Chapter 14 - BUILDINGS AND BUILDING REGULATIONS 11

Footnotes:

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Editor's note— Ord. No. 2015-35, § I, adopted July 13, 2015, amended chapter 14 in its entirety to read as herein set out. Formerly, chapter 14 pertained to similar subject matter, and derived from Ord. No. 2013-23, § 1, adopted April 15, 2013.

Cross reference— Contractors, § 18-66 et seq.; cable communications, ch. 22; civic and cultural facilities and affairs, ch. 30; condition of premises, § 50-56 et seq.; fire prevention and protection, ch. 54; fire lanes, § 54-121 et seq.; water distribution system for fire protection, § 54-146 et seq.; floods, ch. 58; mobile homes, house cars and tourist courts, § 62-196 et seq.; tent campgrounds, § 62-311 et seq.; historic preservation, ch. 66; planning, ch. 98; signs, ch. 106; streets, sidewalks and other public places, ch. 114; address numbering, § 114-61 et seq.; utilities, ch. 130; zoning, app. A; mobile home communities, app. B.

State Law reference— Trench excavation safety, V.T.C.A., Health and Safety Code § 756.021 et seq.; fire escapes, V.T.C.A., Health and Safety Code § 791.001 et seq.; protection of workmen on buildings, Vernon's Ann. Civ. St. arts. 5182, 5182-1; Manufactured Housing Standards Act, Vernon's Ann. Civ. St. art. 5221f; industrialized housing and buildings, Vernon's Ann. Civ. St. art. 5221f-1; Plumbing License Law, Vernon's Ann. Civ. St. art. 6243-101; Residential Service Company Act, Vernon's Ann. Civ. St. art. 6573b; establishment of building lines, V.T.C.A., Local Government Code § 213.001 et seq.; municipal regulation of structures, V.T.C.A., Local Government Code § 214.001 et seq.

ARTICLE I. - IN GENERAL

Sec. 14-1. - Standard Swimming Pool Code adopted; amendments; appeals; re-inspection fee; penalty.

- (a) The International Swimming Pool and Spa Code (ISPSC), 2015 edition, as published by the International Code Council (ICC) is hereby adopted and incorporated by reference as the standard for residential swimming pools, for one- or two-family dwellings.
- (b) The International Swimming Pool and Spa Code (ISPSC), 2015 edition is adopted as the standard for multifamily, commercial and public swimming pools.
- (c) Permit limitations. An application for a permit for any proposed work shall be deemed abandoned if the permit has not been issued (physically received by the applicant) within 30 days of the date of the application's approval, with or without conditions imposed by the city and any reviewing department or agency. An application is considered approved once all reviews are complete and the permit is ready to be issued subject to any condition attached thereto. If abandoned, the work shall not be commenced and no inspections will be made until another application has been made and another permit approved and issued. All permits shall expire a maximum of six months after the date the application is approved or conditionally approved, regardless of whether the permit had been issued (received by the applicant). Extensions of the expiration period may be made by the building official upon presentation by the applicant of good and justifiable cause. Examples of justification could include natural or manmade disasters, scope of extremely large projects that typically require more than six months to complete, or a lack of availability of materials due to regional or nationwide shortages.
 - (1) Fees. Fees for pools and related systems, equipment, and appurtenances shall be based on the schedules approved for the building, electrical, mechanical, gas, and plumbing codes of the city as outlined in appendix D of this Code.
 - (2) Electrical applications to comply with the 2014 National Electrical Code.
- (d) Reinspection fees are outlined in appendix D of this Code.

- (e) Where there is conflict between the code adopted in this section and any city, state, of federal law, the more restrictive requirements shall govern unless the less restrictive requirements are preemptive under state or federal law.
- (f) Any person, firm, corporation, agent, or entity that violates a provision of the code adopted by this section, or fails to comply therewith or with any of the provisions thereof, or violates a detail, statement, plan, or specification for a permit approved there under, shall be guilty of a misdemeanor. Each and every day or portion thereof during which any such violation or failure to comply is committed or continued shall be deemed a separate offense subject to a fine of not more than \$2,000.00 for each day and each offense upon conviction in a court of competent jurisdiction.

(Ord. No. 2015-35, § I, 7-13-15; Ord. No. 2018-21, § 5, 3-26-18)

Sec. 14-2. - Standard Amusement Device Code adopted; amendments; re-inspection fee; penalty.

- (a) The Standard Amusement Device Code, 1985 edition, as published by the Southern Building Code Congress International, Inc., as previously adopted by the city, shall remain in full force and effect subject to and including by reference such revisions, corrections, additions, and deletions as shall appear in this section.
- (b) The Standard Amusement Device Code adopted in subsection (a) of this section is hereby amended in the following respects:

Section 108 shall be renamed the "Construction Board of Adjustment and Appeals" and sections 108.1 through 108.5, inclusive, shall be deleted in their entirety and the following added:

Appeals of the requirements in the Standard Amusement Device Code may be made to the construction board of adjustment and appeals in accordance with the requirements set forth in the building code.

- (c) Reinspection fees are outlined in appendix D of this Code.
- (d) Where there is conflict between the code adopted by this section and any city, state or federal law, the more restrictive requirements shall govern unless the less restrictive requirements are preemptive under state or federal law.
- (e) Any person, firm, corporation, agent, or entity that violates a provision of the codes adopted by this section, or fails to comply therewith or with any of the provisions thereof, or violates a detail, statement, plan, or specification for a permit approved there under, shall be guilty of a misdemeanor. Each and every day or portion thereof during which any violation or failure to comply is committed or continued shall be deemed a separate offense subject to a fine of not more than \$2,000.00 for each day and each offense upon conviction in a court of competent jurisdiction.

(Ord. No. 2015-35, § I, 7-13-15; Ord. No. 2018-21, § 5, 3-26-18)

Sec. 14-3. - Administration and enforcement of codes, ordinances and articles.

The building official of the city shall have the responsibility for the administration and enforcement of these codes ordinances and articles as adopted by this chapter, and such official shall have all of the responsibilities called for in these articles and the specifications, rules and regulations adopted by these codes, ordinance and articles.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-4. - Interpretation of codes, ordinances and articles.

The building official shall have the authority to render interpretations of these codes, ordinance, and articles; and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of these codes, ordinances and articles. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in these codes, ordinances and articles.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-5. - Commercial premium or overtime inspection fees.

Premium or overtime inspections are those inspections requested for times other than the normal working hours. Fees for premium inspections done after 4:00 p.m. on weekdays and on weekends shall be at a rate of \$45.00 per inspection with a minimum of three inspections required.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-6. - Building official to determine conflicts between codes.

The code official is the building official except where specifically described as the fire code official. Applying to any construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, occupancy loads, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures, the building official is hereby authorized and directed to enforce the provisions of these codes and ordinances (all ICC codes adopted by the city and all city and all city ordinances that apply). The building official shall have the authority to render interpretations of all of these codes and ordinances and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of these codes and ordinances. The building official will be the final authority in any disputes of any interpretations of or any conflicts between these codes and ordinances. The building official is also the final authority in determining who will apply and enforce these codes and ordinances.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-7-14-25. - Reserved.

ARTICLE II. - BUILDING CODE

Sec. 14-26. - Short title.

This article shall be known as the building code of the city and may be cited as such.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-27. - International Building Code (IBC) 2015 and International Residential Code (IRC) 2015.

- (a) The IBC 2015 and the IRC 2015, and all appendices, are hereby adopted and incorporated by reference as the building codes of the city, except as stated in the following.
- (b) Appendix A, IBC, Employee Qualifications is not adopted.
- (c) Appendix B, IBC, Board of Appeals is not adopted.
- (d) Appendix D, IBC, Fire Districts is not adopted.

(e) Appendix H, IBC, Signs is amended as follows:

Section 101.2, Signs Exempt from Permits is deleted and replaced with Section 106.10 Code of Ordinances, City of New Braunfels, Texas, Signs exempt from regulation or permits.

- (f) Delete Section 105.2 IBC and IRC and amended as follows:
 - 1. Painting, papering, tiling, carpeting, cabinets, countertops and similar finish work.
 - Swings and other playground equipment accessory to detached one- and two-family dwellings.
- (g) Appendix J, IBC, Grading is not adopted.
- (h) Appendix I, IRC, Private Sewage Disposal is not adopted.
- (i) Appendix L, IRC, Permit Fees is not adopted.
- (j) All references to the International Electric Code are hereby deleted.
- (k) All references to the Department of Building Safety, as found in Section R103, IRC and Section 103, IBC, are hereby deleted and shall be known as the Building Department.
- (I) All references to the Board of Appeals, as found in Section 112, IRC and Section 113, IBC, are hereby deleted and shall be known as the Construction Board of Appeals Section 14-404 of the City of New Braunfels Code of Ordinances.
- (m) Delete Section R302.5.1 IRC and replace as follows:

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 1 3/8 inches in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches thick, or 20 minute fire-rated door.

(n) Delete Section R311.2 IRC and replace as follows:

Exit Door Required. Not less than two doors conforming to this section shall be provided for each dwelling unit. The required doors shall provide for direct access from the habitable portions of the dwelling to the exterior without travel through a garage. Access to habitable levels not having two exits in accordance with this section shall be by a ramp in accordance with Section R311.8 or a stairway in accordance with Section R311.7.

- (o) Delete Chapter 11 of the IBC and replace as follows:
 - 1. Chapter 11 Accessibility: All buildings or portions of buildings must comply with the accessibility standards adopted by the state of Texas. All projects shall be submitted to Texas Department of Licensing & Regulation (TDLR) for review, inspection and approval in accordance with state law.
 - 2. Before a contractor applies for a permit for a building or structure per the Texas Architectural Barriers Act, Texas Government Code, Chapter 469, Section 469.101 the contractor shall provide proof that he has registered the construction documents with the TDLR. Proof of registration consists of the project registration number from the TDLR.
 - 3. The Building Official shall have the authority to require registration with TDLR.
 - 4. The Building Official shall require an asbestos survey as required by the Texas Asbestos Health Protection Act (Art. 4472-3a Vernon's Texas Civil Statutes).
- (p) Chapter 10, Section 1004.1.2 of the IBC is amended to read as follows:

1004.1.2 Number by Table 1004.1.2. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.2

Exception: The Building Official shall have the authority to assign occupancy load that is less than required by Table 1004.1.2.

(q) Chapter 9, Section 903.1 of the IBC shall be amended to read as follows:

903.1 General. Automatic sprinkler systems shall comply with this section.

Exception: Change of occupancy from any other occupancy other than R-3 will require compliance with this section.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-28. - Reserved.

Editor's note—Ord. No. 2018-21, § 5, adopted March 26, 2018, repealed the former section 14-28 in its entirety, which pertained to building code fees, and derived from Ord. No. 2015-35, § 1, adopted July 13, 2015.

For current provisions pertaining to building code fees, the user's attention is directed to appendix D of this Code.

Sec. 14-29. - Contractors.

- (a) General contractor-local registration shall expire on February 28th of each year. The term "general contractor" shall mean and include every person who is engaged in the business of working on, or causing to be worked on, or accepting orders or contracts for work on any building, structure, or property, whether compensated or not compensated, under the IRC 2015 R101.2 Scope. The provisions of the IRC for One- and Two-Family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one and two-family dwellings and multiple single family dwellings (townhouses) not more than three stories in height with a separate means of egress and their accessory structures except for the following:
 - (1) The term "general contractor-residential" shall not apply to specific trades such as foundation and flatwork, framing, cabinetry, painting, roofing, and paving as long as such work is performed under subcontract to a licensed general contractor;
 - (2) The term "general contractor-residential" shall not apply to the trade of electricians who are licensed separately under city ordinances, nor to plumbing and mechanical trades which are regulated by the state; and
 - (3) The term "general contractor-residential" shall not apply to any person performing work on any building, structure, or property where a preemptive state or federal law prevents the city from requiring licensing.
- (b) General contractor-commercial shall be defined as IBC 2015 Section 101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.
 - (1) Detached one- and two-family dwellings and multiple single-family dwellings (town houses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the IRC.
 - (2) General contractor commercial shall be registered with the city. General contractor-commercial local registration shall expire December 31st of each year except for the following:
 - a. The term "general contractor-commercial" shall not apply to specific trades such as foundation and flatwork, framing, cabinetry, painting, roofing, and paving as long as such work is performed under subcontract to a registered general contractor;

- b. The term "general contractor-commercial" shall not apply to the trade of electricians who are registered separately under city ordinances, nor to plumbing and mechanical trades which are regulated by the state; and
- c. The term "general contractor-commercial" shall not apply to any person performing work on any building, structure, or property where a preemptive state or federal law prevents the city from requiring registration.
- (c) Contractor-limited defined; scope of work.
 - (1) The term "contractor-limited" or "limited contractor" shall mean a person who is not a general contractor and who is engaged in the business of working on, or causing to be worked on, or accepting orders or contracts for work on any building, structure, or property, whether compensated or not compensated, except for the following:
 - a. The term "limited contractor" shall not apply to specific trades such as foundation and flatwork, framing, cabinetry, painting, roofing, and paving as long as such work is performed under subcontract to a registered general contractor;
 - b. The term "limited contractor" shall not apply to the trade of electricians who are licensed separately under city ordinances, nor to plumbing and mechanical trades which are regulated by the state; and
 - c. The term "limited contractor" shall not apply to any person performing work on any building, structure, or property where a preemptive state or federal law prevents the city from requiring licensing or permitting.
 - (2) A limited contractor is considered applicable to such trades as roofing, framing, paving, fencing, and other specialty crafts.
- (d) Building permit required. No person, firm, corporation, or any other entity shall erect, construct, enlarge, alter, repair, modify, excavate, fill, or change any fence, sign, land, building, structure, or property in the city, nor cause such work to be done; nor shall any building or structure be moved, removed, converted, or demolished without first obtaining any necessary permit therefore from the building official and complying with all applicable requirements of the city.

In addition to a registered contractor, the designer or design professional that prepared the plans for the building for which a building permit is sought may submit a building permit application. Or, the property owner may apply for the building permit. Such permit shall be issued only to a registered contractor or other person approved by the building official in accordance with this section who will construct the building.

- (e) Owner doing own work; permits required; compliance with applicable laws and requirements.
 - (1) An owner of an existing single-family residence who permanently resides in that residence and who claims it as a homestead under the laws of the state may act as a limited or general contractor on his own residence without being registered. However, he must obtain all necessary permits, pay all required permit fees, and comply with all ordinances of the city as well as any other applicable state or federal laws.
 - (2) A person who intends to build a single-family residence and permanently reside therein and claim it as a homestead under the laws of the state may act as a limited or general contractor on his own residence without being registered if approved by the building official. However, he must obtain all necessary permits, pay all required permit fees, and comply with all ordinances of the city as well as any other applicable state or federal laws.
 - (3) No single-family resident homeowner will be issued a permit under the provisions of this section involving any structural, electrical, or plumbing work unless the building official is satisfied that the applicant can competently and safely perform the work.
- (f) Reserved.

- (g) Registration—Application generally. Every person desiring to engage in the business of general or limited contractor in the city shall obtain a city registration authorizing him to engage in such business. Individuals desiring such registration shall make application with the building official on the form, which may be obtained from the office of the building department of the city. The building official may, at his discretion, issue one permit for the initial work of any otherwise approved structure pending approval of the appropriate general or limited contractor's registration. Only individuals shall be so registered, and the registration is not transferable.
- (h) Insurance required. Before any person shall engage in the business of a general or limited contractor or be granted a registration to do so, he shall first provide the city proof of \$1,000,000.00 liability insurance for general contractor-commercial and \$300,000.00 for limited contractor and general contractor-residential.
- (i) Application for registration—Applicant who has had registration previously denied or revoked. An applicant for a general or limited contractor's registration who has been denied a registration or had a registration revoked by this city or another entity for any building or related trade must disclose that information to the building official at the time of application. Any conviction for a misdemeanor or felony, other than traffic citations, must also be disclosed. Failure to disclose such information will result in automatic disapproval of the application. If the registration is issued and such failure to disclose is discovered later, the registration will be revoked. Any additional legal remedies may also be pursued by the building official. Upon disclosure at the time of registration application, the building official will make a thorough investigation and weigh carefully all details available prior to approving registration.
- (j) Foo. Every applicant who shall make application for a general contractor's registration, as provided for in this article, shall pay a fee of \$200.00 upon submitting such application.
- (k) Issuance of registration. A contractor's registration will be issued by the building official only after receipt of the insurance required by subsection (h).
- (I) Term of registration. All registrations issued under the provisions of this article shall expire on December 31st, except the registrations identified under subsection (a).
- (m) Registration renewal; fee; requirements for renewal. A registration holder may renew his general contractor's registration any time during the period within December 1 and 30 calendar days after the date of its expiration by paying an annual renewal fee of \$100.00. Also, provided he has engaged in such business with a properly issued building permit and satisfactorily completed the work for which the permit was issued sometime within the preceding 24 months. A registration holder who has exceeded the allowed 60 days past expiration will be considered as a new applicant should he desire to reestablish his general contractor's registration.
- (n) Procedure for denial, revocation, or suspension of registration or right to obtain permits. If the building official initiates a recommendation for denial, revocation, or suspension of a registration or of a right to obtain permits to work under an adopted code or ordinance of the city, the following procedure will apply:
 - (1) An applicant for registration or a registrant of the city shall have ten business days to request a review hearing to be held before the construction board of appeals as referenced in section 14-404. During the ten business-day period a current registrant shall not be allowed to obtain permits. If the applicant for registration or a registrant fails to request a hearing within ten business days the recommendation of the building official shall become final. If a registrant requests a hearing, any denial, revocation or suspension of registration or right to obtain permits shall be stayed pending the decision of the board. The board shall by majority vote affirm or reject the building official's recommendation.
 - (2) If the registrant is registered by the state, such as an electrical contractor, mechanical contractor or plumbing contractor, the process in subsection (1) of this section would apply.

Sec. 14-30. Requirements not covered by Code.

Any requirements necessary for the strength, stability or proper operation of an existing or proposed building, structure, electrical, gas, mechanical or plumbing system, or for the public safety, health and general welfare, not specifically covered by this chapter or the other technical codes, shall be determined by the building official. In addition, other requirements to implement, clarify or set procedures to accomplish the intent of this Code may be set in writing by the building official and may be posted electronically for public access.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-31. - Construction work hours and/or noise.

- (a) Construction work hours and/or noise means any construction or noise generated by construction activities, such as the operation of power equipment, machinery or tools, the use of air-powered or impact tools, hammers, saws, picks, shovels and other similar tools, and the loading, unloading, conveyance or assembly of construction materials, equipment, machinery or tools.
- (b) It is unlawful for a person to start work and/or cause construction noise to be made between 9:00 p.m. and 6:00 a.m.
- (c) It is unlawful for a person to whom a construction permit is issued by the city to cause or allow work to start and/or construction noise to be made in connection with the performance of work under the permit between 9:00 p.m. and 6:00 a.m.

Exceptions:

The building department understands that there may be times when work must occur outside of the permissible hours. If you have an emergency that includes any of the following, then the start work and/or noise regulations do not apply:

- Work made necessary to restore a property to a safe condition following a public calamity.
- Work to restore public utilities.
- Work required to protect persons or property from imminent exposure to danger.

There may be other situations that require work outside of permissible hours. For these situations, you must apply for a variance subject to approval by the building official. Application for variance must be in filed with the building department at least 48 hours in advance.

(d) A person who violates this section shall be guilty of a misdemeaner. Each and every day or portion thereof during which any violation or failure to comply is committed or continued shall be deemed a separate offense subject to a fine of not more than \$2,000.00 for each day and each offense upon conviction in a court of competent jurisdiction.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-32. - Erosion control.

(a) Definitions. The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Below ground installations means activity that causes excess sediment laden water, concrete sawing wash water, wash water or drilling mud pumped from an excavation or structure and shall be treated as sediment laden runoff for erosion control purposes.

