

ORDINANCE NO. 6850

AN ORDINANCE AMENDING CHAPTER 30, "BUILDING INSPECTION," OF THE CODE OF ORDINANCES OF THE CITY OF GARLAND, TEXAS; PROVIDING A PENALTY UNDER THE PROVISIONS OF SEC. 10.05 OF THE CODE OF ORDINANCES OF THE CITY OF GARLAND, TEXAS; PROVIDING A SAVINGS CLAUSE AND A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GARLAND, TEXAS:

Section 1

Section 30.01 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.01 Adoption of the International Building Code

The International Building Code ("Building Code"), 2015 edition, is hereby adopted by reference. A copy shall be kept on file in the office of the City Secretary. Unless deleted, amended, expanded or otherwise changed herein, all provisions of the Building Code shall be fully applicable, binding, of full force and effect within the City.

Section 2

Section 30.02 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.02 Amendments, modifications and deletions

The following sections of the International Building Code, as adopted in section 30.01 above, are amended as described below:

Section 101.1 Title shall be amended to read as follows:

101.1 Title. These regulations shall be known as the Building Code of the City, hereinafter referred to as "the Building Code."

Section 101.4 Referenced codes, shall be amended to read as follows:

101.4 Referenced codes. The other codes listed in Sections 101.4.1 thru 101.4.8 and referenced elsewhere in the Building Code, when specifically adopted, shall be considered part of the requirements of the Building Code to the prescribed extent of each such

reference. Whenever amendments have been adopted to the referenced codes and standards, each reference to that code or standard shall be considered to reference the amendments as well. Any reference to the International Electrical Code or NFPA 70 shall mean the Electrical Code as adopted and amended by the Code of Ordinances.

Section 101.4.4 Property Maintenance shall be amended to read as follows:

101.4.4 Property maintenance. The provisions of the International Property Maintenance Code shall apply to existing non-residential structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and occupancy of existing non-residential premises and structures.

Section 101.4.7 Existing buildings shall be amended to read as follows:

101.4.7 Existing buildings. Repair, alternations, additions, relocation and changes in occupancy shall conform to the provisions of this code for a new building. As an alternate method of construction and in conformance with Sec. 104.11 an applicant may submit for approval a design in conformance with the International Existing Building Code. Such design may be approved by the building official provided the proposed design is satisfactory and complies with the intent of the provisions of this code.

Section 101.4.8 Electrical shall be added to read as follows:

101.4.8 Electrical. The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

Section 103.1 Creation of enforcement agency shall be amended to read as follows:

103.1 Creation of enforcement agency. The Building Inspection Department shall enforce the provisions of this code. The official in charge shall be the Building Official.

Section 105.2 Work exempt from permit shall be amended to read as follows:

First paragraph remains unchanged.

Building

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 20 square feet.
2. Oil derricks.
3. Retaining walls which are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II, or III-A liquids.
4. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
5. Temporary motion picture, television and theater stage sets and scenery.
6. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches deep, do not exceed 5,000 gallons, and are installed entirely above ground.
7. Swings and other playground equipment accessory to detached one- and two-family dwellings.
8. Movable cases, counters and partitions not over 5 feet 9 inches in height.
9. Un-covered decks not over 30 inches in height above grade.
10. Minor foundation repair and roof repair of less than \$2,000.00.

Section 105.5 Expiration shall be amended to read as follows:

105.5 Expiration. An individual permit issued by the Building Official shall expire by limitation and become null and void on the expiration of 2 years after its issuance if no progress has been made toward the completion of the project, or upon expiration of the project. (A project shall expire immediately after the fifth anniversary of the date the first permit application was filed for the project if no progress had been made towards completion of the project.) Once a permit for particular work has expired, a new permit must be applied for and obtained before the work can be commenced. The permit fee shall be the full amount required for a new permit for such work. The Building Official or his designee shall determine the extent to which the work must comply with any new regulations that were not in effect at the time the original permit was issued.

Section 107.1 General shall be amended by adding a new paragraph to the end of that section to read as follows:

A state-licensed architect shall prepare documents on all Group E, division 3 daycare facilities over 5,000 square feet.

Section 107.2 Construction documents shall be amended by adding new subsections 107.2.7, 107.2.8 and 107.2.9 to read as follows:

107.2.7 Asbestos survey. An applicant for all public or commercial building renovation or demolition permits must provide evidence of an asbestos survey prior to the issuance of the permit.

