prior approval of the *building official*.

- (26) Section M1411.3.1.1 of the *International Residential Code*, 2018 edition, is hereby amended to add text to read as follows:

M1411.3.1.1 Water-level monitoring devices. On down-flow units ...*{bulk of text unchanged}*... installed in the drain line. A water level detection device may be installed only with prior approval of the *building official*.

- (27) Section M1503.6, Makeup Air Required, of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

M1503.6 Makeup air required. Where one or more gas, liquid or solid fuel-burning appliance that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be mechanically or passively provided with makeup air at a rate approximate to the difference between the exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with not fewer than one damper complying with Section M1503.6.2.

Exception: Makeup air is not required for exhaust systems installed for the exclusive purpose of space cooling and intended to be operated only when windows or other air inlets are open. Where all appliances in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute (0.28 m³/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m³/s) shall be provided with a makeup air at a rate approximately equal to the difference between the exhaust air rate and 600 cubic feet per minute.

- (28) Section M2005.2 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

M2005.2 Prohibited locations. Fuel-fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that *combustion air* will not be taken from the living space. Access to such enclosure may be from the

bedroom or bathroom when through a solid door, weather-stripped in accordance with the exterior door air leakage requirements of the *International Energy Conservation Code* and equipped with an *approved* self-closing device. Installation of direct-vent water heaters within an enclosure is not required

(29) Section G2408.3 (305.5) of the *International Residential Code*, 2018 edition, is hereby deleted.

(30) Section G2415.2.1 (404.2.1) of the *International Residential Code*, 2018 edition, is hereby amended to add a second paragraph to read as follows:

Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an *approved* tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING: 1/2 to 5 psi gas pressure - Do Not Remove"

(31) Section G2415.12 (404.12) of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

G2415.12 (404.12) Minimum burial depth. Underground *piping systems* shall be installed a minimum depth of 18 inches (457 mm) below grade.

(32) Section G2417.1 (406.1) of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

G2417.1 (406.1) General. Prior to acceptance and initial operation, all *piping* installations shall be inspected and *pressure tested* to determine that the materials, design, fabrication, and installation practices comply with the requirements of this *code*. The *permit* holder shall make the applicable tests prescribed in Sections 2417.1.1 through 2417.1.5 to determine compliance with the provisions of this *code*. The *permit* holder shall give reasonable advance notice to the *building official* when the *piping system* is ready for testing. The *equipment*, material, power and labor necessary for the inspections and test shall be furnished by the *permit* holder and the *permit* holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

(33) Section G2417.4 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

G2417.4 (406.4) Test pressure measurement. Test pressure shall be measured with a monometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made.

(34) Section G2417.4.1 (406.4.1) of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 ½”), a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½”), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing

- (35) Section G2417.4.2 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

G2417.4.2 (406.4.2) Test duration. The test duration shall be held for a length of time satisfactory to the *Building Official*, but in no case for less than fifteen (15) minutes. For welded *piping*, and for *piping* carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the *Building Official*, but in no case for less than thirty (30) minutes.

- (36) Section G2420.1 (406.1) of the *International Residential Code*, 2018 edition, is hereby amended to add Section G2420.1.4 to read as follows:

G2420.1.4 Valves in CSST installations. Shutoff *valves* installed with corrugated stainless steel (CSST) *piping systems* shall be supported with an approved termination fitting, or equivalent support, suitable for the size of the *valves*, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the *valve*. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's *piping*, fittings, and *valves* between anchors. All *valves* and supports shall be designed and installed so they will not be disengaged by movement of the supporting *piping*.

- (37) Section G2420.5.1 (409.5.1) of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

G2420.5.1 (409.5.1) Located within the same room. The shutoff valve ...*{bulk of paragraph unchanged}*... in accordance with the appliance manufacturer's

instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox.

- (38) Section G2421.1 (410.1) of the *International Residential Code*, 2018 edition, is hereby amended to add text and an Exception to read as follows:

G2421.1 (410.1) Pressure regulators. A line *pressure regulator* shall be ... *{bulk of paragraph unchanged}*... *approved* for outdoor installation. Access to *regulators* shall comply with the requirements for access to *appliances* as specified in Section M1305.

Exception: A passageway or level service space is not required when the *regulator* is capable of being serviced and removed through the required *attic* opening.

- (39) Section G2422.1.2.3 (411.1.3.3) of the *International Residential Code*, 2018 edition, is hereby amended delete Exception 1 and Exception 4.