Building official means the building official for the City of New Braunfels or his designee.

Construction activities means construction activities that require a building permit.

Erosion control plan means a site plan with necessary details, showing the property where land disturbing activity will take place and showing the locations and types of devices, procedures and practices to be used to control erosion and sedimentation.

Final approval means completion of a project, site or building in accordance with city requirements and ordinances. In the case of a building, a certificate of occupancy is issued.

Land disturbing activity means any activity, including but not limited to excavation, planting, tilling, and grading, which disturbs the natural or improved vegetative ground cover so as to expose soil to the erosive forces of rain, storm water runoff or wind.

Off-site borrow area means a source of earth fill material used in the construction of embankments or other earth fill structures, that is located on another parcel of property other than where the principal construction is occurring.

Off-site sedimentation means deposit of soil material beyond the limits of the property undergoing land disturbing activity or in city streets, alleys or drainage facilities in an amount sufficient to constitute a threat to public safety and comfort.

Off-site spoil area means an area on another parcel of property, other than where the principal construction is occurring, where excess earth, rock or construction material is disposed of.

Permanent erosion control devices means devices or practices installed prior to final approval and maintained after final approval to prevent or minimize the erosion and deposit of soil materials. Such devices may include, but shall not be limited to, permanent seeding, sod, storm drain channels, channel linings, storm drain pipes, outlet velocity control structures and storm water detention structures.

Permanent ground cover means permanent vegetative cover on all bare soil areas of a property not covered by a permanent structure or landscaping improvements, including but not limited to, live sod, perennial grasses or other materials which lessen runoff and soil erosion on the property.

Phased occupancy means use or inhabitation of a single structure or other portion of a project as such structure or portion thereof is completed, but before the project as a whole is fully completed and finally approved by city.

Related land area includes the property where the principal land disturbing activity is taking place, all adjacent property, off-site borrow areas, off-site spoil areas, off-site properties necessary for required utility extensions, and off-site areas for required street improvements.

Responsible party means a business entity, franchised utility company, developer, property owner, contractor or holder of a building permit who is required to comply with the terms of this article.

Staging area means an on-site or off-site location used by a Contractor to store materials for a project, to assemble portions of equipment or structures, to store equipment or machinery, to park vehicles, or for other construction related uses.

Stop work order means the suspension of all city permits with no approvals or inspections of work for the site or project being performed.

Temporary erosion control devices means devices installed or practices implemented and maintained during land disturbing activities to prevent, minimize or control the erosion and deposit of soil materials.

(b) Building permit. When land disturbing activities are conducted on a lot for which a building permit must be issued, the responsible party shall comply with the following:

- (1) Erosion control plan. Prior to approval of a building permit for a lot by the city, the contractor or other responsible party obtaining the building permit shall submit an erosion control plan for approval by the city. No inspection may be performed on a project until a city-approved erosion control plan is implemented.
- (2) Stop work order/citation. City shall inspect the erosion control devices located at a site for compliance with the approved erosion control plan submitted for such site. If a responsible party fails to implement or maintain erosion control devices as specified in his approved erosion control plan, city shall provide such party with written notice of noncompliance identifying the nature of such noncompliance. The responsible party shall have 24 hours to bring his erosion control devices into compliance with the approved erosion control plan for the site where the violation occurred. Correction shall include sediment clean-up, erosion control device repair, erosion control device maintenance, and/or installation of additional erosion control devices to prevent re-occurrence of the violation. The 24-hour cure period may be extended for inclement weather or other factors at the discretion of the building official.

At the end of the 24-hour cure period, city shall re-inspect the site and may assess a re-inspection fee. If at the time of such re-inspection, the erosion control devices at the site have not been brought into compliance with the approved erosion control plan, city may issue a stop work order and issue a citation for each violation of the city's erosion control requirements. When a stop work order has been issued, a re-inspection fee shall be assessed. To obtain a re-inspection for removal of the stop work order, a request must be submitted there for and a re-inspection fee, as set by the building inspection department of the city, shall be paid.

(3) Removal of erosion control devices. Upon final occupancy or upon establishing permanent ground cover on a lot, all temporary erosion control devices shall be removed.

(c) Enforcement.

- (1) Violations. It shall be an offense for a responsible party or a third party performing work on a project to violate any of the requirements of this article, including, but not limited to, the following:
 - a. Conducting any land disturbing or construction activity without an approved erosion control plan for the location where the violation occurred.
 - b. Failing to install erosion control devices or to maintain erosion control devices throughout the duration of land disturbing activities, in compliance with the approved erosion control plan for the location where the violation occurred.
 - c. Failing to remove off-site sedimentation that is a direct result of land disturbing activities where such off-site sedimentation results from the failure to implement or maintain erosion control devices as specified in an approved erosion control plan for the location where the violation occurred.
 - d. Allowing sediment laden water resulting from below ground installations to flow from a site without being treated through an erosion control device.
 - e. Failing to repair damage to existing erosion control devices, including replacement of existing grass or sod.
- (2) Notice of violation. Written notice of violation shall be given to the responsible party or his job site representative as identified in the erosion control plan for a site. Such notice shall identify the nature of the alleged violation and the action required to obtain compliance with the approved erosion control plan.
- (3) Class C misdemeanor. Any person, firm, or corporation violating any of the provisions or terms of this article shall be deemed guilty of a Class C misdemeanor and, upon conviction thereof, be subject to a fine not exceeding \$500.00 for each offense, and each and every day such violation shall continue shall be deemed to constitute a separate offense.

- (1) Appeal to building official. Upon notice of noncompliance, a responsible party may appeal the city's decision to take deductions from his erosion control deposit pursuant to section 14-96 of this article, by filing a written appeal to the building official within seven days of city's written notice of its intent to make such deduction for costs as allowed herein. An appeal filed pursuant to this section shall specifically state the basis for the aggrieved party's challenge to the city's authority to take deductions under this article.
- (2) Standard for appeals. When reviewing an appeal filed pursuant to this section, the building official shall evaluate all evidence submitted. The burden of proving that a violation of this article occurred shall be on the city. The city shall provide evidence sufficient to reasonably support a determination that the responsible party failed to comply with the requirements of this article as alleged by the city.
- (3) Issuance of opinion by director. Decisions of the building official shall be issued within 20 days of city's receipt of the written appeal. Decisions of the building official shall be final.

GLOSSARY

- BARREL A pipe placed through a dam, levee or dike to control the release of water.
- BMP Best Management Practices. Consist of practices, procedures, and devices used to prevent or reduce pollutants, including sediment, from polluting the waters of the United States.
- BORROW AREA A source of earth fill material used in the construction of embankments or other earth fill structures.
- CHANNEL A natural stream or excavated ditch that conveys water.
- CHANNELIZATION Alteration of a stream channel by widening, deepening, straightening, or paving certain areas to improve flow characteristics.
- CHECK DAM A small, temporary dam constructed across a drainage ditch, swale or channel to lower the speed of concentrated flows and promote sediment deposition.
- CONTOUR An imaginary line on the surface of the earth connecting points of the same elevation.
- CUT Portion of land surface or area from which earth has been removed or will be removed by excavating; the depth below the original ground surface to the excavated ground surface.
- DAM A barrier to confine or impound water or for the retention of soil, sediment or debris.
- DESIGN STORM A selected rainfall pattern of specified amount, intensity, duration, and frequency that is used as a basis for design.
- DISCHARGE Usually the rate of water flow commonly expressed as cubic feet per second, eubic meters per second, gallons per minute, or millions of gallons per day.
- DIVERSION A channel with a supporting ridge on the lower side constructed at the top, across, or at the bottom of a slope for the purpose of controlling surface runoff.

- DIVERSION DIKE A barrier built to divert surface runoff.
- DIVIDE, DRAINAGE The boundary between watersheds.
- DRAINAGEWAY A natural or artificial depression that carries surface water to a larger watercourse or outlet such as a river or lake.
- DROP INLET Overall structure in which the water drops through a vertical riser connected to a discharge conduit or storm sewer.
- EARTH DAM Dam constructed of compacted suitable soil materials.
- ENERGY DISSIPATOR A device used to reduce the energy of flowing water to prevent erosion.
- EPA The Environmental Protection Agency. The federal agency responsible for administering the NPDES permit program.
- ERODIBILITY Susceptibility to erosion.
- EROSION The wearing away of the land surface by water, wind, ice, gravity, or other geological agents.
- EROSION CONTROL PLAN—A site plan with necessary details, showing the property where land disturbing activity will take place and showing the locations and types of BMPs to be used to control erosion and sedimentation.
- FILTER FABRIC A woven or non-woven, water permeable material generally made of synthetic products such as polypropylene and used in erosion and sediment control applications to trap sediment or prevent the movement of fine soil particles.
- FLOOD PLAIN The lowland that borders a stream and is subject to flooding when the stream overflows its banks.
- GABION A wire mesh cage, usually rectangular, filled with rock and used to protect channel banks and other sloping areas from erosion.
- GEOTEXTILES See filter fabric.
- GRADE STABILIZATION STRUCTURE A structure for the purpose of stabilizing the grade of a gully or other watercourse, thereby preventing further erosion or lowering of the channel bottom.
- GRADING The cutting and/or filling of the land surface to a desired slope or elevation.

- GRASSED WATERWAY A natural or constructed waterway, usually broad and shallow, covered with erosion-resistant grasses and used to safely conduct surface water from an area.
- GROUND COVER Low growing, spreading plants (grasses or legumes) useful for low-maintenance landscape areas.
- INVERT The inside bottom of a culvert or other conduit.
- LEGUME Any member of the pea or pulse family which includes peas, beans, peanuts, elovers, alfalfa, sweet clovers, lespedezas, vetches, black locust, and kudzu.
- NPDES National Pollutant Discharge Elimination System. A federal program that requires a permit for storm water discharges to the waters of the U.S.
- OUTLET PROTECTION Stone, rip-rap, concrete or asphalt aprons installed to reduce the speed of concentrated storm water flows, thereby reducing erosion and scouring at storm water outlets.
- RAINFALL INTENSITY The rate at which rain is falling at any given instant, usually expressed in inches per hour.
- RATIONAL METHOD A means of computing storm drainage flow rates by use of the formula Q = CiA, where C is a coefficient describing the physical drainage area, i is the rainfall intensity, and A is the drainage area.
- RECEIVING STREAM The body of water into which runoff or effluent is discharged.
- RILL A small intermittent watercourse with steep sides, usually only a few inches deep, normally caused by erosion.
- RISER A vertical pipe or structure extending from the barrel, storm sewer or bottom of a pond BMP that is used to convey the discharge from the pond or drainage area.
- RUNOFF That portion of precipitation that flows from a drainage area on the land surface, in open channels or in storm water conveyance systems.
- SCOUR The clearing and digging action of flowing water, especially the downward erosion caused by stream water in sweeping away mud and silt from the stream bed.
- SEDIMENT Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice.
- SEDIMENT BASIN A settling pond with a controlled storm water release structure used to collect and store sediment produced by land disturbing activities. The basin detains sediment laden runoff from larger drainage areas long enough to allow most of the sediment to settle out.

- SEDIMENT POOL The reservoir space allocated for the accumulation of sediment in a sedimentation control device.
- SEDIMENT TRAP A settling basin with a filter outlet designed to retain runoff long enough to allow most of the silt to settle out.
- SEDIMENTATION The deposition of suspended soil particles that have settled out from storm water runoff.
- SHEETFLOW Runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel or a rill.
- SILT Parts of the soil structure consisting of particles between 0.002 and 0.05 mm in diameter.
- SLOPE Degree of deviation of a surface from the horizontal. Slope is measured and is shown as a numerical ratio or percent.
- SOIL The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.
- STABILIZATION The proper placing, grading and/or covering of soil, rock or earth to ensure its resistance to erosion, sliding, or other movement. Also see Vegetative Stabilization.
- STORM FREQUENCY The time interval between major storms of predetermined intensity and volumes of runoff (e.g. ten year or 100 year storm).
- STORM SEWER (DRAIN) A sewer that carries storm water, surface drainage, street wash and other wash waters, but excludes sewage and industrial wastes. Also called a storm drain.
- STORM WATER Runoff from a rain event or snow melt runoff. Also called surface runoff.
- SWALE An elongated, gentle depression in the land surface that conveys storm water into primary drainage channels. Swales are normally without flowing or standing water.
- SWPPP Storm Water Pollution Prevention Plan. A document that is a part of the NPDES permit application and consists of the site erosion control plan, waste management plan, and site narrative as required by the EPA.
- TEMPORARY SEEDING The growing of short term (less than 1 year) vegetation on disturbed areas to prevent erosion.
- TOE OF SLOPE The base or bottom of a slope at the point where the ground surface abruptly changes to a significantly flatter grade.

- TOPOGRAPHY A general term that includes the physical features of a surface area including relative elevations and the position of natural and man-made features.
- VEGETATIVE STABILIZATION Protection of erodible areas with temporary seeding, permanent seeding, or sodding.
- WATERSHED The region drained by or contributing water to a stream, lake, or other body of water.

Sec. 14-33. - Irrigation systems.

- (a) Scope. This appendix [section] applies to the installation, alteration, repairs, relocation, replacement, addition to, use, or maintenance of irrigation systems within the city. This appendix [section] regulates the installation of backflow prevention devices, control valves, automatic irrigation controllers, control wiring, and water conservation required for the proper design, installation, and operation of irrigation systems. All irrigation systems must comply with the provisions of this appendix [section] and with Title 30, Texas Administrative Code, Chapter 344.
- (b) Purpose. The purpose of this appendix [section] is to require all irrigation systems to be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation.
- (c) Definitions. The following words and terms shall have the meanings shown herein.

Design means 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 hydraulics 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 means 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.

Emission device means 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 means 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, Title 26, United States Code Service, Section 3312(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

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

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

Inspector means 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 means a person who connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to Title 30, Texas Administrative Code, Chapter 30.

Irrigation inspector means 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 Title 30, Texas Administrative Code, Chapter 30.

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

Irrigation system means 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., Agricultural Code § 251.002.

Irrigation technician means 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 Title 30, Texas Administrative Code, Chapter 30.

Irrigation zone means 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 means a person who sells, designs, offers consultations regarding, installs, 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 Title 30, Texas Administrative Code, Chapter 30.

Irrigator-in-charge means 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 means the science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.

License means an occupational license that is issued by the Texas Commission on Environmental Quality under Title 30, Texas Administrative Code, Chapter 30, to an individual that authorizes the individual to engage in an activity that is covered by Title 30, Texas Administrative Code, Chapter 30.

Mainline means a pipe within an irrigation system that delivers water from the water source to the individual zone valves.

Maintenance checklist means 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, 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 means 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 the atmosphere.

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

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

Pass-through contract means 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 irrigation system.

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

Records of landscape irrigation activities means 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.

Static water pressure means the pressure of water when it is not moving.

Supervision means 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 means 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 means 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 means an automatic valve that controls a single zone of a landscape irrigation system.

(d) License. Any person who connects an irrigation system to the water supply in the city must hold a valid license, as defined by Title 30, Texas Administrative Code, Chapter 30, and V.T.C.A., Occupations Code ch. 1903, or as defined by Title 22 of the Texas Administrative Code, Chapter 365, and required by V.T.C.A., Occupations Code ch. 1301.

Exemption: A homeowner is not required to be licensed in accordance with V.T.C.A., Occupations Code tit. 12, § 1903.002(c)(1) if the homeowner is performing irrigation work in a building or on a premises owned and occupied by the homeowner as the homeowner's homestead. A homeowner who installs an irrigation system must meet the standards contained in Title 30, Texas Administrative Code, Chapter 344, regarding spacing, water pressure, spraying water over impervious materials, rain and freeze sensors, backflow prevention and isolation valves.

(e) Permit. Any person or homeowner installing an irrigation system in the city is required to obtain a permit from the city. Any plan approved for a permit must be in compliance with the requirements of this appendix [section].

Exemptions:

- (1) An irrigation system that is an on-site sewage disposal system, as defined by V.T.C.A., Health and Safety Code § 355.002; or
- (2) An irrigation system used on or by an agricultural operation as defined by V.T.C.A., Agriculture Code § 251.002; or

- (3) An irrigation system connected to a groundwater well used by the property owner for domestic use.
- (f) Backflow prevention methods and devices.
 - (1) Any irrigation system that is connected to the potable water supply must be connected through a backflow 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, University of Southern California; the International 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.
 - (2) 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:
 - 1. There is an unobstructed physical separation; and
 - 2. 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:
 - 1. 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
 - Drainage is provided for any water that may be discharged through the assembly relief valve.
 - c. Pressure vacuum breakers may be used if:
 - 1. No back-pressure condition will occur; and
 - 2. 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.
 - d. Atmospheric vacuum breakers may be used if:
 - 1. No back-pressure will be present;
 - 2. There are no shutoff valves downstream from the atmospheric vacuum breaker;
 - 3. 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;
 - 4. 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
 - 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.
 - (3) Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.
 - (4) 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.

- (5) If a double check valve is installed below ground:
 - a. Test cocks must be plugged, except when the double check valve is being tested;
 - b. Test cock plugs must be threaded, water-tight, and made of non-ferrous material;
 - c. A y-type strainer is installed on the inlet side of the double check valve;
 - d. There must be a clearance between any fill material and the bottom of the double check valve to allow space 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.
- (6) If an existing irrigation system without a backflow-prevention assembly requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention method before any major maintenance, alteration, repair, or service is performed.
- (7) 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.
- (8) The irrigator shall ensure the backflow prevention device is tested by a licensed backflow prevention assembly tester prior to being placed in service and the test results provided to the local water purveyor and the irrigation system's owner or owner's representative within ten business days of testing of the backflow prevention device.
- (g) Specific conditions and cross-connection control.
 - (1) 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.
 - (2) 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.
 - (3) 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.
 - (4) If an irrigation system is designed or installed on a property that is served by an on-site sewage facility, as defined in Title 30, Texas Administrative Code, Chapter 285, then:
 - All irrigation piping and valves must meet the separation distances from the on-site sewage facilities system as required for a private water line in Title 30, Texas Administrative Code, Section 285.91(10);
 - 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 Title 30, Texas Administrative Code, Section
 344.50; and
 - c. Any water from the irrigation system that is applied to the surface of the area utilized by the on-site 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 on-site sewage facilities system from operating effectively.
- (h) Irrigation plan design: Minimum standards.
 - (1) An irrigator 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:

- a. Diminish the operational integrity of the irrigation system;
- b. Violate any requirements of this appendix [section]; and
- c. Go unnoted in red on the irrigation plan.
- (2) 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.
- (3) All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:
 - a. The irrigator's seal, signature, and date of signing;
 - b. All major physical features and the boundaries of the areas to be watered;
 - c. A North arrow;
 - d. A legend;
 - e. The zone flow measurement for each zone;
 - f. Location and type of each:
 - 1. Controller; and
 - 2. Sensor (i.e., rain and freeze);
 - g. Location, type, and size of each:
 - 1. Water source, including, but not limited to, a water meter and point(s) of connection;
 - 2. Backflow prevention device:
 - Water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;
 - 4. Valve, including but not limited to, zone valves, master valves, and isolation valves;
 - Pressure regulation component; and
 - 6. Main line and lateral piping.
 - h. The scale used; and
 - i. The design pressure.
- (i) Design and installation: Minimum requirements.
 - (1) 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.
 - (2) Spacing.
 - a. 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.
 - b. 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, including, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.
- c. 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.
- (3) Water pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.
- (4) 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.
- (5) Irrigation zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.
- (6) 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.
- (7) 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.
- (8) Master valve. When provided, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.
- (9) 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, Section 605.
- (10) Rain and freeze sensors.
 - Any commercial, industrial, multi-family, or residential customer class irrigation system installed within the city on or after January 1, 2009, must be equipped with rain and freeze sensors.
 - b. Any commercial, industrial, or multi-family customer class irrigation system installed within the city before January 1, 2009, may not be operated after January 1, 2010, without being equipped with rain and freeze sensors
 - c. Any residential customer class irrigation system installed within the city before January 1, 2009, may not be operated after January 1, 2011, without being equipped with rain and freeze sensors. If a person repairs or replaces more than 50 percent of a residential customer class irrigation system before January 1, 2011, then such irrigation system must be equipped with rain and freeze sensors.
 - d. Any rain and freeze sensor shall be installed according to the manufacturer's published recommendation and shall be from a list approved by the building official.
 - e. Repairs to existing automatic irrigation systems that require replacement of an existing controller shall include a rain and freeze sensor designed to inhibit or interrupt operation of the irrigation system during periods of freezing temperatures and rainfall.
- (11) Isolation valve. All new irrigation systems must include a lockable isolation valve between the water meter and the backflow prevention device.
- (12) Depth-coverage of piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping.
 - a. If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill,

- between the top of the pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at a depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.
- b. If a utility, man-made structure, or roots create an unavoidable obstacle, which makes the six-inch depth coverage requirement impractical, the piping shall be installed to provide a minimum of two inches of select backfill between the top of the pipe and the natural grade of the topsoil.
- All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.
- (13) Wiring irrigation systems.
 - a. Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.
 - b. Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation.
 - c. Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer.
 - d. Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.
- (14) Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, including, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout) is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box, and the hose bib and any hoses connected to the bib must be labeled "non potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.
- (15) Beginning January 1, 2010, either a licensed irrigator or a licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not on-site, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.
- (j) Completion of irrigation system installation. Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete four items:
 - (1) A final "walk through" with the irrigation system's owner or the owner's representative to explain the operation of the system.
 - (2) 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. The items on the maintenance checklist shall include, but are not limited to:
 - a. The manufacturer's manual for the automatic controller, if the system is automatic;

- b. 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;
- c. A list of components, such as the nozzle, pump filters, and other such components, that require maintenance and the recommended frequency for the service; and
- d. 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."
- (3) 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 automatic controller installed by the irrigator or irrigation technician. If the irrigation system is manual, the sticker shall be affixed to the original maintenance checklist. The information contained on the sticker must be printed with waterproof ink.
- (4) The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.
- (k) Maintenance, alteration, repair, or service of irrigation systems.
 - (1) 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.
 - (2) 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.
 - (3) 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, Section 605.
 - (4) When maintenance, alteration, repair, or service of an irrigation system involves excavation work at the water meter or backflow prevention device, a lockable isolation valve shall be installed, if an isolation valve is not present.
- (I) 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 components;
 - (4) The domestic potable water line is connected using an air gap or a reduced pressure principle backflow prevention device, in accordance with Title 30, Texas Administrative Code, Section 290.47(i);
 - (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 city ordinances.
- (m) Lawn and landscape irrigation restrictions.