107.2.8 TDLR-AB review. Plans and specifications shall be submitted to the Texas Department of Licensing and Regulation ("TDLR") for review prior to submittal for review or permitting. Verification of project registration with TDLR shall be required prior to permit

107.2.9 Storm-water pollution prevention plan A storm-water pollution prevention plan ("SWPPP") may be required in accordance with State, Federal and local statute.

Section 109 Fees shall be amended by adding subsections 109.7, 109.8, 109.8.1, 109.8.2 and 109.9 to read as follows:

109.7 Re-inspection Fee. A fee as established by city council resolution may be charged when:

1. The inspection called for is not ready when the inspector arrives;
2. No building address or permit card is clearly posted;
3. City approved plans are not on the job site available to the inspector;
4. The building is locked or work otherwise not available for inspection when called;
5. The job site is red-tagged twice for the same item;
6. The original red tag has been removed from the job site.
7. Failure to maintain erosion control, trash control or tree protection.
8. Work is concealed without required inspection.
9. The applicant fails to provide means of access to the area subject to inspection.

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

109.8 Work without a permit.

109.8.1 Preliminary inspection. Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, a preliminary inspection may be made before a permit may be issued for such work.

109.8.2 Fees. Permit fees may be doubled when work is commenced prior to obtaining a permit.

Section 110.3.8 Other inspections shall be amended by adding a sentence to the end of that section to read as follows:

A storm-water pollution prevention plan ("SWPPP") and inspection may be required.

Section 111 Certificate of Occupancy is amended in its entirety to read as follows:

SECTION 111 CERTIFICATE OF OCCUPANCY

111.1 Use or occupancy. A building or structure shall not be used or operated, and a change in the existing use or occupancy classification of a building or structure or a portion thereof shall not be made, until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Dwellings are exempted from the foregoing requirements.

The Building Inspection Department may issue a single certificate of occupancy for multi-tenants in one lease space or building when the occupants share common areas or staff and related activities which are under the control of a single person or business.

A certificate of occupancy shall be obtained for a building, structure or land when there is a change in classification of use as provided by the Garland Development Code (GDC) when there is a change as provided by the Building Code, or when there is a change in tenants of the building, structure or land.

111.2 Certificate issued. After all necessary inspections have

been conducted by the City and when it is determined that there is no probable cause to believe that the buildings, structures or land do not comply with an applicable provision of the Code of Ordinances, the Building Official shall issue a certificate of occupancy containing the following:

- (1) The address of the location of the building, structure or land.
- (2) The name of the tenant occupying or using the building, structure, or land.
- (3) A statement as to the approved use of the building, structure or land.
- (4) The allowable occupant load for assembly uses.
- (5) Any other information deemed necessary by the Building Inspection Department.

Approved use is based upon an applicant's representations as to the use of the building, structure, or land. The use approved by the Building Official does not authorize any unlawful use of the building, land, or structure even if the City issues the certificate of occupancy.

111.3 Temporary occupancy. The Building Official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The Building Official shall set a time period during which the temporary certificate of occupancy is valid.

111.4 Revocation. The Building Official may suspend or revoke a certificate of occupancy when it is determined it was issued in error or on the basis of incorrect information; in the event of an unapproved addition or change in use or occupancy of the building, structure, land or any part thereof; or when it is determined that the building, structure, land or any portion thereof is in violation of any ordinance or regulation, or any provision of the applicable zoning, building or fire codes.

111.5 Posting. The certificate of occupancy shall be posted in a conspicuous place on the premises and shall not be removed except by the Building Official.

111.6 Fee. At the time that an application is made for a certificate of occupancy, a fee in the amount prescribed in the

fee schedule (section 30.301 of chapter 30 of the Code of Ordinances) shall be paid.

Section 113 Board of Appeals shall be amended in its entirety to read as follows:

SECTION 113 BUILDING AND FIRE CODES BOARD

113.1 Appeals. Any person aggrieved by any decision or ruling made by the Building Official or the Fire Marshal under the provisions of the Building Code may appeal to the Building and Fire Codes Board (the "board").