- (40) Section G2445.2 (621.2) of the *International Residential Code*, 2018 edition, is hereby amended to add an Exception to read as follows:

G2445.2 (621.2) Prohibited use. One or more *unvented room heaters* shall not be used as the sole source of comfort heating in a *dwelling unit*.

Exception: Existing *approved unvented room heaters* may continue to be used in *dwelling units*, in accordance with the *code* provisions in effect when installed, when *approved* by the *Building Official* unless an unsafe condition is determined to exist as described in *International Fuel Gas Code* Section 108.7 of the *Fuel Gas Code*.

- (41) Section G2448.1.1 (624.1.1) of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

G2448.1.1 (624.1.1) Installation requirements. The requirements for *water heaters* relative to access, sizing, *relief valves*, drain pans and scald protection shall be in accordance with this *code*.

- (42) Section P2603 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

P2603 Protection against corrosion. Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or cinder walls and floors or other masonry. Metallic piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing shall have a thickness of not less than 0.008 inch (8 mil) (0.203 mm) and the sheathing shall be made of approved material. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

- (43) Section P2603.5.1 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of [number] inches (mm) below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches (304 mm) below grade.

- (44) Section P2604 of the *International Residential Code*, 2018 edition, is hereby added to read as follows:

P2604.2.1 Plastic sewer and DWV piping installation. Plastic sewer and DWV piping installed underground shall be installed in accordance with the manufacturer's installation instructions. Trench width shall be controlled to not exceed the outside the pipe diameter plus 16 inches or in a trench which has a controlled width equal to the nominal diameter of the piping multiplied by 1.25 plus 12 inches. The piping shall be bedded in 4 inches of granular fill and then backfilled compacting the side fill in 6-inch layers on each side of the piping. The compaction shall be to minimum of 85 percent standard proctor density and extend to a minimum of 6 inches above the top of the pipe.

- (45) Section P2801 of the *International Residential Code*, 2018 edition, is hereby added to read as follows:

P2801.6 Required pan. Where a storage tank-type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a pan constructed of one of the following:

1. Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.
2. Plastic not less than 0.036 inch (0.9 mm) in thickness.
3. Other approved materials.

- (46) Section P2801.6.1 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

Section P2801.6.1 Pan size and drain. The pan shall be not less than 1 1/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table P2906.5. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions. {existing text unchanged}

- (47) Section P2804.6.1 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

Section P2804.6.1 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

5. Discharge to an indirect waste receptor or to the outdoors.

[remainder unchanged]

- (48) Section P2902.5.3 of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

P2902.5.3 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

- (49) Section P3009.9 of the *International Residential Code*, 2018 edition, is hereby amended to delete the 'Exception' and to read as follows:

P3003.9.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground.

- (50) Section P3111 of the *International Residential Code*, 2018 edition, is hereby deleted.

- (51) Section P3112.2 of the *International Residential Code*, 2018 edition, is hereby deleted and replaced as follows:

P3112.2 Installation. Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9 mm/m) back to the drain shall be maintained. The return bend used under the drain-board shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 radius), a ninety (90) degree (1.6 radius) and a forty-five (45) degree (0.79 radius) elbow in the order named. Pipe sizing shall be as elsewhere required in this Code. The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.

- (52) Appendix Q of the *International Residential Code*, 2018 edition, is hereby amended to read as follows:

Appendix Q. Swimming Pools, Spas and Hot Tubs.

SECTION AQ101 GENERAL

AQ101.1 General.

The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

AQ101.2 Pools in flood hazard areas.

Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Section AQ101.2.1 or AQ101.2.2.

Exception: Pools located in riverine flood hazard areas which are outside of designated floodways.

AQ101.2.1 Pools located in designated floodways.

Where pools are located in designated floodways, documentation shall be submitted to the building official which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the jurisdiction.

AQ101.2.2 Pools located where floodways have not been designated.

Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

SECTION AQ102 DEFINITIONS

AQ102.1 General.

For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool."

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See "Swimming pool."

IN-GROUND POOL. See "Swimming pool."

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling, or a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE. See "Swimming pool."

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water more than 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION AG103 SWIMMING POOLS

AQ103.1 In-ground pools.

In-ground pools shall be designed and constructed in compliance with ANSI/NSPI-5.

AQ103.2 Above-ground and on-ground pools.

Above-ground and on-ground pools shall be designed and constructed in compliance with ANSI/NSPI-4.