- (1) A person commits an offense if the person knowingly or recklessly irrigates, waters, or causes or permits the irrigation or watering of a lawn or landscape located on premises owned, leased, or managed by the person in a manner that causes:
 - A substantial amount of water to fall upon impervious areas instead of a lawn or landscape, such that a constant stream of water overflows from the lawn or landscape onto a street or other drainage area; or
 - b. An irrigation system or other lawn or landscape watering device to operate during any form of precipitation.
- (2) A person commits an offense if, on premises owned, leased, or managed by that person, the person operates an irrigation system or other lawn or landscape watering device that:
 - a. Has any broken or missing sprinkler head; or
 - b. Has not been properly maintained in a manner that prevents the waste of water-

Secs. 14-34-14-50. - Reserved.

ARTICLE III. - ELECTRICAL CODE^[2]

Footnotes:

- (2) -

Cross reference—Businesses, ch. 18.

Sec. 14-51. - Electrical code.

The National Electrical Code 2014 is hereby adopted as the electrical code of the city, except:

- (1) Section 80-35, Effective Date, is not adopted.
- (2) Section 80.15, Electrical Board of the National Electrical Code, is deleted.
- (3) That paragraph 80.23(B)(3) of the 2014 National Electrical Code is deleted.

(Ord. No. 2015-35, § I, 7-13-15; Ord. No. 2018-21, § 5, 3-26-18)

Sec. 14-52. - Scope of article.

The provisions of this article shall apply to all electrical wiring and equipment installed, used or maintained in the city, except the electrical work, wiring or equipment used in the generation, distribution and rendition of service to the public which is installed by or for and owned or maintained by a public utility, telephone, telegraph or district messenger company permitted to operate in the city, and the registration fees and liability insurance provided for in this article shall not apply to such companies and their employees in the performance of such work, but the wiring and installations for light, heat and power equipment of such companies which are installed for their own use as office, warehouse or repair facilities shall be done under permit according to the requirements of this article.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-53. - Maintenance.

- (a) The electrical service and wiring of all buildings and structures, both existing and new, shall be maintained in a safe and operating condition unless electrical service is completely removed from such building or structure.
- (b) Electrical wiring for which the owner no longer has use, need or desire for and therefore disconnects from its electrical source shall be completely removed from the building or structure unless electrical service to such structure is completely removed.
- (c) The owner, or his designated agent, shall be responsible for the electrical maintenance of buildings or structures.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-54. - Administration and enforcement generally.

The building official is designated as the city officer responsible for enforcing the requirements of this article and is the administrative authority. He and/or members of his department shall serve as electrical inspectors when enforcing the provisions of this article.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-55. - Conflicts of interest; restrictions on providing initial electrical service.

- (a) No person employed by the building department of this city shall be financially interested in the furnishing of labor, material or appliances for use in any manner in the electrical installation of a building or structure unless such person is otherwise eligible under the property and homeowner exception as set forth in section 14-62.
- (b) Utility providers shall not provide initial electrical service to any building or structure unless such utility has been furnished a certificate of occupancy or release as required by the city for such building or structure that corresponds to the intended use of the building. Temporary electrical service may be provided to such building or structure for a period not exceeding 180 days after the utility provider has been furnished a certificate of inspection or temporary certificate of occupancy. When temporary service has been provided for the purpose of construction, the period of service may be extended by the building official. Each of the certificates referred to in this section will be issued as appropriate by the building official upon completion of the required inspections.

(Ord. No. 2015-35, § I. 7-13-15)

Sec. 14-56. - Electrical inspector, powers and duties.

- (a) Right of entry. The building official and/or his department and personnel when serving as electrical inspectors in enforcement of this article may enter any building, structure, portion thereof, or premises during reasonable hours to perform any duty imposed upon him by this article.
- (b) Issuance of permits; supervision of work. The building official shall cause to be issued for each job requiring any type of electrical work a permit, shall see that the fees (see section 14-66) set out in this article are properly paid, and that all work done under such permits are accomplished in accordance with this article under the direct supervision of persons registered under the provisions of this article.
- (c) Stop work orders. Upon notice from the building official that electrical work on any building or structure is being done contrary to the provisions of this article or in a dangerous or unsafe manner,

such work shall be immediately stopped. Such notice shall be in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed. Where an emergency exists, the stop work order shall be given verbally with written notice following within two working days.

- (d) Revocation of permits. The building official may revoke a permit or approval issued under the provisions of this article if there has been any false statement, misunderstanding or misrepresentation as to a material fact in the application or plans on which the permit or approval was based.
- (e) Electrically unsafe buildings. All buildings or structures which in the opinion of the electrical inspector are electrically unsafe so as to create a hazard to life or constitute a fire hazard or are otherwise dangerous to life or property are hereby declared illegal and shall have the electrical power removed or disconnected and then shall be abated by repair, rehabilitation or demolition in accordance with condemnation procedures as established by the codes as adopted by this city.
- (f) Requirements not covered by this article. Any requirement necessary for the electrical safety to life and property not specifically covered by this article shall be determined by the building official subject to appeal to the electrical appeals board.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-57. - Electrical contractor registration.

It shall be unlawful for any corporation, partnership, association, or individual to engage in the business of installing, altering or changing of any electrical wiring and apparatus within any building in the city that does not have a valid, unexpired electrical contractor's registration from the city. The registration must be issued in the name of the individual who met the requirements of this article. Nothing contained in this article shall be construed to prevent a property owner from doing electrical work in a building owned by him to be occupied by him as a dwelling or home of a two-family dwelling or single-family dwelling type; provided, that the property owner must actually perform the work and that no person other than the actual owner shall do any part of the work unless such persons possess a electrical contractor's registration in full compliance with all provisions of this article, and further provided, that all work performed and material used meets the requirements of this article and the city electrical inspector's approval.

- (1) An applicant for any electrical registration shall make application to the building division on the form provided by the city. All questions on such form must be completely and truthfully answered upon submission of the application in order to receive favorable consideration for registration issuance.
- (2) Electrical contractor's registration. The applicant must show proof of state registration
- (3) Liability insurance required. Before any person shall be issued an electrical contractor's registration, retain such registration or engage in the business of electrical work in the city, he shall first provide proof of \$300,000.00 liability insurance, conditioned that the person engaged in the electrical business will faithfully observe all the laws pertaining to electric installation and maintenance, and further, that the city shall be indemnified and saved harmless from all claims arising from accidents and damage of any character whatsoever caused by the negligence of such person engaged in the electric business, or by any other unfaithful or inadequate work done either by the person or his agents or employees.
- (4) Upon acceptance of the proof of insurance required under subsection (3) of this section by the city, the individual, firm or corporation desiring to do such work shall secure from the building division of the city an electrical contractor's registration, which shall not be transferable. In the event of the dissolution of any company or partnership holding such registration, the member in whose name the registration was issued and who retains such registration shall be required to renew the certificate of insurance provided for in this section before doing any such work

- provided for in this article. The person obtaining an electrical contractor's registration shall pay to the city the sum of \$200.00 for the first year and \$75.00 as an annual renewal fee for such registration. Every registered electrical contractor shall have his city registration in his possession when performing or supervising electrical work.
- (5) Master electrician's registration. The applicant must show proof of state registration. No insurance is required of a master electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every master electrician shall have his city registration in his possession when performing or supervising electrical work. A properly registered master electrician is considered qualified to provide immediate permitted job-site supervision of electrical installations, provided that he is under the general, which may include permitted job-site supervision by the electrical contractor who holds the permit issued in accordance with this article.
- (6) Journeyman electrician's registration. The applicant must show proof of state registration. No insurance is required of a journeyman electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every journeyman electrician shall have his city registration in his possession when performing or supervising electrical work. A properly registered journeyman electrician is considered qualified to provide immediate permitted job-site supervision of electrical installations, provided that he is under the general, which may include permitted job-site supervision by the electrical contractor who holds the permit issued in accordance with this article.
- (7) Wireman electrician's registration. The applicant must show proof of state registration. No insurance is required of a wireman electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every wireman electrician shall have his city registration in his possession when performing electrical work. A wireman electrician may supervise no more than one apprentice electrician at the permitted job-site location, and is limited to single-family and duplex residences only.
- (8) Maintenance electrician's registration. The applicant must show proof of state registration. No insurance is required of a maintenance electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every maintenance electrician shall have his city registration in his possession when performing electrical work. A maintenance electrician shall perform his duties only for the company for which he is employed.
- (9) Sign electrician's registration. The applicant must show proof of state registration. No insurance is required of a sign electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every sign electrician shall have his city registration in his possession when performing electrical work. A sign electrician shall perform his duties under the direct, permitted job-site supervision of a journeyman or electrical contractor who holds a valid city registration.
- (10) Apprentice electrician. An electrical contractor may employ a person as an apprentice electrician and such person shall be identified by the issuance of an apprentice electrician's registration by the city. Every apprentice shall have his city registration in his possession when performing electrical work. An apprentice electrician shall perform his duties under the direct, permitted job-site supervision of a wireman, journeyman or electrical contractor, who holds a valid city registration.
- (11) All registrations issued under the provisions of this article shall expire on June 30th of each year, unless sooner revoked.
- (12) Any holder of an expired registration issued under the provisions of this article may renew such registration within 30 days of its expiration by paying the annual renewal fee for such

- registration. A holder of a registration issued under the provisions of this article, which has expired in excess of 30 days, shall be considered as a new applicant.
- (13) Any person who has applied for an electrician's registration and who has been refused such registration by the administrative authority of this article may apply to the construction board of appeals for a full hearing.

(Ord. No. 2015-35, § I, 7-13-15; Ord. No. 2018-21, § 5, 3-26-18)

Editor's note — Ord. No. 2018-21, § 5, adopted March 26, 2018, changed the title of section 14-57 from "Registration and bond generally" to "Electrical contractor registration."

Sec. 14-58. - Reserved.

Sec. 14-59. - Work standards.

- (a) New residential construction. New residential construction shall be electrically wired to conform to the National Electrical Code, currently adopted edition.
- (b) New commercial construction. Electrical conductors shall be installed in conduit and will meet the requirements of the National Electrical Code, currently adopted edition.

Exception: Any multi-family construction three stories or less shall not apply but shall meet the requirements of the National Electrical Code, currently adopted edition.

- (c) Existing buildings.
 - (1) If an existing unsafe condition is discovered by the electrical inspector that, in the opinion of the inspector, requires immediate correction, he will issue verbal and written instructions to the property owner requiring such corrections as needed and/or proceed in accordance with subsection 14-56(c).
 - (2) If an existing building is condemned for any reason under the provisions of the adopted building code, the electrical wiring within that building and/or premises shall be required to be upgraded to new construction standards before electrical power is restored.
 - (3) Should the electrical meter loop be judged inadequate or substandard by the utility company providing electrical service and the building official agrees that meter loop shall be required to be updated to the utility connection policy standards. Electrical power once severed will only be reestablished when that meter loop installation meets city standards.
- (d) Reference standards for construction.
 - (1) Meter loop installation must comply with city utility connection policy.
 - (2) No residential branch circuit shall have more than ten outlets.
 - (3) Equipment ground shall be installed in all conduit and cable systems.
 - (4) In any R or I type occupancy, any room constructed with a door, closet, window and can be utilized as a sleeping area shall be classified as a bedroom.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-60. - Reserved.

Sec. 14-61. - Permits, fees and inspections.

- (a) The holder of an electrical contractor's registration issued by this city desiring to perform or have his employees perform any electrical installation, repair or alteration or extension of any existing electrical system shall apply to the building department for a permit to perform such work.
- (b) The holder of an electrical contractor's registration may designate in writing to the building official one employee whom he authorizes to sign a permit application in his place. Such authorization shall in no way alter or relieve the master electrician from any responsibility or legal liability of complying with this article nor from the responsibility for safe and satisfactory performance of any such work done under authority of a permit signed by such employee.

Sec. 14-62. - Violations; record of permits and inspections; penalty.

- (a) No corporation, partnership, association or individual shall cause or allow any electric wiring or apparatus to be installed, altered or changed in any building within the city unless the corporation, partnership, association or individual doing all of such work has been registered under the provisions of this article and has received a permit or authority under the provisions of this article to do that particular electric wiring and apparatus work.
- (b) No corporation, copartnership, association or individual or agent thereof shall interfere with the electrical inspector or any persons deputized to assist him as provided in this article when in the performance of duty, and each such interference shall be deemed to constitute a separate offense within the intent and meaning of this article.
- (c) The building official shall cause to be kept a record of permits issued, inspections made, or other official work performed as required by this article.
- (d) In case of a violation of any of the terms or provisions of this article by any person, corporation or firm, the officers and agents actively in charge of the business of such corporation or firm or the person actually performing the work for such corporation or firm shall be subject to the penalties provided in this Code.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-63. - Savings clause.

The terms of this article shall not be construed to operate against or upon any contract or contracts for the installation, alteration or changes in electrical wiring or apparatus which may have been entered into under the existing ordinances, if the performance of the work under such contract or contracts has been undertaken and is unfinished at the time of the taking effect of this article.

(Ord. No. 2015-35, § I, 7-13-15)

Secs. 14-64-14-90. - Reserved.

Editor's note—Ord. No. 2018-21, § 5, adopted March 26, 2018, repealed the former section 14-64 in its entirety, which pertained to electrical fees and derived from Ord. No. 2015-35, § I, adopted July 13, 2015.

— For current provisions pertaining to electrical fees, the user's attention is directed to appendix D of this Code.

ARTICLE IV. - PLUMBING CODE [3]

Footnotes:

-- (3) --

Cross reference—Businesses, ch. 18; health and sanitation, ch. 62; wastewater from tourist courts, § 62-232; streets, sidewalks and other public places, ch. 114; utilities, ch. 130; water service, § 130-121 et seq.; sewer service, § 130-231 et seq.

State Law reference—Plumbing License Law, Vernon's Ann. Civ. St. art. 6243-101.

Sec. 14-91. - Plumbing code.

- (a) The International Plumbing Code 2015 is hereby adopted as the plumbing code of the city except as stated in the following:
- (b) (1) Section 410.1: Drinking Fountains. Delete the last sentence and replace with the following:

Deleted Sentence:

"In other occupancies, where drinking fountains are required, water coolers or bottled water dispensers shall be permitted to be substituted for not more than 50 percent of the required drinking fountains."

Replacement:

"In other occupancies, where drinking fountains are required, bottle water dispensers or water coolers shall be permitted as a substitution; in occupancies with an occupant load of not more than 15 and mercantile occupancies with an occupant load of not more than 30."

(2) Appendix A, Fee Schedule, paragraph 106.6 Fees, Section 109 Means of Appeal, paragraph 108.4 Violation penalties are not adopted.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-92. - Registration and insurance; quality of work.

- (a) Registration and insurance required. Before any person shall engage in the plumbing business, he shall be registered with the building official and otherwise qualified as set forth in this section and as provided by state law. Where any plumbing work is being done, a registered master or journeyman plumber shall at all times be present on the job and in direct control and in charge of the work being done.
- (b) Revocation of license. Although licensed by the state board of plumbing examiners, the building official may, after a hearing as provided in this section, revoke the city plumbing registration to the extent that such person is no longer authorized to perform plumbing work or receive plumbing permits in the city. Such registration revocation may be reported to the state board of plumbing examiners along with the grounds for such registration revocation.
- (c) Quality of work. Any person engaged in the plumbing business whose work does not conform to the rules and regulations set out in this article, or whose workmanship or materials are of inferior quality, shall on notice from the building official make necessary changes or corrections at once so as to conform to this article. If work has not been so changed after ten days' notice from the building official, the building official may then refuse to issue any more permits to such person until such work has fully complied with the rules and regulations of this article. The building official may revoke or suspend city registration because of continuous violations. When the revocation or suspension of any such registration is to be considered at any meeting, the person to whom the registration has

- been issued shall have at least three days' notice in writing of the time and place of such meeting, together with a statement of the grounds upon which it is proposed to revoke such registration.
- (d) Insurance certificate required. Before any person shall engage in the business of plumbing, he shall first obtain the proper registration, and deposit with the city good and sufficient proof of a certificate of insurance in the amount of \$300,000.00 with the certificate holder being the city.
- (e) Allowing one's name, license or bond to be used to obtain permit fraudulently. No person engaged in the business of plumbing shall allow his name to be used by any other person, directly or indirectly, to obtain a permit, or for the construction of any work under his name, registration or insurance; nor shall such person make any misrepresentations or omissions in his returns.
- (f) Hearings. Any person who has applied for a plumber's registration and who has been refused such registration by the building official may apply to the construction board of appeals for a full hearing.

Cross reference—Businesses, ch. 18.

State Law reference—Plumbing License Law, Vernon's Ann. Civ. St. art. 6243-101.

Secs. 14-93-14-95. - Reserved.

Editor's note—Ord. No. 2018-21, § 5, adopted March 26, 2018, repealed the former section 14-94 in its entirety, which pertained to plumbing fees and derived from Ord. No. 2015-35, § I, adopted July 13, 2015.

— For current provisions pertaining to plumbing fees, the user's attention is directed to appendix D of this Code.

Sec. 14-96. - Violations and penalties.