113.2 Time for filing appeal/grounds. The appeal must be in writing and received in the office of the Building Official within 30 days of the decision or ruling to be appealed, and must set forth the specific grounds for the appeal. The Building Official shall forward the appeal to the board, along with all information constituting the record upon which the decision was made.

113.3 Notice of hearing. The board shall meet upon notice from the chairman and within 30 days of the date the appeal was filed.

113.4 Decision of board. The board shall render a written decision affirming, modifying, or reversing the decision, in whole or in part, within 30 days of the hearing, and may issue appropriate orders consistent with its decision. All decisions of the board shall be by a majority vote. The minutes of the meeting shall reflect how each of the board members participating in the decision voted. The decision of the board shall be filed promptly in the office of the Building Official and with the City Secretary. The Building Official shall be responsible for the enforcement of the board's decisions.

113.5 Board composition.

113.5.1 Composition. The board shall consist of 9 voting members who shall be appointed by the City Council. The term of office for members of the board shall be 2 years. The Building Official or his designee shall be an ex officio member of the board, without voting privileges.

113.5.2 Compensation. The appointive members of the board shall serve without compensation.

113.5.3 Secretary. The Building Official or his designee shall act as secretary to the board, and shall be responsible for keeping written minutes of the meeting.

113.5.4 Election of officers. An annual election of the chairman and vice chairman of the board shall be held during the first meeting after September 1 of each year.

113.6 Powers and duties.

113.6.1 Generally. The board shall meet upon call of the chairman to consider proposed revisions to this code, as needed for the consideration of appeals of decisions of the Building Official, to consider the time period of suspension of a person's ability to secure permits, or to perform other duties assigned to the board by the Code of Ordinances.

113.6.2 Amendments. The board shall recommend to the City Council amendments to the Building Code, as well as to the Fire Code, the Energy Conservation Code and Chapters 1-11 of the Residential Code. Any interested person may submit proposed amendments to the board. The board shall consider the recommendation of the Building Official concerning any proposed amendment. In order for the board to recommend an amendment to the City Council, a concurring vote of two-thirds (2/3) of the members of the board present at the meeting is required.

113.6.3 Appeals. The board shall have the authority to hear appeals of decisions or rulings of the Building Official made under the provisions of the Building Code, Energy Conservation Code and Chapters 1-11 of the Residential Code. The board shall have the authority to hear appeals of decisions or rulings of the Fire Marshal made under the provisions of the Fire Code. In that connection, the board shall have the limited power to determine whether the true intent of these codes and the rules adopted thereunder have been correctly interpreted, whether the provisions of these codes apply fully, or whether an equally good or better form or construction or material was proposed and may be used. The board shall have no power to limit, modify, change or waive any requirement of these codes.

113.6.4 Suspension of permit privileges. A person's ability to secure permits may be suspended by the Building Official for a period specified by the Building and Fire Codes Board, for any of the following causes:

- (a) The person fails to finalize permits by obtaining the required approved inspections.
- (b) The person allows use or occupancy of the structure or facility without first obtaining the required authorization.
- (c) The person has been found by the board to have been grossly negligent in the performance of the work.
- (d) Expiration, suspension or revocation of required license, bond or insurance.

Section 117 Working Hours, shall be added to read as follows:

SECTION 117 WORKING HOURS

117.1 Hours established. Any outside work being done adjacent to an occupied residential subdivision or adjacent to an occupied residential use, including multifamily uses, shall be allowed only between 7:00 a.m. and 8:00 p.m. each day of the week. Any outside work being done adjacent to an occupied residential subdivision or adjacent to an occupied residential use, including multifamily uses, shall be prohibited between 8:00 p.m. and 7:00 a.m. each day of the week.

117.2 Other regulations unaffected. This section does not authorize violation of any other law or regulation.

117.3 Exceptions. These regulations do not affect emergency work being done to secure a structure or to reestablish utility service to a structure.

117.4 Variance. The Director of Health, in accordance with section 22.76 of the Code of Ordinances, may issue a permit of variance to these regulations.

Section 202 Definitions shall be amended by changing the following definitions of to read as follows:

ATRIUM. An opening connecting three or more stories other than enclosed stairways, elevators, hoistways, escalators, plumbing, electrical, air-conditioning or other equipment, which is closed at the top and not defined as a mall. Stories, as used in this definition, do not include balconies within assembly groups or mezzanines that comply with Section 505 of the Building Code.