AQ103.3 Pools in flood hazard areas.

In flood hazard areas established by Table R301.2(1), pools in coastal high-hazard areas shall be designed and constructed in compliance with ASCE 24.

SECTION AQ104 SPAS AND HOT TUBS

AQ104.1 Permanently installed spas and hot tubs.

Permanently installed spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-3.

AQ104.2 Portable spas and hot tubs.

Portable spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-6.

SECTION AQ105 BARRIER REQUIREMENTS

AQ105.1 Application.

The provisions of this appendix shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

AQ105.2 Outdoor swimming pool.

An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219mm) above grade measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51mm) measured on the side of the barrier, which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102mm).
2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102mm) sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm).

Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

6. Maximum mesh size for chain link fences shall be a 2.25-inch (57 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).

7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).

8. Access gates shall comply with the requirements of Section AQ105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:

8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and

8.2. The gate and barrier shall have not opening greater than 0.5 inch (13 mm) within 18 inches (457 mm) of the release mechanism.

9. Where a wall of a dwelling serves a part of the barrier one of the following conditions shall be met:

9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or

9.2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch (es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or

9.3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.

10. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then:

10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access, or

10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AQ105.2, Items 1 through 9. When the ladder or

steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch diameter (102 mm) sphere.

AQ105.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Section AQ105.2, Item 9.

AQ105.4 Prohibited locations. Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb them.

AQ105.5 Barrier exceptions. Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AQ107, shall be exempt from the provisions of this appendix

SECTION AQ106 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

AQ106.1 General.

Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

SECTION AQ107 ABBREVIATIONS

AQ107.1 General.

ANSI—American National Standards Institute
11 West 42nd Street
New York, NY 10036

APSP—Association of Pool and Spa Professionals
NSPI—National Spa and Pool Institute
2111 Eisenhower Avenue
Alexandria, VA 22314

ASCE—American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, VA 98411-0700

ASTM—ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428

UL—Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096

SECTION AQ108 REFERENCED STANDARDS

AQ108.1 General.

ANSI/NSP

<u>ANSI/NSPI-3—99</u>	<u>Standard for Permanently Installed Residential Spas</u>	<u>AQ104.1</u>
<u>ANSI/NSPI-4—99</u>	<u>Standard for Above-ground/On-ground Residential Swimming Pools</u>	<u>AQ103.2</u>
<u>ANSI/NSPI-5—03</u>	<u>Standard for Residential In-ground Swimming Pools</u>	<u>AQ103.1</u>
<u>ANSI/NSPI-6—99</u>	<u>Standard for Residential Portable Spas</u>	<u>AQ104.2</u>

ANSI/APSP

<u>ANSI/APSP-7—06</u>	<u>Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins</u>	<u>AQ106.1</u>
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ASCE

<u>ASCE/SEI-24—05</u>	<u>Flood-resistant Design and Construction</u>	<u>AQ103.3</u>
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ASTM

<u>ASTM F 1346—91 (2003)</u>	<u>Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools Spas and Hot Tubs</u>	<u>AQ105.2, AQ105.5</u>
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UL

<u>UL 2017—2000</u>	<u>Standard for General-purpose Signaling Devices and Systems — with revisions through June 2004</u>	<u>AQ105.2</u>
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Section 3. PENALTY CLAUSE

Any person, firm or corporation violating any of the provisions or terms of this Ordinance or the Code of Ordinances as amended hereby shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine not to exceed the sum of Two Thousand Dollars (\$2,000.00) for each offense, and each and every day such violation shall continue shall constitute a separate offense.

Section 4. SEVERABILITY CLAUSE

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs and sections of this Ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this Ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Ordinance, since the same would have been enacted by the City Council without the incorporation of this Ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

Section 5. REPEALER CLAUSE

Any provision of any prior ordinance of the City, whether codified or uncodified, which is in conflict with any provision of this Ordinance, is hereby repealed to the extent of the conflict, but all other provisions of the ordinances of the City, whether codified or uncodified, which are not in conflict with the provisions of this Ordinance shall remain in full force and effect.

Section 6. EFFECTIVE DATE

This Ordinance shall become effective immediately upon its passage and publication as required by law.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Forney, Texas, on this the _____ day of _____, 2020.

Mary Penn, Mayor

ATTEST:

Dorothy Brooks, TRMC, CMC, City Secretary

APPROVED AS TO FORM AND LEGALITY:

Jon Thatcher, City Attorney