- (a) Any person or agent who shall violate a provision of this article or fail to comply therewith or with any of the provisions thereof, or violate a detail, statement or plan submitted and approved there under, shall be guilty of a misdemeanor. Each such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this article is committed or continued, and upon conviction in the court of jurisdiction for any such violation, such person shall be punished by a fine of not more than \$2,000.00.
- (b) The building official shall have the authority to require, where work for which a permit is required by this Code is started or proceeded prior to obtaining said permit, the fees herein specified shall be \$200.00 or double the original permit fee per occurrence as determined by the building official, but the payment of such fee shall not relieve any persons from fully complying with the requirements of this Code in the execution of the work nor from any other penalties prescribed herein.

(Ord. No. 2015-35, § I, 7-13-15; Ord. No. 2018-21, § 5, 3-26-18)

Secs. 14-97-14-115. - Reserved.

ARTICLE V. - MECHANICAL CODE

Sec. 14-116. - Mechanical code.

- (a) The International Mechanical Code 2015 and all its appendices are hereby adopted as the Mechanical Code of the city, except as stated in the following:
- (b) Appendix B, Recommended Permit Fee Schedule, paragraph 106.5 Fees, paragraph 108.4 Violation penalties, and Section 109 Means of Appeal are not adopted.

Sec. 14-117. - Administration and enforcement generally.

The building official is designated as the city officer responsible for enforcing the requirements of this code and is the administrative authority. He and/or members of his department shall serve as mechanical inspectors when enforcing the provisions of this code.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-118. - Registered and liability insured personnel to perform work.

- (a) Any person doing any work within the scope of this code shall be registered as an air conditioning contractor by the state department of labor and standards, boiler division.
- (b) Before any state registered air conditioning contractor may secure a mechanical permit from the city, he shall deposit with the city a good and sufficient liability insurance in the amount of \$2,000.00 conditioned that the contractor will faithfully observe all laws pertaining to air conditioning contractors and further that the city shall be indemnified and saved harmless from all claims arising from accidents and damage of any character whatsoever caused by the negligence or other failure of such person engaged in the business of a general contractor.
- (c) An annual registration fee of \$100.00 shall be paid to the city by mechanical contractors and must show proof of licensing by the state department of licensing and regulations. Every registered mechanical contractor shall have his license in his possession when performing or supervising mechanical work and shall have his company name and license number affixed to each company vehicle.

(Ord. No. 2015-35, § I, 7-13-15)

Secs. 14-119-14-140. - Reserved.

Editor's note—Ord. No. 2018-21, § 5, adopted March 26, 2018, repealed the former section 14-120 in its entirety, which pertained to mechanical fees and derived from Ord. No. 2015-35, § I, adopted July 13, 2015.

For current provisions pertaining to mechanical fees, the user's attention is directed to appendix D of this Code.

ARTICLE VI. - LIQUEFIED PETROLEUM GAS CODE^[4]

Footnotes:

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Cross reference— Fire prevention and protection, ch. 54; streets, sidewalks and other public places, ch. 114; utilities, ch. 130.

State Law reference— Liquefied petroleum gas, V.T.C.A., Natural Resources Code § 113.001 et seq. Sec. 14-141. Short title.

This article shall be known as the "Liquefied Petroleum Gas Code" of the city, and may be cited as such.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-142. - Definitions.

The following definitions, along with those contained in the specifications, rules and regulations adopted by this article, are provided for the purpose of interpretation and administration of this article:

Gertain appliances means conversion burners, floor furnaces, central heating plants, vented wall furnaces, water heaters and boilers.

Certificate of approval means a document or tag issued and/or attached by the inspector to the inspected material, piping, or appliance installation, filled out, together with date, address of the premises, and signature of the inspector.

Inspector means the building official of the city.

Liquefied petroleum gas company means any person distributing liquefied petroleum gas within the corporation limits of the city, or authorized and proposing to so engage.

(Ord. No. 2015-35, § I, 7-13-15)

Cross reference — Definitions generally, § 1-2.

State Law reference — Definitions, V.T.C.A., Natural Resources Code § 113.002.

Sec. 14-143. Compliance with article and other applicable regulations; Liquefied Petroleum Gas Docket No. 1 adopted.

All liquefied petroleum gas bulk storage facilities, wholesale and retail distribution facilities and consumer system piping and appliances installed, replaced, maintained, or repaired within the corporate limits of the city shall conform to the requirements of this article, the specifications, rules and regulations entitled "Liquefied Petroleum Gas Docket No. 1, Railroad Commission of Texas, L.P. Gas Division, September, 2001 Revision," the Standard Fire Prevention Code, chapter 54 of this Code of Ordinances, the zoning ordinance of the city, and all other applicable ordinances. The September 2001 revision of the Liquefied Petroleum Gas Docket No. 1 is hereby adopted by the city, incorporated by reference in this article and made a part of this article as fully as if set out at length herein, and copies of these regulations shall be kept on file in the office of the building official.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-144. - Conflicts between article and Liquefied Petroleum Gas Docket No. 1.

In the event of any conflict between this article and the Liquefied Petroleum Gas Docket No. 1, as adopted in section 14-143, the most restrictive requirements shall prevail.

Sec. 14-145. - Permit not to issue for new construction, additions, unless applicable ordinances are complied with.

No permit shall be issued for new construction unless such construction will be in compliance with all applicable ordinances. No permit shall be issued for an addition to an existing facility unless such existing facility and the addition thereto are in compliance with all applicable ordinances or unless such addition is required to make the existing facility comply with all applicable ordinances.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-146. - Conversion to liquefied petroleum gas.

Unless stated otherwise in this article, consumer's piping installed prior to April 9, 1973, or piping installed to supply natural gas may be converted to liquefied petroleum gas if the inspector finds, upon inspection and proper tests, that such piping will render reasonably satisfactory gas service to the consumer and will not in any way endanger life or property; otherwise, such piping shall be altered or replaced, in whole or in part, to conform with the requirements of this article.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-147. - Liability insurance and registration required; exception.

- (a) No person other than a single-family homeowner working on his own permanent homestead residence shall engage in or work at the installation, extension, or alteration of consumer's gas piping or certain gas appliances without first being registered according to requirements of the city and/or the state. A copy of a valid and current state registration must be provided to the city, as well as a good and sufficient surety liability insurance acceptable to the building official in the amount of \$2,000.00, such liability insurance to be valid for one year from the date of issuance, and to be renewed annually thereafter, so as to be in effect at all times the individual is registered. Until proof of registration and liability insurance is accepted by the building official, no permits will be issued by the city and no work shall be done that requires a permit under this article.
- (b) Nothing contained in this article shall be construed as prohibiting an individual from installing or repairing his own appliances or installing, extending, replacing, altering, or repairing consumer's piping on his own premises, or as requiring a registration or liability insurance from an individual doing such work on his own premises; provided, however, that all such work must be done in conformity with all other provisions of this article, including those relating to permits, inspection, and fees, as long as the individual performing the work is the single-family homeowner working on his own permanent homestead residence.

(Ord. No. 2015-35, § I, 7-13-15)

State Law reference Licensing, V.T.C.A., Natural Resources Code § 113.081 et seq.

Sec. 14-148. - Administration and enforcement of article.

The building official of the city shall have the responsibility for the administration and enforcement of this article, and such official shall have all of the responsibilities of the office of gas inspector called for in this article and the specifications, rules and regulations adopted by this article.

State Law reference Administrative provisions, V.T.C.A., Natural Resources Code § 113.011 et seq.

Sec. 14-149. City's right of entry; authority of inspector to disconnect piping; notice of disconnection; duty of inspector to confer with various departments and agencies.

- (a) The inspector is authorized and directed to enforce all of the provisions of this article, and the inspector, upon presentation of proper credentials, may enter any building or premises at reasonable times for the purpose of making inspections or preventing violations of this article.
- (b) The inspector is authorized to disconnect any gas piping or fixture or appliance for which a certificate of approval is required but has not been issued with respect to such piping, fixture or appliance, or which, upon inspection, shall be found defective or in such condition as to endanger life or property. In all cases where such a disconnection is made, a notice shall be attached to the piping, fixture, or appliance disconnected by the inspector, which notice shall state that such piping, fixture or appliance has been disconnected by the inspector, together with the reason therefor, and it shall be unlawful for any person to remove such notice or reconnect such gas piping, fixture or appliance without authorization by the inspector, and such gas piping, fixture or appliance shall not be put in service or used until the inspector has attached his certificate of approval in lieu of his prior disconnection notice.
- (c) It shall be the duty of the inspector to confer from time to time with representatives of the local health department, the local fire department, and the liquefied petroleum gas division, state railroad commission, and otherwise obtain from proper sources all helpful information and advice, presenting such information to the appropriate officials from time to time for their consideration.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-150. - Permit required; exception.

- (a) No person shall install a gas conversion burner, floor furnace, central heating plant, vented wall furnace, water heater, boiler, consumer's gas piping, or convert existing piping to utilize natural gas without first obtaining a permit to do such work from the permit clerk of the city building official's office.
- (b) The liquefied petroleum gas company shall not be required to obtain permits to set meters, or to extend, relocate, remove, or repair its service lines, or other facilities, or for work having to do with its own gas system.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-151. Piping inspection.

- (a) Rough piping inspection. A rough piping inspection shall be made after all new piping authorized by the permit has been installed, and before any such piping has been covered or concealed or any fixtures or gas appliances have been attached thereto.
- (b) Final piping inspection. A final piping inspection shall be made after all piping authorized by the permit has been installed and after all portions thereof which are to be concealed, by plastering or otherwise, have been so concealed, and before any fixtures or gas appliances have been attached thereto. This inspection shall include a pressure test, at which time the piping shall stand an air pressure equal to not less than the pressure of a column of mercury six inches in height, and the

piping shall hold this air pressure for a period of at least ten minutes without any perceptible drop. A mercury column gauge shall be used for the test. All tools, apparatus, labor, and assistance necessary for the tests shall be furnished by the installer of such piping.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-152. - Issuance of certificate of approval.

The inspector may issue a certificate of approval at the completion of the work for which a permit for consumer piping has been issued if after inspection it is found that such work complies with the provisions of this article. A duplicate of each certificate issued covering consumer's gas piping may be delivered to the liquefied petroleum gas company and used as its authority to render gas service.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-153. - Inspection fees.

Inspection fees and reinspection fees shall be as outlined in appendix D of this Code.

(Ord. No. 2015-35, § I, 7-13-15; Ord. No. 2018-21, § 5, 3-26-18)

Sec. 14-154. - Violation declared misdemeanor.

Any person, firm, corporation, agent, or entity that violates a provision of this chapter, or fails to comply therewith or with any of the provisions thereof; or violates a detail, statement, plan, or specification for a permit approved there under, shall be guilty of a misdemeanor. Each and every day or portion thereof during which any violation or failure to comply is committed or continued shall be deemed a separate offense subject to a fine of not more than \$2,000.00 for each day and each offense upon conviction in a court of competent jurisdiction.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-155. - Nonliability of city.

This article shall not be construed as imposing upon the city or any of its officials or employees any liability or responsibility for damages to any person injured by any defect in any gas piping or appliance mentioned in this article, or by installation thereof, nor shall the city or any official or employee thereof be held as assuming any such liability or responsibility by reason of the inspection authorized under this article or the certificate of approval issued by the inspector.

(Ord. No. 2015-35, § I, 7-13-15)

Secs. 14-156—14-175. - Reserved.

ARTICLE VII. - NATURAL GAS CODE [5]

Footnotes:

- (5) -

Cross reference— Natural gas service, § 130-431 et seq.

State Law reference— Regulation of natural gas, V.T.C.A., Natural Resources Code ch. 86.

Sec. 14-176. - Fuel gas code.

- (a) The International Fuel Gas Code 2015 and all its appendices are hereby adopted as the fuel gas code of the city, except as stated in the following.
- (b) Paragraph 106.5 Fees, paragraph 108.4 Violation penalties, and Section 109 Means of Appeal are not adopted.
- (c) Paragraph 108.5 Stop Work Orders is deleted and amended as follows:

108.5 Stop Work Orders. Upon notice from the code official that work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to be cited and subject to a fine as determined by law and this chapter.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-177. - Definitions.

The following definitions, along with those contained in the specifications, rules and regulations adopted by this article, are provided for the purpose of interpretation and administration of this article:

Certain appliances means conversion burners, floor furnaces, central heating plants, vented wall furnaces, water heaters and boilers.

Certificate of approval means a document or tab issued and/or attached by the inspector to the inspected material, piping or appliance installation, filled out, together with date, address of the premises, and signed by the inspector.

Gas company means any person distributing gas within the corporate limits of the city, or authorized and proposed to so engage.

Inspector means the city building official referred to in this article.

(Ord. No. 2015-35, § I, 7-13-15)

Cross reference — Definitions generally, § 1-2.

State Law reference — Definitions, V.T.C.A., Natural Resources Code § 86.002.

Sec. 14-177.5. - Registration and liability insurance generally.

No person other than a single-family homeowner working on his own permanent homestead residence shall engage in or work at the installation, extension, or alteration of consumer's gas piping or certain gas appliances without first being registered according to requirements of the city and/or the state. A copy of a valid and current state registration must be provided to the city, as well as a good and sufficient surety liability insurance acceptable to the building official, such liability insurance to be valid for one year from the date of issuance, and to be renewed annually thereafter so as to be in effect at all

times the individual is registered. Until proof of registration and liability insurance is accepted by the building official, no permits will be issued by the city and no work shall be done that requires a permit under this article.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-177.6. - Reserved.

Editor's note—Ord. No. 2018-21, § 5, adopted March 26, 2018, repealed the former section 14-177.6 in its entirety, which pertained to fuel gas fees and derived from Ord. No. 2015-35, § I, adopted July 13, 2015.

— For current provisions pertaining to fuel gas fees, the user's attention is directed to appendix D of this Code.

Secs. 14-178-14-200. - Reserved.

ARTICLE VIII. - PROPERTY MAINTENANCE CODE®

Footnotes:

-- (6) --

State Law reference— Dangerous structures, V.T.C.A., Local Government Code § 214.001 et seq. Sec. 14-201. - Property maintenance code.

- (a) The International Property Maintenance Code 2015 and all its appendices are hereby adopted as the Property Maintenance Code of the city, except as stated in the following.
- (b) Section 110, Demolition, paragraph 110.2, Notices and Orders is amended by adding the following sentence to paragraph 110.2: All demolition procedures, notices and orders shall comply with Chapter 50 of the Code of Ordinances, City of New Braunfels, Texas.
- (c) Section 103.5 Fees is not adopted and is replaced with the following:

Section 103.5 Fees. There shall be no fee charged for an inspection. If a violation is noted requiring a re-inspection to determine if the violation is abated, a re-inspection fee of \$35.00 shall be paid for each violation re-inspected by the owner or agent for the owner. The re-inspection fee will double with each failed inspection.

- (d) Section 111 Means of Appeal is not adopted.
- (e) The first phrase in Section 303.14 Insect Screens, which states "During the period from [date] to [date]" is deleted and replaced with the following phrase: "At all times..."
- (f) The dates in Section 602.3 Heat supply shall be from November 1 to April 1.
- (g) Sections 604.2 Service is amended by replacing the words "ICC Electrical Code" with the words "National Electrical Code adopted by the City".

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-202. - International existing building code.

The International Existing Building Code 2015 and appendix is hereby adopted as the city existing building code.

(Ord. No. 2015-35, § I, 7-13-15)

Secs. 14-203-14-300. Reserved.

ARTICLE IX. - ENERGY CONSERVATION CODE

Sec. 14-301. - Energy conservation code.

The International Energy Conservation Code 2012 and its appendix is hereby adopted as the city energy conservation code, except as noted in the following:

Section 105.5. Re-inspection fee is added as follows:

Section 105.5 Re-inspection Fees. A fee of \$35.00 must be paid to the city for each re-inspection of work authorized under this code. The re-inspection fee will double with each failed inspection. The person or agent to whom the permit was issued prior to any re-inspection must pay the re-inspection fee.

(Ord. No. 2015-35, § I, 7-13-15)

Secs. 14-302-14-400. - Reserved.

ARTICLE X. VIOLATIONS, PENALTIES, FEE REFUND POLICY, BOARD OF APPEALS AND ADMINISTRATIVE

Sec. 14-401. - General.

The provisions of this article apply to all the articles of this chapter unless the article expressly states otherwise.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-402. - Violation and penalty.

Any person, firm, corporation, agent, or entity that violates a provision of this chapter, or fails to comply therewith or with any of the provisions thereof; or violates a detail, statement, plan, or specification for a permit approved there under, shall constitute an endangerment of the public's health, safety, and welfare and be guilty of a misdemeanor. Each and every day or portion thereof during which any violation or failure to comply is committed or continued shall be deemed a separate offense subject to a fine of not more than \$2,000.00 for each day and each offense upon conviction in a court of competent jurisdiction.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-403. - Reserved.

Editor's note—Ord. No. 2018-21, § 5, adopted March 26, 2018, repealed the former section 14-403 in its entirety, which pertained to fee refunds and derived from Ord. No. 2015-35, § I, adopted July 13, 2015.

— For current provisions pertaining to fee refunds, the user's attention is directed to appendix D of this Code.

Sec. 14-404. - Construction board of appeals.

- (a) There shall be a single consolidated construction board of appeals. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretations of this chapter, there shall be and is hereby created a board of appeals.
- (b) Application. The application for appeal shall be filed on a form obtained from the building official within ten days after the notice was served. An application fee of \$200.00 for residential or \$300.00 for commercial shall be paid to the city by applicants desiring an audience before the construction board of appeals.
- (c) The construction board of appeals shall consist of persons appointed by the city council. Each member shall serve for five years or until a successor has been appointed. The building official shall be an ex officio member of said board but shall have no vote on any matter before the board.
- (d) Alternate members. The city council shall appoint four alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership and shall be appointed for five years, or until a successor has been appointed.
- (e) Qualifications. The construction board of appeals shall consist of seven individuals, one from each of the following professions or disciplines:
 - (1) A registered design professional with architectural experience or a builder or superintendent of building construction.
 - (2) A registered design professional with engineering experience.
 - (3) A registered mechanical contractor.
 - (4) A registered electrical contractor.
 - (5) A registered plumbing contractor.
 - (6) Two registered general contractors.
 - (7) Or, the city council may appoint one person who is an attorney or a citizen of the city, in lieu of any of the previously listed qualified persons.
 - (8) Or, the council may appoint an interim board with the persons of qualification determined by the council.
- (f) Rules and procedures. The board is authorized to establish policies and procedures necessary to carry out its duties.
- (g) Chairperson. The board shall annually select one of its members to serve as chairperson.
- (h) Disqualification of member. A member shall not hear an appeal in which that member has a personal, professional or financial interest.
- (i) Secretary. The chief administrative officer shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the building official.
- (j) Notice of meeting. The board shall meet upon notice from the chairperson, within ten days of the filing of an appeal or at stated periodic meetings.
- (k) Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the building official and any person who interests are affected shall be given an opportunity to be heard.

- (I) Procedure. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.
- (m) Postponed hearing. When seven members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.
- (n) Board decision. The board shall modify or reverse the decision of the building official by a concurring vote of two-thirds of its members. The board may deny the appeal, approve the appeal, or approve the appeal with conditions.
- (o) Administration. The building official shall take immediate action in accordance with the decision of the board.
- (p) Limitations on authority. An application for appeal shall be based on a claim that the true intent of this chapter or the rules legally adopted there under have been incorrectly interpreted, the provisions of this chapter do not fully apply, or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this chapter.

(Ord. No. 2015-35, § I, 7-13-15)

ARTICLE I. - IN GENERAL

Sec. 14-1. - Administration and enforcement of codes, ordinances and articles.

The building official of the city shall have the responsibility for the administration and enforcement of these codes ordinances and articles as adopted by this chapter, and such official shall have all of the responsibilities called for in these articles and the specifications, rules and regulations adopted by these codes, ordinance and articles.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-2. - Interpretation of codes, ordinances and articles.