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation by the services provided. This group may include but not be limited to the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

ASSISTED LIVING FACILITIES. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

HIGH-RISE BUILDING. A building having floors used for human occupancy located more than 55 feet above the lowest level of fire department vehicle access.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

SPECIAL INSPECTOR. A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the registered design professional in responsible charge and the Building Official as having the competence necessary to inspect a particular type of construction requiring special inspection.

Section 303.1.3 Associate the Group E occupancies shall be amended to read as follows:

303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy. Except when applying the assembly requirements of Chapter 10 and 11.

Section 304.1 Business Group shall be amended by adding the following two uses to the list of occupancies types:

Fire stations;
Police stations with detention facilities for 5 or less.

Section 307.1.1 Uses other than Group H shall be amended to add the following sentence to Exception 4:

4. Cleaning establishments... *{Text unchanged}* ...with Section 707 or 1-hour horizontal assemblies constructed in accordance with Section 711 or both. See also IFC Chapter 21, Dry Cleaning Plant provisions.

Section 403.1 Applicability shall be amended to read as follows:

403.1 Applicability. The provisions of this section shall apply to buildings having any occupied floors located more than 55 feet above the lowest level of fire department vehicle access. High-rise buildings shall comply with Sections 403.2 through 403.6.

Section 403.1, Exception 3 shall be amended to read as follows:

3. The open air portion of a building *[remainder unchanged]*

Section 403.3.2 Water supply to required fire pumps shall be amended to read as follows:

403.3.2 Water supply to required fire pumps. In buildings that are more than 120 feet (36.5 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: *{No change to exception.}*

Section 403.5.4 Smokeproof enclosures shall be amended to read as follows:

403.5.4 Smokeproof enclosures. Every required interior exit stairway serving floors more than 55 feet above the lowest level of fire department vehicle access shall be a smokeproof enclosure in accordance with Sections 909.20 and 1023.10.

Section 404.5 Smoke control shall be amended by deleting the

exception in its entirety.

Section 406.3.5.1 Carport separation shall be amended to read as follows:

406.3.5.1 Carport separation. A separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet.

Section 406.8 Repair Garages shall be amended by adding a second paragraph at the end of the section to read as follows:

This occupancy shall include garages involved in the servicing of motor vehicles such as oil and lubricant changes, inspections, windshield repair or replacement, shock absorbers, minor part replacement, and other such non-major repair. When the garage is only involved in such minor repair, it need not comply with Section 406.8.1 of the Building Code

Section 506.3.1 Minimum Percentage of perimeter shall be amended by adding a sentence to the end of the section to read as follows:

In order to be considered as accessible, if not in direct contact with a street or fire lane, a minimum 10-foot wide pathway from the street or approved fire lane must be provided. (See the International Fire Code, as adopted and amended by the Code of Ordinances, for hose lay measurement pathway requirements.)

Table 508.4 Required separation of occupancies (hours) shall be amended by adding a new exception "f" to read as follows:

f. Unless waived by the Building Official, a 1-hour tenant separation wall is required between tenants in all occupancies. Protection of openings may be waived if the building is classified as "non-separated uses" in accordance with Section 302.3 of the Building Code.

Table 705.8 Maximum area of exterior wall openings based on fire separation distance and degree of opening protection shall be amended by adding a sentence to the end of footnote "f" to read as follows:

Open metal carport structures may be constructed on the property

line without fire-resistive or opening protection when the location of the carport is allowed or approved as provided by the Code of Ordinances.

Section 806.3 Combustible decorative materials shall be amended to read as follows:

806.3 Combustible decorative materials. In occupancies in Groups A, E, I, and R-1, and dormitories in Group R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 806.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

Section 901.5.1 Acceptance Testing is amended to add Section 901.5.1.1 to read as follows:

901.5.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be backflushed when foreign material is present, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the *fire code official*) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the *fire code official*.

5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.
6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (*fire code official*) shall be followed.
7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
9. Contact the *fire code official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the *fire code official*.

Section 901.7 Fire areas, shall be deleted in its entirety.

Section 901.8 Pump and riser room size shall be amended to add the following:

901.8.1 Pump and riser room. When located on the ground level, the fire pump or sprinkler riser room shall be located at an exterior wall and provided with an exterior fire department access door that is not less than three (3) feet in width and six feet, eight inches (6'8") in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by the Fire Code Official. The exterior door shall be marked "FIRE RISER ROOM" or "FIRE PUMP ROOM."