The building official shall have the authority to render interpretations of these codes, ordinance, and articles; and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of these codes, ordinances and articles. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in these codes, ordinances and articles.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-3. - Commercial premium or overtime inspection fees.

Premium or overtime inspections are those inspections requested for times other than the normal working hours. Fees for premium inspections done after 4:00 p.m. on weekdays and on weekends shall be at a rate of \$45.00 per inspection with a minimum of three inspections required.

Sec. 14-4. - Building official to determine conflicts between codes.

The code official is the building official except where specifically described as the fire code official. Applying to any construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, occupancy loads, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures, the building official is hereby authorized and directed to enforce the provisions of these codes and ordinances (all ICC codes adopted by the city and all city and all city ordinances that apply). The building official shall have the authority to render interpretations of all these codes and ordinances and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of these codes and ordinances. The building official will be the final authority in any disputes of any interpretations of or any conflicts between these codes and ordinances. The building official is also the final authority in determining who will apply and enforce these codes and ordinances.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-5. – Building Permit Required.

No person, firm, corporation, or any other entity shall erect, construct, enlarge, alter, repair, modify, excavate, fill, or change any fence, sign, land, building, structure, or property in the city, nor cause such work to be done; nor shall any building or structure be moved, removed, converted, or demolished without first obtaining any necessary permit therefore from the building official and complying with all applicable requirements of the city.

Sec. 14-6. - Requirements not covered by Code.

Any requirements necessary for the strength, stability or proper operation of an existing or proposed building, structure, electrical, gas, mechanical or plumbing system, or for the public safety, health and general welfare, not specifically covered by this chapter or the other technical codes, shall be determined by the building official. In addition, other requirements to implement, clarify or set procedures to accomplish the intent of this Code may be set in writing by the building official and may be posted electronically for public access.

Sec. 14-7. - Construction work hours and/or noise.

- a) Construction work hours and/or noise means any construction or noise generated by construction activities, such as the operation of power equipment, machinery or tools, the use of air-powered or impact tools, hammers, saws, picks, shovels and other similar tools, and the loading, unloading, conveyance or assembly of construction materials, equipment, machinery or tools.
- b) It is unlawful for a person to start work and/or cause construction noise to be made between 9:00 p.m. and 6:00 a.m.

c) It is unlawful for a person to whom a construction permit is issued by the city to cause or allow work to start and/or construction noise to be made in connection with the performance of work under the permit between 9:00 p.m. and 6:00 a.m.

Exceptions:

The building department understands that there may be times when work must occur outside of the permissible hours. If you have an emergency that includes any of the following, then the start of work and/or noise regulations do not apply:

- Work made necessary to restore a property to a safe condition following a public calamity.
- Work to restore public utilities.
- Work required to protect persons or property from imminent exposure to danger.

There may be other situations that require work outside of permissible hours. For these situations, you must apply for a variance subject to approval by the building official. Application for variance must be in filed with the building department at least 48 hours in advance.

d) A person who violates this section shall be guilty of a misdemeanor. Each and every day or portion thereof during which any violation or failure to comply is committed or continued shall be deemed a separate offense subject to a fine of not more than \$2,000.00 for each day and each offense upon conviction in a court of competent jurisdiction.

Sec. 14-8—14-26. - Reserved.

ARTICLE II. - BUILDING CODE

Sec. 14-27. – 2018 International Building Code (IBC)

The 2018 International Building Code and all appendices, are hereby adopted and incorporated by reference as the building codes of the City of New Braunfels, except as stated in the following:

- a) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
- b) Section 105.1.1 Annual permit shall be deleted.
- c) Section 105.1.2 Annual permit records shall be deleted.
- d) Section 105.2 Work exempt from permit shall be amended as follows:
 - 1. 105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

- a. Private Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over 32 square feet total.
- b. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- c. Swings and other playground equipment accessory to detached one- and two-family dwellings.
- e) Section 1612.3. Insert: City of New Braunfels
- f) Section 1612.3. Insert: September 2, 2009
- g) Appendix B shall be deleted
- h) Appendix D shall be deleted.
- i) Appendix H is adopted with sections amended as follows:
 - 1. Section H101.2 Signs exempt from permits shall be deleted.
 - 2. H105.2 Permits, drawings and specifications. Where a permit is required, as provided in Chapter 1, construction documents shall be required. These documents shall show the dimensions, material and required details of construction, including loads, stresses and anchors. Engineered Drawings may be required for free standing signs over 8' in height and monument signs over 6' in height.

Sec. 14-28. - Reserved.

ARTICLE III. - RESIDENTIAL CODE

Sec. 14-29. – 2018 International Residential Code (IRC)

The 2018 International Residential Code and all appendices, are hereby adopted and incorporated by reference as the building code of the City of New Braunfels, except as stated in the following:

- a) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
- b) Section 105.2 Work exempt from permit shall be amended as follows:
 - 105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:
 - 2. Private Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not more than 32 square feet total.
 - 3. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

- 4. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
- 5. Swings and other playground equipment.
- c) Table R301.2(1)—Insert:

TABLE R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

	GROUND SNOW LOAD°	WIND DESIGN				SEISMIC	SUBJECT TO DAMAGE FROM			WINTER	ICE BARRIER	FLOOD	AIR	MEAN
		Speed ^d (mph)	Topographic effects ^k	Special wind region ¹	Windborne debris zone ^m	DESIGN CATEGORY	Weathering	Frost line depth ^b	Termite	DESIGN TEMP°	UNDERLAYMENT REQUIRED ^h	HAZARDS ⁹	FREEZING INDEX ⁱ	ANNUAL TEMP ⁱ
	5	115	No	No	No	A	Negligible	0	Moderate	30	No	Yes	29	68.5

- d) Appendix L Permit Fees shall be deleted.
- e) Appendix T Solar Ready Provisions shall be deleted.

ARTICLE IV. - ELECTRICAL CODE [2]

Footnotes: --- (2) ---

Cross reference—Businesses, ch. 18.

Sec. 14-30. - Electrical code.

The 2017 National Electrical Code (NEC) and all annexes, are hereby adopted and incorporated by reference as the electrical code of the City of New Braunfels.

(1) All Enforcement and Administrative Provisions of the Electrical Code has been referenced in Appendix K of the 2018 International Building Code.

Sec. 14-31. - Conflicts of interest; restrictions on providing initial electrical service.

- (a) No person employed by the building department of this city shall be financially interested in the furnishing of labor, material or appliances for use in any manner in the electrical installation of a building or structure unless such person is otherwise eligible under the property and homeowner exception as set forth in section 14-62.
- (b) Utility providers shall not provide initial electrical service to any building or structure unless such utility has been furnished a certificate of occupancy or release as required by the city for such building or structure that corresponds to the intended use of the building. Temporary electrical service may be provided to such building or structure for a period not exceeding 180 days after the utility provider has been furnished a certificate of inspection or temporary certificate of occupancy. When temporary service has been provided, for the purpose of construction, the period of service may be extended by the building official. Each of the certificates referred to in this section will be issued as appropriate by the building official upon completion of the required inspections.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-32. - Electrical inspector, powers and duties.

- (a) Right of entry. The building official and/or his department and personnel when serving as electrical inspectors in enforcement of this article may enter any building, structure, portion thereof, or premises during reasonable hours to perform any duty imposed upon him by this article.
- (b) Issuance of permits; supervision of work. The building official shall cause to be issued for each job requiring any type of electrical work a permit, shall see that the fees (see section 14-66) set out in this article are properly paid, and that all work done under such permits are accomplished in accordance with this article under the direct supervision of persons registered under the provisions of this article.
- (c) Stop work orders. Upon notice from the building official that electrical work on any building or structure is being done contrary to the provisions of this article or in a dangerous or unsafe manner, such work shall be immediately stopped. Such notice shall be in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed. Where an emergency exists, the stop work order shall be given verbally with written notice following within two working days.
- (d) Revocation of permits. The building official may revoke a permit or approval issued under the provisions of this article if there has been any false statement, misunderstanding or misrepresentation as to a material fact in the application or plans on which the permit or approval was based.
- (e) Electrically unsafe buildings. All buildings or structures which in the opinion of the electrical inspector are electrically unsafe so as to create a hazard to life or constitute a fire hazard or are otherwise dangerous to life or property are hereby declared illegal and shall have the electrical power removed or disconnected and then shall be abated by repair, rehabilitation or demolition in accordance with condemnation procedures as established by the codes as adopted by this city.
- (f) Requirements not covered by this article. Any requirement necessary for the electrical safety to life and property not specifically covered by this article shall be determined by the building official subject to appeal to the electrical appeals board.

ARTICLE IV. - PLUMBING CODE[3]

Footnotes: --- (3) ---

Cross reference—Businesses, ch. 18; health and sanitation, ch. 62; wastewater from tourist courts, § 62-232; streets, sidewalks and other public places, ch. 114; utilities, ch. 130; water service, § 130-121 et seq.; sewer service, § 130-231 et seq.

State Law reference— Plumbing License Law, Vernon's Ann. Civ. St. art. 6243-101.

Sec. 14-33. - Plumbing code.

- (a) The 2018 International Plumbing Code (IPC) and all Appendices are hereby adopted and incorporated by reference as the plumbing code of the City of New Braunfels except as stated in the following:
 - 1) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
 - 2) Section 106.6.2 Fee Schedule shall be deleted.
 - 3) Section 106.6.3 Fee Refund shall be deleted.
 - 4) Section 108.4 Violation Penalties shall be deleted and replaced with, "Section 108.4 Violation Penalties. Violations and penalties shall be set forth by City Ordinance"
 - 5) Section 108.5. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS] [\$200] [2 x the cost of the permit]
 - 6) Appendix A shall be deleted
 - 7) Appendix B shall be deleted and replaced with NOAA Atlas 14 Texas

ARTICLE V. - MECHANICAL CODE

Sec. 14-34. - Mechanical code.

- (a) The 2018 International Mechanical Code (IMC) and all appendices are hereby adopted and incorporated by reference as the Mechanical Code of the City of New Braunfels, except as stated in the following:
 - 1) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
 - 2) Section 106.5.2 Fee Schedule shall be deleted
 - 3) Section 106.5.3 Fee Refund shall be deleted
 - 4) Section 108.4 Violation Penalties shall be deleted and replaced with, "Section 108.4 Violation Penalties. Violations and penalties shall be set forth by City Ordinance"
 - 5) Section 108.5. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS] [\$200] [2 x the cost of the permit]
 - 6) Appendix D Permit Fee Schedule shall be deleted

ARTICLE VI. - FUEL GAS CODE[5]

Footnotes: --- (5) ---

Cross reference— Natural gas service, § 130-431 et seq.

State Law reference—Regulation of natural gas, V.T.C.A., Natural Resources Code ch. 86.

Sec. 14-35. - Fuel gas code.

- (a) The 2018 International Fuel Gas Code (IFGC) and all its appendices are hereby adopted and incorporated by reference as the fuel gas code of the City of New Braunfels, except as stated in the following:
 - 1) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
 - 2) Section 106.6.2 Fee Schedule shall be deleted
 - 3) Section 106.6.3 Fee Refund shall be deleted
 - 4) Section 108.4 Violation Penalties shall be deleted and replaced with, "Section 108.4 Violation Penalties. Violations and penalties shall be set forth by City Ordinance"
 - 5) Section 108.5. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS] [\$200] [2 x the cost of the permit]

ARTICLE VII. - PROPERTY MAINTENANCE CODE[6]

Footnotes: --- (6) ---

State Law reference— Dangerous structures, V.T.C.A., Local Government Code § 214.001 et seq.

Sec. 14-36. - Property maintenance code.

- (a) The 2018 International Property Maintenance Code (IPMC) and all its Appendices are hereby adopted and incorporated by reference as the Property Maintenance Code of the City of New Braunfels, except as stated in the following:
 - 1) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
 - 2) Section 103.5 Fee Schedule shall be deleted
 - 3) Section 112.4 Failure to Comply shall be deleted and replaced with, "Section 108.4 Failure to Comply. Violations and penalties shall be set forth by City Ordinance"
 - 4) Section 302.4 Insert: [HEIGHT IN INCHES] [12"]
 - 5) Section 304.14. Insert: [DATES IN TWO LOCATIONS][January 1st] [December 31st]
 - 6) Section 602.3. Insert: [DATES IN TWO LOCATIONS] [November1st] [April 1st]
 - 7) Section 602.4. Insert: [DATES IN TWO LOCATIONS] [November1st] [April 1st]

ARTICLE VIII. – Existing Building Code

Sec. 14-37. - International existing building code.

- (a) The 2018 International Existing Building Code (IEBC) and all its appendices are hereby adopted and incorporated by reference as the fuel gas code of the City of New Braunfels, except as stated in the following:
 - 1) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]

ARTICLE IX. - ENERGY CONSERVATION CODE

Sec. 14-38. - Energy conservation code.

- (a) The 2018 International Energy Conservation Code (IECC) and all its appendices are hereby adopted and incorporated by reference as the energy conservation code of the City of New Braunfels, except as stated in the following:
 - 1) Section C101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
 - 2) Section R101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]

ARTICLE X. – PRIVATE SEWAGE CODE

Sec. 14-39. – Private sewage code.

- (a) The 2018 International Private Sewage Code (IPSC) and all Appendices are hereby adopted and incorporated by reference as the plumbing code of the City of New Braunfels except as stated in the following:
 - 1) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
 - 2) Section 106.6.2 Fee Schedule shall be deleted.
 - 3) Section 106.6.3 Fee Refund shall be deleted.
 - 4) Section 108.4 Violation Penalties shall be deleted and replaced with, "Section 108.4 Violation Penalties. Violations and penalties shall be set forth by City Ordinance"
 - 5) Section 108.5. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS] [\$200] [2 x the cost of the permit]

ARTICLE XI. – SWIMMING POOL AND SPA CODE

Sec. 14-40. – Swimming pool and Spa Code.

- (a) The 2018 International Swimming Pool and Spa Code (IPSC) and all Appendices are hereby adopted and incorporated by reference as the plumbing code of the City of New Braunfels except as stated in the following:
 - 1) Section 101.1. Insert: [NAME OF JURISDICTION] [City of New Braunfels]
 - 2) Section 105.6.2 Fee Schedule shall be deleted.
 - 3) Section 105.6.3 Fee Refund shall be deleted.
 - 4) Section 107.4 Violation Penalties shall be deleted and replaced with, "Section 108.4 Violation Penalties. Violations and penalties shall be set forth by City Ordinance"
 - 5) Section 107.5. Insert: [DOLLAR AMOUNT IN TWO LOCATIONS] [\$200] [2 x the cost of the permit]

ARTICLE XII. - VIOLATIONS, PENALTIES, BOARD OF APPEALS AND ADMINISTRATIVE

Sec. 14-41. - General.

The provisions of this article apply to all the articles of this chapter unless the article expressly states otherwise.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-42. - Violation and penalty.

Any person, firm, corporation, agent, or entity that violates a provision of this chapter, or fails to comply therewith or with any of the provisions thereof; or violates a detail, statement, plan, or specification for a permit approved there under, shall constitute an endangerment of the public's health, safety, and welfare and be guilty of a misdemeanor. Each and every day or portion thereof during which any violation or failure to comply is committed or continued shall be deemed a separate offense subject to a fine of not more than \$2,000.00 for each day and each offense upon conviction in a court of competent jurisdiction.

Sec. 14-43. - Construction board of appeals.

(a) There shall be a single consolidated construction board of appeals. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretations of this chapter, there shall be and is hereby created a board of appeals.

- (b) Application. The application for appeal shall be filed on a form obtained from the building official within ten days after the notice was served. An application fee of \$200.00 for residential or \$300.00 for commercial shall be paid to the city by applicants desiring an audience before the construction board of appeals.
- (c) The construction board of appeals shall consist of persons appointed by the city council. Each member shall serve for five years or until a successor has been appointed. The building official shall be an ex officio member of said board but shall have no vote on any matter before the board.
- (d) Alternate members. The city council shall appoint four alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership and shall be appointed for five years, or until a successor has been appointed.
- (e) Qualifications. The construction board of appeals shall consist of seven individuals, one from each of the following professions or disciplines:
 - (1) A registered design professional with architectural experience or a builder or superintendent of building construction.
 - (2) A registered design professional with engineering experience.
 - (3) A registered mechanical contractor.
 - (4) A registered electrical contractor.
 - (5) A registered plumbing contractor.
 - (6) Two registered general contractors.
 - (7) Or, the city council may appoint one person who is an attorney or a citizen of the city, in lieu of any of the previously listed qualified persons.
 - (8) Or, the council may appoint an interim board with the persons of qualification determined by the council.
- (f) Rules and procedures. The board is authorized to establish policies and procedures necessary to carry out its duties.
- (g) Chairperson. The board shall annually select one of its members to serve as chairperson.
- (h) Disqualification of member. A member shall not hear an appeal in which that member has a personal, professional or financial interest.
- (i) Secretary. The chief administrative officer shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the building official.

- (j) Notice of meeting. The board shall meet upon notice from the chairperson, within ten days of the filing of an appeal or at stated periodic meetings.
- (k) Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the building official and any person who interests are affected shall be given an opportunity to be heard.
- (I) Procedure. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.
- (m) Postponed hearing. When seven members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.
- (n) Board decision. The board shall modify or reverse the decision of the building official by a concurring vote of two-thirds of its members. The board may deny the appeal, approve the appeal with conditions.
- (o) Administration. The building official shall take immediate action in accordance with the decision of the board.
- (p) Limitations on authority. An application for appeal shall be based on a claim that the true intent of this chapter or the rules legally adopted there under have been incorrectly interpreted, the provisions of this chapter do not fully apply, or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this chapter.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-44. - Contractors.

- (a) **General contractor residential shall be defined as,** contractors regulated by 2018 IRC Section 101.2 Scope.
 - (1) General contractor Residential shall be registered with the city. General contractor-commercial local registration shall expire December 31st of each year.
- (b) **General contractor-commercial shall be defined as**, contractors regulated by IBC 2018 Section 101.2 Scope.
 - (1) General contractor commercial shall be registered with the city. General contractor-commercial local registration shall expire December 31st of each year.
- (c) **Contractor-limited shall be defined as,** a contractor other than Electrical, Mechanical, Plumbing, and Irrigator.

- (1) The term "contractor-limited" shall apply to home owners doing work on properties they own.
- (2) A Contractor Limited shall apply to such trades as roofing, framing, paving, fencing, and other specialty crafts.
- (3) Contractor Limited shall be registered with the city. General contractor-commercial local registration shall expire December 31st of each year.

(e) Owner doing own work; Homestead.

- (1) An owner of an existing single-family residence who permanently resides in that residence and who claims it as a homestead under the laws of the state may act as a limited or general contractor on his own residence without being registered. However, he must obtain all necessary permits, pay all required permit fees, and comply with all ordinances of the city as well as any other applicable state or federal laws.
- (2) A person who intends to build a single-family residence and permanently reside therein and claim it as a homestead under the laws of the state may act as a limited or general contractor on his own residence without being registered if approved by the building official. However, he must obtain all necessary permits, pay all required permit fees, and comply with all ordinances of the city as well as any other applicable state or federal laws.
- (3) No single-family resident homeowner will be issued a permit under the provisions of this section involving any structural, electrical, or plumbing work unless the building official is satisfied that the applicant can competently and safely perform the work.
- (g) **Contractor Registration—Application generally.** Every person desiring to engage in the business of general or limited contractor in the city shall obtain a city registration authorizing him to engage in such business. Individuals desiring such registration shall make application with the building official on the form, which may be obtained from the office of the building department of the city. The building official may, at his discretion, issue one permit for the initial work of any otherwise approved structure pending approval of the appropriate general or limited contractor's registration. Only individuals shall be so registered, and the registration is not transferable.
- (h) **Insurance required.** Before any person shall engage in the business of a general or limited contractor or be granted a registration to do so, he shall first provide the city proof of \$1,000,000.00 liability insurance for general contractor-commercial and \$300,000.00 for limited contractor and general contractor-residential, naming the City of New Braunfels as the Certificate Holder.
- (i) **Application for registration**—Applicant who has had registration previously denied or revoked. An applicant for a general or limited contractor's registration who has been denied a registration or had a registration revoked by this city or another entity for any building or related trade must disclose that information to the building official at the time of application. Any conviction for a misdemeanor or felony, other than traffic citations, must also be disclosed. Failure to disclose such information will result

in automatic disapproval of the application. If the registration is issued and such failure to disclose is discovered later, the registration will be revoked. Any additional legal remedies may also be pursued by the building official. Upon disclosure at the time of registration application, the building official will make a thorough investigation and weigh carefully all details available prior to approving registration.

- (j) **Fee.** Every applicant who shall make application for a general contractor's registration, as provided for in this article, shall pay a fee of \$200.00 upon submitting such application.
- (k) **Issuance of registration.** A contractor's registration will be issued by the building official only after receipt of the insurance required by subsection (h).
- (m) Registration renewal; fee; requirements for renewal. A registration holder may renew his general contractor's registration any time during the period of 60 days prior to expiration, but no later than 30 days after the expiration date, by paying an annual renewal fee of \$100.00. Also, provided he has engaged in such business with a properly issued building permit and satisfactorily completed the work for which the permit was issued sometime within the preceding 24 months. A registration holder who has exceeded the allowed 30 days past expiration will be considered as a new applicant should he desire to reestablish his general contractor's registration.

Sec. 14-45. - Electrical contractor registration.

- (1) **Electrical contractor's registration.** The applicant must show proof of state registration. An applicant for any electrical registration shall make application to the building division on the form provided by the city. All questions on such form must be completely and truthfully answered upon submission of the application in order to receive favorable consideration for registration issuance.
 - (a) **Electrical Contractors shall be registered with the city**. Electrical Contractor registration shall expire June 30th of each year.
 - (b) **Fee.** Every applicant who shall make application for an electrical contractor's registration, as provided for in this article, shall pay a fee of \$200.00 upon submitting such application.
 - (c) **Liability insurance required.** Before any person shall be issued an electrical contractor's registration, retain such registration or engage in the business of electrical work in the city, he shall first provide proof of \$300,000.00 liability insurance, naming the City of New Braunfels as the certificate holder.
 - (d) **Issuance of registration.** A contractor's registration will be issued by the building official only after receipt of the insurance required by subsection (c).
 - (e) Registration renewal; fee; requirements for renewal. A registration holder may renew his electrical contractor's registration any time during the period of 60 days prior to expiration, but no later than 30 days after the expiration date, by paying an annual renewal fee of \$75.00. Also, provided he has engaged in such business with a properly issued building permit and satisfactorily completed the work for which the permit was issued sometime within the

preceding 24 months. A registration holder who has exceeded the allowed 30 days past expiration will be considered as a new applicant should he desire to reestablish his general contractor's registration.

- (5) **Master electrician's registration.** The applicant must show proof of state registration. No insurance is required of a master electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every master electrician shall have his city registration in his possession when performing or supervising electrical work. A properly registered master electrician is considered qualified to provide immediate permitted job-site supervision of electrical installations, provided that he is under the general, which may include permitted job-site supervision by the electrical contractor who holds the permit issued in accordance with this article.
- (6) Journeyman electrician's registration. The applicant must show proof of state registration. No insurance is required of a journeyman electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every journeyman electrician shall have his city registration in his possession when performing or supervising electrical work. A properly registered journeyman electrician is considered qualified to provide immediate permitted job-site supervision of electrical installations, provided that he is under the general, which may include permitted job-site supervision by the electrical contractor who holds the permit issued in accordance with this article.
- (7) Wireman electrician's registration. The applicant must show proof of state registration. No insurance is required of a wireman electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every wireman electrician shall have his city registration in his possession when performing electrical work. A wireman electrician may supervise no more than one apprentice electrician at the permitted job-site location, and is limited to single-family and duplex residences only.
- (8) Maintenance electrician's registration. The applicant must show proof of state registration. No insurance is required of a maintenance electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every maintenance electrician shall have his city registration in his possession when performing electrical work. A maintenance electrician shall perform his duties only for the company for which he is employed.
- (9) Sign electrician's registration. The applicant must show proof of state registration. No insurance is required of a sign electrician, and he may not be issued an electrical permit except that this restriction shall in no way deprive him of property owner's rights available to any citizen as described elsewhere in this article. Every sign electrician shall have his city registration in his possession when performing

electrical work. A sign electrician shall perform his duties under the direct, permitted job-site supervision of a journeyman or electrical contractor who holds a valid city registration.

- (10) Apprentice electrician. An electrical contractor may employ a person as an apprentice electrician and such person shall be identified by the issuance of an apprentice electrician's registration by the city. Every apprentice shall have his city registration in his possession when performing electrical work. An apprentice electrician shall perform his duties under the direct, permitted job-site supervision of a wireman, journeyman or electrical contractor, who holds a valid city registration.
- (11) All registrations issued under the provisions of this article shall expire on June 30th of each year, unless sooner revoked.

Sec. 14-46. – Plumbing Contractor Registration

- (1) Plumbing contractor's registration. The applicant must show proof of state registration. An applicant for any Plumbing contractor registration shall make application to the building division on the form provided by the city. All questions on such form must be completely and truthfully answered upon submission of the application in order to receive favorable consideration for registration issuance.
- (a) **Plumbing Contractors shall be registered with the city.** Plumbing contractor registration shall expire when insurance or state license have expired.
- (b) **Liability insurance required.** Before any person shall be issued an electrical contractor's registration, retain such registration or engage in the business of electrical work in the city, he shall first provide proof of \$300,000.00 liability insurance, naming the City of New Braunfels as the certificate holder.
- (c) **Issuance of registration**. A contractor's registration will be issued by the building official only after receipt of the insurance required by subsection (b).

Sec. 14-47. – Mechanical Contractor Registration

- (1) **Mechanical contractor's registration.** The applicant must show proof of state registration. An applicant for any electrical registration shall make application to the building division on the form provided by the city. All questions on such form must be completely and truthfully answered upon submission of the application in order to receive favorable consideration for registration issuance.
 - (a) Mechanical Contractors shall be registered with the city. Mechanical Contractor registration shall expire June 30th of each year.
 - (b) **Fee.** Every applicant who shall make application for an Mechanical contractor's registration, as provided for in this article, shall pay a fee of \$200.00 upon submitting such application.

- (c) **Liability insurance required.** Before any person shall be issued an Mechanical contractor's registration, retain such registration or engage in the business of electrical work in the city, he shall first provide proof of \$300,000.00 liability insurance, naming the City of New Braunfels as the certificate holder.
- (d) **Issuance of registration.** A contractor's registration will be issued by the building official only after receipt of the insurance required by subsection (c).
- (e) Registration renewal; fee; requirements for renewal. A registration holder may renew his Mechanical contractor's registration any time during the period of 60 days prior to expiration, but no later than 30 days after the expiration date, by paying an annual renewal fee of \$75.00. Also, provided he has engaged in such business with a properly issued building permit and satisfactorily completed the work for which the permit was issued sometime within the preceding 24 months. A registration holder who has exceeded the allowed 30 days past expiration will be considered as a new applicant should he desire to reestablish his general contractor's registration.

Sec.14-48. Revocation or Denial of Contractor Registration

- (1) **Procedure for denial, revocation, or suspension of registration or right to obtain permits**. If the building official initiates a recommendation for denial, revocation, or suspension of a registration or of a right to obtain permits to work under an adopted code or ordinance of the city, the following procedure will apply:
 - (a) An applicant for registration or a registrant of the city shall have ten business days to request a review hearing to be held before the construction board of appeals as referenced in section 14-404. During the ten business-day period a current registrant shall not be allowed to obtain permits. If the applicant for registration or a registrant fails to request a hearing within ten business days the recommendation of the building official shall become final. If a registrant requests a hearing, any denial, revocation or suspension of registration or right to obtain permits shall be stayed pending the decision of the board. The board shall by majority vote affirm or reject the building official's recommendation.
 - (b) If the registrant is registered by the state, such as an electrical contractor, mechanical contractor or plumbing contractor, the process in subsection (1) of this section would apply.

Sec. 14-49. - Erosion control.

(a) Definitions. The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Below ground installations means activity that causes excess sediment laden water, concrete sawing wash water, wash water or drilling mud pumped from an excavation or structure and shall be treated as sediment laden runoff for erosion control purposes.

Building official means the building official for the City of New Braunfels or his designee.

Construction activities means construction activities that require a building permit.

Erosion control plan means a site plan with necessary details, showing the property where land disturbing activity will take place and showing the locations and types of devices, procedures and practices to be used to control erosion and sedimentation.

Final approval means completion of a project, site or building in accordance with city requirements and ordinances. In the case of a building, a certificate of occupancy is issued.

Land disturbing activity means any activity, including but not limited to excavation, planting, tilling, and grading, which disturbs the natural or improved vegetative ground cover so as to expose soil to the erosive forces of rain, storm water runoff or wind.

Off-site borrow area means a source of earth fill material used in the construction of embankments or other earth fill structures, that is located on another parcel of property other than where the principal construction is occurring.

Off-site sedimentation means deposit of soil material beyond the limits of the property undergoing land disturbing activity or in city streets, alleys or drainage facilities in an amount sufficient to constitute a threat to public safety and comfort.

Off-site spoil area means an area on another parcel of property, other than where the principal construction is occurring, where excess earth, rock or construction material is disposed of.

Permanent erosion control devices means devices or practices installed prior to final approval and maintained after final approval to prevent or minimize the erosion and deposit of soil materials. Such devices may include, but shall not be limited to, permanent seeding, sod, storm drain channels, channel linings, storm drain pipes, outlet velocity control structures and storm water detention structures.

Permanent ground cover means permanent vegetative cover on all bare soil areas of a property not covered by a permanent structure or landscaping improvements, including but not limited to, live sod, perennial grasses or other materials which lessen runoff and soil erosion on the property.

Phased occupancy means use or inhabitation of a single structure or other portion of a project as such structure or portion thereof is completed, but before the project as a whole is fully completed and finally approved by city.

Related land area includes the property where the principal land disturbing activity is taking place, all adjacent property, off-site borrow areas, off-site spoil areas, off-site properties necessary for required utility extensions, and off-site areas for required street improvements.

Responsible party means a business entity, franchised utility company, developer, property owner, contractor or holder of a building permit who is required to comply with the terms of this article.

Staging area means an on-site or off-site location used by a Contractor to store materials for a project, to assemble portions of equipment or structures, to store equipment or machinery, to park vehicles, or for other construction related uses.

Stop work order means the suspension of all city permits with no approvals or inspections of work for the site or project being performed.

Temporary erosion control devices means devices installed or practices implemented and maintained during land disturbing activities to prevent, minimize or control the erosion and deposit of soil materials.

- (b) Building permit. When land disturbing activities are conducted on a lot for which a building permit must be issued, the responsible party shall comply with the following:
- (1) Erosion control plan. Prior to approval of a building permit for a lot by the city, the contractor or other responsible party obtaining the building permit shall submit an erosion control plan for approval by the city. No inspection may be performed on a project until a city-approved erosion control plan is implemented.
- (2) Stop work order/citation. City shall inspect the erosion control devices located at a site for compliance with the approved erosion control plan submitted for such site. If a responsible party fails to implement or maintain erosion control devices as specified in his approved erosion control plan, city shall provide such party with written notice of noncompliance identifying the nature of such noncompliance. The responsible party shall have 24 hours to bring his erosion control devices into compliance with the approved erosion control plan for the site where the violation occurred. Correction shall include sediment clean-up, erosion control device repair, erosion control device maintenance, and/or installation of additional erosion control devices to prevent re-occurrence of the violation. The 24-hour cure period may be extended for inclement weather or other factors at the discretion of the building official.

At the end of the 24-hour cure period, city shall re-inspect the site and may assess a re-inspection fee. If at the time of such re-inspection, the erosion control devices at the site have not been brought into compliance with the approved erosion control plan, city may issue a stop work order and issue a citation for each violation of the city's erosion control requirements. When a stop work order has been issued, a re-inspection fee shall be assessed. To obtain a re-inspection for removal of the stop work order, a request must be submitted there for and a re-inspection fee, as set by the building inspection department of the city, shall be paid.

- (3) Removal of erosion control devices. Upon final occupancy or upon establishing permanent ground cover on a lot, all temporary erosion control devices shall be removed.
- (c) Enforcement.

- (1) Violations. It shall be an offense for a responsible party or a third party performing work on a project to violate any of the requirements of this article, including, but not limited to, the following:
- a. Conducting any land disturbing or construction activity without an approved erosion control plan for the location where the violation occurred.
- b. Failing to install erosion control devices or to maintain erosion control devices throughout the duration of land disturbing activities, in compliance with the approved erosion control plan for the location where the violation occurred.
- c. Failing to remove off-site sedimentation that is a direct result of land disturbing activities where such off-site sedimentation results from the failure to implement or maintain erosion control devices as specified in an approved erosion control plan for the location where the violation occurred.
- d. Allowing sediment laden water resulting from below ground installations to flow from a site without being treated through an erosion control device.
- e. Failing to repair damage to existing erosion control devices, including replacement of existing grass or sod.
- (2) Notice of violation. Written notice of violation shall be given to the responsible party or his job site representative as identified in the erosion control plan for a site. Such notice shall identify the nature of the alleged violation and the action required to obtain compliance with the approved erosion control plan.
- (3) Class C misdemeanor. Any person, firm, or corporation violating any of the provisions or terms of this article shall be deemed guilty of a Class C misdemeanor and, upon conviction thereof, be subject to a fine not exceeding \$500.00 for each offense, and each and every day such violation shall continue shall be deemed to constitute a separate offense.
- (d) Appeals.
- (1) Appeal to building official. Upon notice of noncompliance, a responsible party may appeal the city's decision to take deductions from his erosion control deposit pursuant to section 14-96 of this article, by filing a written appeal to the building official within seven days of city's written notice of its intent to make such deduction for costs as allowed herein. An appeal filed pursuant to this section shall specifically state the basis for the aggrieved party's challenge to the city's authority to take deductions under this article.
- (2) Standard for appeals. When reviewing an appeal filed pursuant to this section, the building official shall evaluate all evidence submitted. The burden of proving that a violation of this article occurred shall be on the city. The city shall provide evidence sufficient to reasonably support a determination that the responsible party failed to comply with the requirements of this article as alleged by the city.

(3) Issuance of opinion by director. Decisions of the building official shall be issued within 20 days of city's receipt of the written appeal. Decisions of the building official shall be final.

GLOSSARY

- BARREL A pipe placed through a dam, levee or dike to control the release of water.
- BMP Best Management Practices. Consist of practices, procedures, and devices used to prevent or reduce pollutants, including sediment, from polluting the waters of the United States.
- BORROW AREA A source of earth fill material used in the construction of embankments or other earth fill structures.
- CHANNEL A natural stream or excavated ditch that conveys water.
- CHANNELIZATION Alteration of a stream channel by widening, deepening, straightening, or paving certain areas to improve flow characteristics.
- CHECK DAM A small, temporary dam constructed across a drainage ditch, swale or channel to lower the speed of concentrated flows and promote sediment deposition.
- CONTOUR An imaginary line on the surface of the earth connecting points of the same elevation.
- CUT Portion of land surface or area from which earth has been removed or will be removed by excavating; the depth below the original ground surface to the excavated ground surface.
- DAM A barrier to confine or impound water or for the retention of soil, sediment or debris.
- DESIGN STORM A selected rainfall pattern of specified amount, intensity, duration, and frequency that is used as a basis for design.
- DISCHARGE Usually the rate of water flow commonly expressed as cubic feet per second, cubic meters per second, gallons per minute, or millions of gallons per day.
- DIVERSION A channel with a supporting ridge on the lower side constructed at the top, across, or at the bottom of a slope for the purpose of controlling surface runoff.
- DIVERSION DIKE A barrier built to divert surface runoff.
- DIVIDE, DRAINAGE The boundary between watersheds.
- DRAINAGEWAY A natural or artificial depression that carries surface water to a larger watercourse or outlet such as a river or lake.
- DROP INLET Overall structure in which the water drops through a vertical riser connected to a discharge conduit or storm sewer.
- EARTH DAM Dam constructed of compacted suitable soil materials.

- ENERGY DISSIPATOR A device used to reduce the energy of flowing water to prevent erosion.
- EPA The Environmental Protection Agency. The federal agency responsible for administering the NPDES permit program.
- ERODIBILITY Susceptibility to erosion.
- EROSION The wearing away of the land surface by water, wind, ice, gravity, or other geological agents.
- EROSION CONTROL PLAN A site plan with necessary details, showing the property where land disturbing activity will take place and showing the locations and types of BMPs to be used to control erosion and sedimentation.
- FILTER FABRIC A woven or non-woven, water-permeable material generally made of synthetic products such as polypropylene and used in erosion and sediment control applications to trap sediment or prevent the movement of fine soil particles.
- FLOOD PLAIN The lowland that borders a stream and is subject to flooding when the stream overflows its banks.
- GABION A wire mesh cage, usually rectangular, filled with rock and used to protect channel banks and other sloping areas from erosion.
- GEOTEXTILES See filter fabric.
- GRADE STABILIZATION STRUCTURE A structure for the purpose of stabilizing the grade of a gully or other watercourse, thereby preventing further erosion or lowering of the channel bottom.
- GRADING The cutting and/or filling of the land surface to a desired slope or elevation.
- GRASSED WATERWAY A natural or constructed waterway, usually broad and shallow, covered with erosion-resistant grasses and used to safely conduct surface water from an area.
- GROUND COVER Low-growing, spreading plants (grasses or legumes) useful for low-maintenance landscape areas.
- INVERT The inside bottom of a culvert or other conduit.
- LEGUME Any member of the pea or pulse family which includes peas, beans, peanuts, clovers, alfalfa, sweet clovers, lespedezas, vetches, black locust, and kudzu.
- NPDES National Pollutant Discharge Elimination System. A federal program that requires a permit for storm water discharges to the waters of the U.S.
- OUTLET PROTECTION Stone, rip-rap, concrete or asphalt aprons installed to reduce the speed of concentrated storm water flows, thereby reducing erosion and scouring at storm water outlets.

- RAINFALL INTENSITY The rate at which rain is falling at any given instant, usually expressed in inches per hour.
- RATIONAL METHOD A means of computing storm drainage flow rates by use of the formula Q = CiA, where C is a coefficient describing the physical drainage area, i is the rainfall intensity, and A is the drainage area.
- RECEIVING STREAM The body of water into which runoff or effluent is discharged.
- RILL A small intermittent watercourse with steep sides, usually only a few inches deep, normally caused by erosion.
- RISER A vertical pipe or structure extending from the barrel, storm sewer or bottom of a pond BMP that is used to convey the discharge from the pond or drainage area.
- RUNOFF That portion of precipitation that flows from a drainage area on the land surface, in open channels or in storm water conveyance systems.
- SCOUR The clearing and digging action of flowing water, especially the downward erosion caused by stream water in sweeping away mud and silt from the stream bed.
- SEDIMENT Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice.
- SEDIMENT BASIN A settling pond with a controlled storm water release structure used to collect and store sediment produced by land disturbing activities. The basin detains sediment-laden runoff from larger drainage areas long enough to allow most of the sediment to settle out.
- SEDIMENT POOL The reservoir space allocated for the accumulation of sediment in a sedimentation control device.
- SEDIMENT TRAP A settling basin with a filter outlet designed to retain runoff long enough to allow most of the silt to settle out.
- SEDIMENTATION The deposition of suspended soil particles that have settled out from storm water runoff.
- SHEETFLOW Runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel or a rill.
- SILT Parts of the soil structure consisting of particles between 0.002 and 0.05 mm in diameter.
- SLOPE Degree of deviation of a surface from the horizontal. Slope is measured and is shown as a numerical ratio or percent.
- SOIL The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.

- STABILIZATION The proper placing, grading and/or covering of soil, rock or earth to ensure its resistance to erosion, sliding, or other movement. Also see Vegetative Stabilization.
- STORM FREQUENCY The time interval between major storms of predetermined intensity and volumes of runoff (e.g. ten-year or 100-year storm).
- STORM SEWER (DRAIN) A sewer that carries storm water, surface drainage, street wash and other wash waters, but excludes sewage and industrial wastes. Also called a storm drain.
- STORM WATER Runoff from a rain event or snow melt runoff. Also called surface runoff.
- SWALE An elongated, gentle depression in the land surface that conveys storm water into primary drainage channels. Swales are normally without flowing or standing water.
- SWPPP Storm Water Pollution Prevention Plan. A document that is a part of the NPDES permit application and consists of the site erosion control plan, waste management plan, and site narrative as required by the EPA.
- TEMPORARY SEEDING The growing of short-term (less than 1-year) vegetation on disturbed areas to prevent erosion.
- TOE OF SLOPE The base or bottom of a slope at the point where the ground surface abruptly changes to a significantly flatter grade.
- TOPOGRAPHY A general term that includes the physical features of a surface area including relative elevations and the position of natural and man-made features.
- VEGETATIVE STABILIZATION Protection of erodible areas with temporary seeding, permanent seeding, or sodding.
- WATERSHED The region drained by or contributing water to a stream, lake, or other body of water.

(Ord. No. 2015-35, § I, 7-13-15)

Sec. 14-50. - Irrigation systems.

- (a) Scope. This Section applies to the installation, alteration, repairs, relocation, replacement, addition to, use, or maintenance of irrigation systems within the city. This Section regulates the installation of backflow prevention devices, control valves, automatic irrigation controllers, control wiring, and water conservation required for the proper design, installation, and operation of irrigation systems. All irrigation systems must comply with the provisions of this Section and with Title 30, Texas Administrative Code, Chapter 344.
- (b) Purpose. The purpose of this Section is to require all irrigation systems to be designed, installed, maintained, altered, repaired, serviced, and operated in a manner that will promote water conservation.
- (c) Definitions. The following words and terms shall have the meanings shown herein.

Design means 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 hydraulics 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 means 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.

Emission device means 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 means 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, Title 26, United States Code Service, Section 3312(d) based on the behavioral control, financial control, and the type of relationship involved in performing employment related tasks.

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

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

Inspector means 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 means a person who connects an irrigation system to a private or public raw or potable water supply system or any water supply, who is licensed according to Title 30, Texas Administrative Code, Chapter 30.

Irrigation inspector means 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 Title 30, Texas Administrative Code, Chapter 30.

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

Irrigation system means 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., Agricultural Code § 251.002.

Irrigation technician means 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 Title 30, Texas Administrative Code, Chapter 30.

Irrigation zone means 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 means a person who sells, designs, offers consultations regarding, installs, 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 Title 30, Texas Administrative Code, Chapter 30.

Irrigator-in-charge means 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 means the science of applying the necessary amount of water to promote or sustain healthy growth of plant material or turf.

License means an occupational license that is issued by the Texas Commission on Environmental Quality under Title 30, Texas Administrative Code, Chapter 30, to an individual that authorizes the individual to engage in an activity that is covered by Title 30, Texas Administrative Code, Chapter 30.

Mainline means a pipe within an irrigation system that delivers water from the water source to the individual zone valves.

Maintenance checklist means 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, 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 means 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 the atmosphere.

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

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

Pass-through contract means 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 irrigation system.

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

Records of landscape irrigation activities means 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.

Static water pressure means the pressure of water when it is not moving.

Supervision means 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 means 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 means 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 means an automatic valve that controls a single zone of a landscape irrigation system.

(d) License. Any person who connects an irrigation system to the water supply in the city must hold a valid license, as defined by Title 30, Texas Administrative Code, Chapter 30, and V.T.C.A., Occupations

Code ch. 1903, or as defined by Title 22 of the Texas Administrative Code, Chapter 365, and required by V.T.C.A., Occupations Code ch. 1301.

Exemption: A homeowner is not required to be licensed in accordance with V.T.C.A., Occupations Code tit. 12, § 1903.002(c)(1) if the homeowner is performing irrigation work in a building or on a premises owned and occupied by the homeowner as the homeowner's homestead. A homeowner who installs an irrigation system must meet the standards contained in Title 30, Texas Administrative Code, Chapter 344, regarding spacing, water pressure, spraying water over impervious materials, rain and freeze sensors, backflow prevention and isolation valves.

(e) Permit. Any person or homeowner installing an irrigation system in the city is required to obtain a permit from the city. Any plan approved for a permit must be in compliance with the requirements of this appendix [section].

Exemptions:

- (1) An irrigation system that is an on-site sewage disposal system, as defined by V.T.C.A., Health and Safety Code § 355.002; or
- (2) An irrigation system used on or by an agricultural operation as defined by V.T.C.A., Agriculture Code § 251.002; or
- (3) An irrigation system connected to a groundwater well used by the property owner for domestic use.
- (f) Backflow prevention methods and devices.
- (1) Any irrigation system that is connected to the potable water supply must be connected through a backflow 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, University of Southern California; the International 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.
- (2) 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:
- 1. There is an unobstructed physical separation; and
- 2. 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:
- 1. 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
- 2. Drainage is provided for any water that may be discharged through the assembly relief valve.
- c. Pressure vacuum breakers may be used if:
- 1. No back-pressure condition will occur; and
- 2. 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.
- d. Atmospheric vacuum breakers may be used if:
- 1. No back-pressure will be present;
- 2. There are no shutoff valves downstream from the atmospheric vacuum breaker;
- 3. 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;
- 4. 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
- 5. 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.
- (3) Backflow prevention devices used in applications designated as health hazards must be tested upon installation and annually thereafter.
- (4) 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.
- (5) If a double check valve is installed below ground:
- a. Test cocks must be plugged, except when the double check valve is being tested;
- b. Test cock plugs must be threaded, water-tight, and made of non-ferrous material;
- c. A y-type strainer is installed on the inlet side of the double check valve;
- d. There must be a clearance between any fill material and the bottom of the double check valve to allow space 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.
- (6) If an existing irrigation system without a backflow-prevention assembly requires major maintenance, alteration, repair, or service, the system must be connected to the potable water supply through an approved, properly installed backflow prevention method before any major maintenance, alteration, repair, or service is performed.
- (7) 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.
- (8) The irrigator shall ensure the backflow prevention device is tested by a licensed backflow prevention assembly tester prior to being placed in service and the test results provided to the local water purveyor and the irrigation system's owner or owner's representative within ten business days of testing of the backflow prevention device.
- (g) Specific conditions and cross-connection control.
- (1) 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.
- (2) 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.
- (3) 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.
- (4) If an irrigation system is designed or installed on a property that is served by an on-site sewage facility, as defined in Title 30, Texas Administrative Code, Chapter 285, then:
- a. All irrigation piping and valves must meet the separation distances from the on-site sewage facilities system as required for a private water line in Title 30, Texas Administrative Code, Section 285.91(10);
- b. 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 Title 30, Texas Administrative Code, Section 344.50; and
- c. Any water from the irrigation system that is applied to the surface of the area utilized by the on-site 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.

- (h) Irrigation plan design: Minimum standards.
- (1) An irrigator 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:
- a. Diminish the operational integrity of the irrigation system;
- b. Violate any requirements of this appendix [section]; and
- c. Go unnoted in red on the irrigation plan.
- (2) 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.
- (3) All irrigation plans used for construction must be drawn to scale. The plan must include, at a minimum, the following information:
- a. The irrigator's seal, signature, and date of signing;
- b. All major physical features and the boundaries of the areas to be watered;
- c. A North arrow;
- d. A legend;
- e. The zone flow measurement for each zone;
- f. Location and type of each:
- 1. Controller; and
- 2. Sensor (i.e., rain and freeze);
- g. Location, type, and size of each:
- 1. Water source, including, but not limited to, a water meter and point(s) of connection;
- 2. Backflow prevention device;
- 3. Water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip, or micro-sprays;

- 4. Valve, including but not limited to, zone valves, master valves, and isolation valves;
- 5. Pressure regulation component; and
- 6. Main line and lateral piping.
- h. The scale used; and
- i. The design pressure.
- (i) Design and installation: Minimum requirements.
- (1) 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.
- (2) Spacing.
- a. 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.
- b. 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, including, but not limited to, a building foundation, fence, concrete, asphalt, pavers, or stones set with mortar.
- c. 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.
- (3) Water pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator, or pressure compensating spray heads.
- (4) 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.
- (5) Irrigation zones. Irrigation systems shall have separate zones based on plant material type, microclimate factors, topographic features, soil conditions, and hydrological requirements.
- (6) 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.

- (7) 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.
- (8) Master valve. When provided, a master valve shall be installed on the discharge side of the backflow prevention device on all new installations.
- (9) 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, Section 605.
- (10) Rain and freeze sensors.
- a. Any commercial, industrial, multi-family, or residential customer class irrigation system installed within the city on or after January 1, 2009, must be equipped with rain and freeze sensors.
- b. Any commercial, industrial, or multi-family customer class irrigation system installed within the city before January 1, 2009, may not be operated after January 1, 2010, without being equipped with rain and freeze sensors
- c. Any residential customer class irrigation system installed within the city before January 1, 2009, may not be operated after January 1, 2011, without being equipped with rain and freeze sensors. If a person repairs or replaces more than 50 percent of a residential customer class irrigation system before January 1, 2011, then such irrigation system must be equipped with rain and freeze sensors.
- d. Any rain and freeze sensor shall be installed according to the manufacturer's published recommendation and shall be from a list approved by the building official.
- e. Repairs to existing automatic irrigation systems that require replacement of an existing controller shall include a rain and freeze sensor designed to inhibit or interrupt operation of the irrigation system during periods of freezing temperatures and rainfall.
- (11) Isolation valve. All new irrigation systems must include a lockable isolation valve between the water meter and the backflow prevention device.
- (12) Depth coverage of piping. Piping in all irrigation systems must be installed according to the manufacturer's published specifications for depth coverage of piping.
- a. If the manufacturer has not published specifications for depth coverage of piping, the piping must be installed to provide minimum depth coverage of six inches of select backfill, between the top of the pipe and the natural grade of the topsoil. All portions of the irrigation system that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at a depth of six inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the irrigation system owner or owner's representative to address any safety issues.

- b. If a utility, man-made structure, or roots create an unavoidable obstacle, which makes the six-inch depth coverage requirement impractical, the piping shall be installed to provide a minimum of two inches of select backfill between the top of the pipe and the natural grade of the topsoil.
- c. All trenches and holes created during installation of an irrigation system must be backfilled and compacted to the original grade.
- (13) Wiring irrigation systems.
- a. Underground electrical wiring used to connect an automatic controller to any electrical component of the irrigation system must be listed by Underwriters Laboratories as acceptable for burial underground.
- b. Electrical wiring that connects any electrical components of an irrigation system must be sized according to the manufacturer's recommendation.
- c. Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer.
- d. Underground electrical wiring that connects an automatic controller to any electrical component of the irrigation system must be buried with a minimum of six inches of select backfill.
- (14) Water contained within the piping of an irrigation system is deemed to be non-potable. No drinking or domestic water usage, including, but not limited to, filling swimming pools or decorative fountains, shall be connected to an irrigation system. If a hose bib (an outdoor water faucet that has hose threads on the spout) is connected to an irrigation system for the purpose of providing supplemental water to an area, the hose bib must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box, and the hose bib and any hoses connected to the bib must be labeled "non potable, not safe for drinking." An isolation valve must be installed upstream of a quick coupler connecting a hose bib to an irrigation system.
- (15) Beginning January 1, 2010, either a licensed irrigator or a licensed irrigation technician shall be on-site at all times while the landscape irrigation system is being installed. When an irrigator is not on-site, the irrigator shall be responsible for ensuring that a licensed irrigation technician is on-site to supervise the installation of the irrigation system.
- (j) Completion of irrigation system installation. Upon completion of the irrigation system, the irrigator or irrigation technician who provided supervision for the on-site installation shall be required to complete four items:
- (1) A final "walk through" with the irrigation system's owner or the owner's representative to explain the operation of the system.
- (2) 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. The items on the maintenance checklist shall include, but are not limited to:

- a. The manufacturer's manual for the automatic controller, if the system is automatic;
- b. 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;
- c. A list of components, such as the nozzle, pump filters, and other such components, that require maintenance and the recommended frequency for the service; and
- d. 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."
- (3) 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 automatic controller installed by the irrigator or irrigation technician. If the irrigation system is manual, the sticker shall be affixed to the original maintenance checklist. The information contained on the sticker must be printed with waterproof ink.
- (4) The irrigation plan indicating the actual installation of the system must be provided to the irrigation system's owner or owner representative.
- (k) Maintenance, alteration, repair, or service of irrigation systems.
- (1) 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.
- (2) 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.
- (3) 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, Section 605.

- (4) When maintenance, alteration, repair, or service of an irrigation system involves excavation work at the water meter or backflow prevention device, a lockable isolation valve shall be installed, if an isolation valve is not present.
- (I) 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 components;
- (4) The domestic potable water line is connected using an air gap or a reduced pressure principle backflow prevention device, in accordance with Title 30, Texas Administrative Code, Section 290.47(i);
- (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 city ordinances.
- (m) Lawn and landscape irrigation restrictions.
- (1) A person commits an offense if the person knowingly or recklessly irrigates, waters, or causes or permits the irrigation or watering of a lawn or landscape located on premises owned, leased, or managed by the person in a manner that causes:
- a. A substantial amount of water to fall upon impervious areas instead of a lawn or landscape, such that a constant stream of water overflows from the lawn or landscape onto a street or other drainage area; or
- b. An irrigation system or other lawn or landscape watering device to operate during any form of precipitation.
- (2) A person commits an offense if, on premises owned, leased, or managed by that person, the person operates an irrigation system or other lawn or landscape watering device that:
- a. Has any broken or missing sprinkler head; or
- b. Has not been properly maintained in a manner that prevents the waste of water.

Chapter 54 - FIRE PREVENTION AND PROTECTION; EMERGENCY MEDICAL SERVICES[1]

ARTICLE III. - FIRE PREVENTION[4]

Footnotes: --- (4) ---

Editor's note— Ord. No. 2003-17, adopted February 24, 2003, repealed and reenacted article III in its entirety to read as herein set out. Formerly, article III pertained to similar subject matter and derived from the Code of 1961, §§ 8-5—8-17, and Ord. No. 98-24, adopted September 14, 1998.

Cross reference— Fire prevention in tourist courts, § 62-248; natural gas service, § 130-431 et seq.

Sec. 54-86. - International Fire Code; and amendments.

- (a) Adopted. The International Fire Code, 20158 edition, (IFC) including appendixes, B, D, E, F, G, H and I thereto, as published by the International Code Council, Inc. are hereby adopted and incorporated by reference as the fire code of the city, subject to and including by reference such amendments as shall appear in this article.
- (b) Amendments, modifications, and deletions to the 20158 International Fire Code. Amendments, modifications, and deletions to the 20158 International Fire Code are adopted as follows:

Section 103.2 is deleted.

Section 108.1 is amended to read as follows:

108.1 Construction board of appeals. The construction board of appeals will hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code.

Section <u>109.4</u> <u>110.4</u> is amended to read as follows:

109.4. 110.4 Violation penalties. Persons who violate this code or who fail to comply with any of the requirements in this code, or who erect, install, alter, repair or do work in violation of the approved construction documents or contrary to the directives of the fire code official or in violation of a permit or certificate issued under provisions of this code, shall be assessed a fine up to \$2,000. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Section 111.4 112.4 is amended to read as follows:

411.4. 112.4 Failure to comply. Any person who continues work after having been served with a stop work order, except such work the code official has directed to be performed to remedy a violation or unsafe condition, shall be subjected to a fine not to exceed \$2,000.

The following definitions in Section 202 are amended to read as follows:

Code official. The Code Official is the Building Official except where specifically described as the Fire Code Official. The building official shall have the authority to render interpretations of all of these codes and ordinances and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of these codes and ordinances. The building official will be the final authority in any disputes of any interpretations of or any conflicts between these codes and ordinances. The building official is also the final authority in determining who will apply and enforce these codes and ordinances.

Fire Code official. The fire marshal or a duly authorized representative charged with the duties of administration and enforcement of the Fire Code.

Fire Watch. A temporary measure intended to ensure continuous and systematic surveillance of a building and portion thereof by one (1) or more fire marshal approved individuals for the purpose of

identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire, and notifying the fire department.

Section 307 is amended to read as follows:

307.2. Permits. A permit or authorization from the fire code official shall be obtained in accordance with § 105.6 before engaging in open trench burning or open air burning of dead livestock.

307.2.2. Some fires prohibited. The fire code official may prohibit any or all burning, including permit burning, when the atmospheric conditions or circumstances make such fires hazardous.

Section 308.1.4 is amended to read as follows:

308.1.4 Outdoor cooking. It is unlawful to use or to store a charcoal burner, open flame, LP gas burner, outdoor grill, barbecue, or other outdoor cooking appliance with open flame on the premises of a residential building with three or more dwelling units or of a multifamily residential building with two or more stories. The provision does not apply to the use of permanently mounted outdoor cooking devices located ten or more feet from any structure.

Section 401.1 is amended by deleting the exception.

Section 503.2.7 is amended to read as follows:

503.2.7 Grade. The grade of the fire apparatus access road shall not exceed 6 percent in grade.

Exception: Grades steeper than 6 percent as approved by the fire code official.

Section 503.3 is amended to read as follows:

503.3 Marking. Approved markings, signs, or other notices to identify such roads or prohibit the obstruction thereof shall be provided for fire apparatus access roads. The fire code official shall provide the acceptable standards and specifications. Signs, markings, and other notices shall be maintained in a clean and legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility.

Section 503.4.1 is amended to read as follows:

503.4.1 Traffic Calming Devices. Traffic calming devices on public and private streets shall be approved by the fire code official and the city engineer. Traffic calming devices on fire apparatus access roadways in private property shall be prohibited unless approved by the fire code official.

Section 505.1 is amended to read as follows:

505.1. Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street and/or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 6 inches high with a minimum stroke width of ½ inch. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

Section 506.1 is amended to read as follows:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in a approved location.

Section 507.2.1 is amended to read as follows:

507.2.1 Public and private fire service mains. Public and private fire service mains and appurtenances shall be installed in accordance with NFPA 24.

Section 507.3 is amended to read as follows:

507.3 Fire flow. Fire flow requirements for buildings or portions of buildings and facilities shall be determined by using the Insurance Services Office (ISO) Guide for Determination of Needed Fire Flow (Edition 06-2014).

Exceptions:

- 1. Every fire hydrant shall be capable of providing a minimum flow of 500 GPM in areas zoned residential and 1500 GPM in areas zoned commercial or industrial.
- 2. Fire hydrant flows for buildings, excluding 1 or 2 family dwellings, provided with fire sprinkler systems shall be the required fire flow of the fire sprinkler system plus 500 GPM or a minimum of 1000 GPM, whichever is greater.
- 3. The fire flow requirements listed in this section shall be met with a minimum of 20 psi residual

Section 507.5.1 is amended to read as follows: exclude exception 1.

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 500 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

- 1. Hydrants shall be spaced not over 600 feet away from the facility or building in residential (one-and-two family dwelling) areas, and not over 300 feet away from the facility or building in commercial or industrial zoned areas, including heavily congested residential areas.
- 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet.

Section 507.5.1.1 is amended to read as follows:

507.5.1.1 Hydrant for fire department connections. Buildings or facilities equipped with a fire sprinkler system or a fire standpipe system shall have a fire hydrant located within 100 feet of the fire department connections.

Exceptions: The distance shall be permitted to exceed 100 feet where approved by the fire code official.

Section 507.5.3 is amended to read as follows:

507.5.3 Water mains. Public and private fire service mains shall be installed, inspected, tested and maintained in accordance with the following requirements:

- 1. Water mains shall be at least 8 inches and large enough to supply the required fire flows.
- 2. New 8 inch mains longer than 1320 feet must be looped.
- 3. 6 inch lead lines for fire hydrants shall not exceed 100 feet, and in no case, reduce the amount of required fire flow.

4. Primate mains, tanks, and hydrants shall be installed, inspected, tested and maintained in accordance with the requirements of the most current editions of NEPA 24 and NEPA 25.

Section 507.5 is amended by adding the following:

507.5.7 Fire hydrant marking. All fire hydrants located within the city, or its extraterritorial jurisdiction, shall be identified with a blue reflector affixed to the pavement so that the hydrant is readily visible to arriving fire companies. On unpaved streets, a blue reflector shall be fixed to a post as close as practicable to the edge of the roadway so as to be visible. Specifications and type and placement locations of markers shall be obtained from the fire code official.

Section 903.3.1.1.2 is deleted.

Section 1103.5.1 is amended to read as follows:

1103.5.1 Group A-2.

Where alcoholic beverages are consumed in a Group A-2 occupancy having an occupant load of 300 or more, the fire area containing the Group A-2 occupancy shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1. Building owners shall file a compliance schedule with the fire code official not later than 365 days after receipt of a written notice of violation. The compliance schedule shall not exceed 3 years for an automatic sprinkler system retrofit.

Appendix D to be amended as follows:

SECTION D107

ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.

Exceptions

- 1. Where there are more than 30 dwelling units on a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the International Fire Code, access from two directions shall not be required.
- 2. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.
- 3. Where there are more than 30 but less than 126 dwelling units on a single public or private fire apparatus access road and this access road is at least 40 feet wide, access from two directions shall not be required.

(Ord. No. 2003-17, 2-24-03; Ord. No. 2004-17, 3-8-04; Ord. No. 2008-65, § 2, 9-22-08; Ord. No. 2010-79, § 1, 10-25-10; Ord. No. 2015-36, § 1(Exh. A), 7-13-15; Ord. No. 2015-65, § 1(Exh. A), 11-9-15)

Sec. 54-87. - Fire prevention and protection fees.

Fees are as adopted in appendix D of this Code.

(Ord. No. 2003-17, 2-24-03; Ord. No. 2004-17, 3-8-04; Ord. No. 2008-65, § 2, 9-22-08; Ord. No. 2009-32, § 1, 5-26-09; Ord. No. 2010-78, § 1, 10-25-10; Ord. No. 2018-21, § 6, 3-26-18)

Sec. 54-88. - Smoke detectors.

Every dwelling and every dwelling unit within an apartment, house, condominium, townhouse, and every guest or sleeping room in a motel, hotel, dormitory, one-family and two-family dwelling unit which is rented or leased, shall be provided with an approved listed smoke detector, installed in accordance with the manufacturer's recommendation and listing. In dwellings and dwelling units, a smoke detector shall be mounted on the ceiling or wall at a point centrally located in the corridor or area giving access to each group of rooms used for sleeping purposes. The landlord or agents of the landlord are responsible for installing smoke detectors in all residential dwelling units, as listed in this section, which are rented or leased. The landlord shall install at least one smoke detector prior to possession by a tenant. The landlord shall also test the smoke detector to verify that it is in good working order when a tenant takes possession of the dwelling. The landlord further has a duty to inspect or repair malfunctioning smoke detectors unless damage to the detector was caused by the tenant and tenant's family or guests. The landlord has a duty to inspect or repair damaged units if the tenant pays in advance for the reasonable cost of repair or replacement.

(Ord. No. 2003-17, 2-24-03)

Sec. 54-89. - Establishment of motor vehicle routes—For vehicles transporting explosives and blasting agents.

The routes referred to in the state law for vehicles transporting explosives and blasting agents are hereby established as follows: Such vehicles shall be restricted to railroads, state and federal highways, and M-2 industrial districts.

(Ord. No. 2003-17, 2-24-03)

Cross reference— Operation of vehicles, § 126-91 et seq.

Sec. 54-90. - Same—For vehicles transporting hazardous chemicals or other dangerous articles.

The routes for vehicles transporting hazardous chemicals or other dangerous articles are hereby established as follows: Such vehicles shall be restricted to railroads, state and federal highways, and M-2 industrial districts.

(Ord. No. 2003-17, 2-24-03)

Cross reference— Operation of vehicles, § 126-91 et seq.

Sec. 54-91. - Violations declared nuisances: extraterritorial application.

- (a) The following are declared public nuisances:
 - (1) The possession, storage, or discharge, of fireworks; or

- (2) Any violation of article III, Fire prevention, which poses a serious danger to the safety of persons or property.
- (b) It is unlawful for a person to create or maintain a public nuisance, or to engage in any activity that constitutes a public nuisance, within the city limits or within 5,000 feet of the city limits.

(Ord. No. 2006-88, § 1, 9-11-06; Ord. No. 2015-51, § 1, 10-12-15)

Editor's note— Ord. No. 2006-88, § 1, adopted September 11, 2006, amended § 54-91 in its entirety to read as herein set out. Formerly, § 54-91 pertained to the manufacture and sale of fireworks, and derived from Ord. No. 2003-17, adopted February 24, 2003.

State Law reference— Extent of extraterritorial jurisdiction, V.T.C.A., Local Government Code § 42.021.

Secs. 54-92—54-120. - Reserved.

APPENDIX D - FEE SCHEDULE amended as follows:

Sec. B. - Additional fees specific to building permitting.

- (b) Building permit fees for new construction or new additions, shall be calculated on square footage using the following table identified as Building Permit Fee Schedule B which is dependent upon the use and construction type.
 - (1) Buildings with multiple (mixed) use groups shall be charged the applicable fee per use group.
 - (2) Shell buildings shall be charged a fee based on 80 percent of the calculated permit fee (0.80 x permit fee).
 - (3) When proposed work involves both remodel of existing and new construction/addition, the fee for the remodel will be based on the remodel valuation and the fee for the new construction/addition shall be based on the square footage.
 - (4) Permit fees are derived from ICC's 2012 most current published Building Valuation Data (BVD) fee schedule using a spreadsheet that has been set with an appropriate multiplier.

Building Permit Fee Schedule B

Permit Fee Estimator (based on 2012 BVD Fee Subtitle) Instructions: (Complete Steps 1 and 2 for EACH Permit separately.) Select Occupancy Groups, Construction Type, and Square Footage for each building area. Step 1. Stop 2. Input the value of Roadway impact fees for your project. The fee estimator will use your input values to automatically calculate the approximate cost of the fees you will be charged at time of submittal. Step 1 Calculate New Construction Fee Valuation: Pick your Occupancy and Construction Type by clicking on a yellow box and selecting from the Type in the Applicable to New Construction and Additions square footage for each area in drop-down menus below: the building: Occupancy Group Areas Construction Type Calculated Fee Valuation Sq Footage x BVD Cost/Sq Ft **Building Fee Valuation Total Square Feet:** Based on New Area = Estimated Building Permit Fee = \$ Calculated Building Permit Fee Enter the cost of Roadway Step 2 **Enter Roadway Impact Fees:** Impact fees Building Permit Fee + Roadway Estimated Total Building Fees = Impact fees. The amounts estimated through this tool may not be accurate if the values entered into the tool are incorrect. NOTES: The Building Division will accept intake fees that fall reasonably close to the amount All fees must be paid in their entirety before a permit can be issued.

Reference Tables:

Occupancy Group Definitions

IBC Occupancy Group	ICC BVD Uses	2015 ICC Uses
A-1	Assembly, theaters, with stage	Theaters, auditoriums

Assembly, theaters, without stage	Theaters, auditoriums				
Assembly, nightclubs					
Assembly, restaurants, bars, banquet halls	Restaurants				
Assembly, churches	Churches				
Assembly, general, community halls, libraries, museums	Bowling alleys, libraries				
Assembly, arenas					
Business	Banks, medical office, office				
Educational	Schools				
Factory and industrial, moderate hazard	Industrial plants				
Factory and industrial, low hazard	Industrial plants				
High Hazard, explosives					
High Hazard					
НРМ					
Institutional, supervised environment	Convalescent hospitals, homes for the elderly				
Institutional, incapacitated	Hospitals				
Institutional	Nursing homes				
Institutional, restrained	Jails				
Institutional, day care facilities					
Mercantile	Stores, service stations (mini-marts)				
Residential, hotels	Hotels and motels				
	Assembly, nightclubs Assembly, restaurants, bars, banquet halls Assembly, churches Assembly, general, community halls, libraries, museums Assembly, arenas Business Educational Factory and industrial, moderate hazard Factory and industrial, low hazard High Hazard, explosives High Hazard HPM Institutional, supervised environment Institutional, incapacitated Institutional Institutional, restrained Institutional, day care facilities Mercantile				

R-2	Residential, multiple family	Apartment houses
R-3	Residential, one- and two-family	Dwellings
R-4	Residential care, assisted living facilities	
S-1	Storage, moderate hazard	Service stations (canopies and service bays), warehouses
S-2	Storage, low hazard	Public garages, warehouse
U	Utility, miscellaneous	Residential garage, private garage

Construction Types

Type of User	Construction Type and Circumstances
Single- Family	Use R-3 Under Occupancy Group and VB under Construction Type for all aspects of all Single Family projects.
Small Businesses	Construction type for commercial projects/businesses varies according to type of material and size of project. Note that alterations or additions valued at \$50,000.00 or more and new construction projects valued at \$100,000.00 or more must involve a licensed design professional.
Design Professionals	Designer or design professional that prepared the plans for the building for which a building permit is sought may submit a building permit application. However, a permit can only be issued to a registered contractor.

The International Code Council using the Marshall Valuation Service, as published by the Marshall and Swift Publication Company, Los Angeles, California, has compiled this building valuation table. ICC has developed this data to aid jurisdictions in determining fees.

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A-1 Assembly, theaters, with stage 212.00 204.85 199.65 191.24 179.60 174.56 184.86 164.20 157.69 A-1 Assembly, theaters, without stage 194.08 186.93 181.72 173.31 161.62 156.64 166.93 146.29 139.78 A-2 Assembly, restaurants, bars, banquet halls 165.35 160.60 155.13 149.84 139.62 136.83 144.25 128.47 122.67 A-3 Assembly, restaurants, bars, banquet halls 165.35 160.60 155.13 149.84 139.62 136.83 144.25 126.47 122.67 A-3 Assembly, general, community halls, libraries, museums 163.95 156.80 150.60 143.19 130.66 126.63 136.81 115.27 109.76 A-4 Assembly, arenas 193.08 185.93 179.72 172.31 159.66 126.63 136.81 115.27 109.76 B-Business 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 E										
without stage 194-08 186-93 181-72 173-31 161-68 156-64 166-93 146-29 139-78 A-2 Assembly, nightclubs 166-35 161-60 157-13 150-84 141-62 137-83 145-25 128-47 122-67 A-2 Assembly, restaurants, bars, banquet halls 195-96 188-81 183-60 175-20 163-70 158-66 168-82 148-30 141-80 A-3 Assembly, general, community halls, libraries, museums 163-95 156-80 150-60 143-19 130-66 126-63 136-81 115-27 109-76 A-4 Assembly, arenas 193-08 185-93 179-72 172-31 159-68 155-64 165-93 144-29 138-78 A-4 Assembly, arenas 193-08 185-93 179-72 172-31 159-68 155-64 165-93 144-29 138-78 A-4 Assembly, arenas 193-08 185-93 179-72 172-31 159-68 155-64 165-93 144-29 138-78 A-4 Assembly, arenas 193-08 185-93 179-72 172-31 159-68 155-64 165-93	**	212.00	204.85	199.65	191.24	179.60	174.56	184.86	164.20	157.69
A 2 Assembly, restaurants, bars, banquet halls A 3 Assembly, churches 195.96 188.81 183.60 175.20 163.70 158.66 168.82 144.25 148.30 141.80 A 3 Assembly, general, community halls, libraries, museums A 4 Assembly, arenas 193.08 185.93 179.72 172.31 159.68 155.64 155.64 155.64 155.65 150.60 143.19 150.66 155.64 155.64 155.65 150.65 150.60 143.19 150.66 155.64 155.64 155.65 150.65 150.66 150.67 150.68 150.		194.08	186.93	181.72	173.31	161.68	156.64	166.93	146.29	139.78
bars, banquet halls 165.35 160.60 155.13 149.84 139.62 136.33 144.25 126.47 122.67 A 3 Assembly, churches 195.96 188.81 183.60 175.20 163.70 158.66 168.82 148.30 141.80 A 3 Assembly, general, community halls, libraries, museums 163.95 156.80 150.60 143.19 130.66 126.63 136.81 115.27 109.76 A 4 Assembly, arenas 193.08 185.93 179.72 172.31 159.68 155.64 165.93 144.29 138.78 B Business 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 E Educational 178.16 172.02 166.90 159.29 148.37 140.44 153.73 129.09 124.71 F 1 Factory and industrial, low hazard 190.75 95.02 90.26 86.94 77.68 74.37 82.16 64.01 59.19 H 1 High Hazard 94.40 89.68 8	A-2 Assembly, nightclubs	166.35	161.60	157.13	150.8 4	141.62	137.83	145.25	128.47	123.67
A-3 Assembly, general, community halls, libraries, museums A-4 Assembly, arenas B-Business 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 E-Educational 178.16 172.02 166.90 159.29 148.37 140.44 153.73 129.09 124.71 F-1 Factory and industrial, moderate hazard 190.75 96.02 90.26 86.94 77.68 74.37 83.16 64.01 60.19 F-2 Factory and industrial, low hazard 190.75 95.02 90.26 85.94 77.68 73.37 82.16 64.01 59.19 H-1 High Hazard, explosives 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 54.03 H-5 HPM 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65		165.35	160.60	155.13	149.84	139.62	136.83	144.25	126.47	122.67
community halls, libraries, museums 163.95 156.80 150.60 143.19 130.66 126.63 136.81 115.27 109.76 A.4 Assembly, arenas 193.08 185.93 179.72 172.31 159.68 155.64 165.93 144.29 138.78 B Business 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 E Educational 178.16 172.02 166.90 159.29 148.37 140.44 153.73 129.09 124.71 F 1 Factory and industrial, moderate hazard 100.75 96.02 90.26 86.94 77.68 74.37 83.16 64.01 60.19 F 2 Factory and industrial, low hazard 99.75 95.02 90.26 85.94 77.68 73.37 82.16 64.01 59.19 H 1 High Hazard, explosives 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 54.03 H 5 HPM 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65	A-3 Assembly, churches	195.96	188.81	183.60	175.20	163.70	158.66	168.82	148.30	141.80
B Business 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 E Educational 178.16 172.02 166.90 159.29 148.37 140.44 153.73 129.09 124.71 F 1 Factory and industrial, moderate hazard 100.75 96.02 90.26 86.94 77.68 74.37 83.16 64.01 60.19 F 2 Factory and industrial, low hazard 99.75 95.02 90.26 85.94 77.68 73.37 82.16 64.01 59.19 H 1 High Hazard, explosives 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 0.00 H 234 High Hazard 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 54.03 H 5 HPM 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 I 1 Institutional, supervised environment 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86	community halls, libraries,	163.95	156.80	150.60	143.19	130.66	126.63	136.81	115.27	109.76
E Educational 178.16 172.02 166.90 159.29 148.37 140.44 153.73 129.09 124.71 F-1 Factory and industrial, moderate hazard 100.75 96.02 90.26 86.94 77.68 74.37 83.16 64.01 60.19 F-2 Factory and industrial, low hazard 99.75 95.02 90.26 85.94 77.68 73.37 82.16 64.01 59.19 H 1 High Hazard, explosives 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 0.00 H234 High Hazard 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 54.03 H-5 HPM 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 I-1 Institutional, supervised environment 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86	A-4 Assembly, arenas	193.08	185.93	179.72	172.31	159.68	155.6 4	165.93	144.29	138.78
F-1 Factory and industrial, moderate hazard 100.75 96.02 90.26 86.94 77.68 74.37 83.16 64.01 60.19 F-2 Factory and industrial, low hazard 99.75 95.02 90.26 85.94 77.68 73.37 82.16 64.01 59.19 H-1 High Hazard, explosives 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 0.00 H-234 High Hazard 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 54.03 H-5 HPM 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 I-1 Institutional, supervised environment 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86	B Business	169.14	162.95	157.42	149.72	135.78	130.75	143.54	119.31	113.65
F-2 Factory and industrial, low hazard 99.75 95.02 90.26 85.94 77.68 73.37 82.16 64.01 59.19 H 1 High Hazard, explosives 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 0.00 H234 High Hazard 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 54.03 H-5 HPM 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 I-1 Institutional, supervised environment 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86	E Educational	178.16	172.02	166.90	159.29	148.37	140.44	153.73	129.09	124.71
Hazard 99.75 95.02 90.26 85.94 77.68 73.37 82.16 64.01 59.19 Hazard 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 0.00 Hazard 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 54.03 Hazard 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 Hazard 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86	•	100.75	96.02	90.26	86.94	77.68	74.37	83.16	64.01	60.19
H234 High Hazard 94.40 89.68 84.92 80.59 72.52 68.22 76.82 58.86 54.03 H-5 HPM 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 I-1 Institutional, supervised environment 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86		99.75	95.02	90.26	85.94	77.68	73.37	82.16	64.01	59.19
H-5 HPM 169.14 162.95 157.42 149.72 135.78 130.75 143.54 119.31 113.65 I-1 Institutional, supervised environment 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86	H-1 High Hazard, explosives	94.40	89.68	84.92	80.59	72.52	68.22	76.82	58.86	0.00
I-1 Institutional, supervised environment 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86	H234 High Hazard	94.40	89.68	84.92	80.59	72.52	68.22	76.82	58.86	54.03
environment 168.08 162.18 157.65 150.82 138.52 134.86 146.99 124.28 119.86	H-5 HPM	169.14	162.95	157.42	149.72	135.78	130.75	143.54	119.31	113.65
I-2 Institutional, hospitals 287.21 281.02 275.49 267.79 252.87 0.00 261.61 236.40 0.00	· ·	168.08	162.18	157.65	150.82	138.52	134.86	146.99	124.28	119.86
	I-2 Institutional, hospitals	287.21	281.02	275.49	267.79	252.87	0.00	261.61	236.40	0.00

I-2 Institutional, nursing homes	198.55	192.37	186.83	179.13	165.20	0.00	172.95	148.74	0.00
I-3 Institutional, restrained	192.65	186.47	180.93	173.23	160.79	154.76	167.05	144.32	136.66
I-4 Institutional, day care facilities	168.08	162.18	157.65	150.82	138.52	134.86	146.99	124.28	119.86
M Mercantile	123.91	119.17	113.69	108.40	98.85	96.06	102.82	85.70	81.90
R-1 Residential, hotels	169.51	163.62	159.09	152.26	140.12	136.46	148.59	125.88	121.46
R-2 Residential, multiple family	142.14	136.24	131.71	124.88	113.41	109.75	121.89	99.18	94.76
R-3 Residential, one- and two- family	133.78	130.13	126.82	123.67	118.74	115.78	119.75	110.94	103.92
R-4 Residential, care/assisted living facilities	168.08	162.18	157.65	150.82	138.52	134.86	146.99	124.28	119.86
S-1 Storage, moderate hazard	93.40	88.68	82.92	79.59	70.52	67.22	75.82	56.86	53.03
S-2 Storage, low hazard	92.40	87.68	82.92	78.59	70.52	66.22	74.82	56.86	52.03
U Utility, miscellaneous	71.08	67.13	62.83	59.33	53.24	49.79	56.48	41.64	39.44