Exception: When it is necessary to locate a fire sprinkler riser room on other levels, the corridor leading to the fire

sprinkler riser room access from the exterior of the building shall be provided with a minimum one hour fire resistance, or as approved by the Building Official. Access keys shall be provided in the key box as required by the Fire Code Official.

Section 903.1.1 Alternative protection shall be amended to read as follows:

903.1.1 Alternative Protection. Alternative automatic sprinkler systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard, or as approved by the Fire Code Official.

Section 903.1 General shall be amended by adding a new Section 903.1.2 to read as follows:

903.1.2 Residential systems. Unless specifically allowed by this code or the International Fire Code, residential sprinkler systems installed in accordance with NFPA 13D or NFPA 13 R shall not be recognized for the purpose of exceptions or reduction (commonly referred to as "trade-offs") permitted by other provisions of this code.

Section 903.2 Where required shall be amended to read as follows:

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Section 903.2.1 thru 903.2.12 of the Building Code. Automatic sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits, where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating "ELEVATOR MACHINERY - NO STORAGE ALLOWED."

Section 903.2 Where required shall be amended to delete the exception.

Section 903.2.1.1, Group A-1, shall be amended to change the condition to read as follows:

1. The fire area exceeds 5,000 square feet.

Section 903.2.1.3, Group A-3, shall be amended to change the condition to read as follows:

1. The fire area exceeds 5,000 square feet.

Section 903.2.1.4, Group A-4, shall be amended to change the condition to read as follows:

1. The fire area exceeds 5,000 square feet.

Section 903.2.3, Group E, shall be amended to change the conditions to read as follows:

1. The fire area exceeds 5,000 square feet;
2. Where a Group E fire area is located below the lowest level of exit discharge serving that portion of the building; or
3. Where a Group E fire area is located more than two stories above grade plane.

Section 903.2.4, Group F-1, shall be amended to change the conditions to read as follows:

1. The fire area exceeds 5,000 square feet;
2. The fire area is located more than two stories above grade plane; or
3. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 sq meters).

Section 903.2.7, Group M, shall be amended to change the condition to read as follows:

1. The fire area exceeds 5,000 square feet.

Section 903.2.7 Group M shall be further amended by deleting exceptions 3 and 4 in their entirety.

Section 903.2.8.1, Group R, shall be amended by adding an exception to read as follows:

Exception: Group R-3 single-family residences that are less

than 5,000 square feet shall not be required to be sprinkled.

Section 903.2.8 Group R shall be amended by adding new Sections 903.2.8.5 and 903.2.8.6 to read as follows:

903.2.8.5 Mixed use occupancies. Where buildings are of mixed use, residential portions of the building shall be protected with residential or quick response sprinklers in accordance with NFPA 13. Other portions of such buildings including attic spaces shall be protected in accordance with NFPA 13. NFPA 13R systems shall not be allowed in buildings where portions of mixed use contain residential occupancies. Fire walls and fire separations shall not define separate buildings.

903.2.8.6 Existing R-1 and R-2 occupancies. In R-1 and R-2 occupancies where a fire has occurred and displaces occupants in 50-percent or more of the buildings, the affected building shall be fire sprinkled prior to re-occupancy of the building.

Section 903.2.9, Group S-1 shall be amended to change the conditions to read as follows:

1. The fire area exceeds 5,000 square feet;
2. The fire area is located more than two stories above grade plane;
3. The S-1 occupancy is used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 sq. meters).
4. The fire area used for the storage of commercial trucks or buses exceeds 5,000 square feet.

Section 903.2.9.1, Repair Garages, shall be amended to change the conditions to read as follows:

1. The fire area of buildings having two or more stories above grade that exceeds 3,500 square feet;
2. The fire area in a one story building exceeding 5,000 square feet; or
3. The fire area used for the repair of commercial trucks or buses exceeding 2,500 square feet.
4. Buildings with repair garages servicing vehicles parked in basements.

Section 903.2.9.2 Bulk storage of tires shall be amended to read as follows:

903.2.9.2 Bulk tire/storage of tires. Buildings or structures that contain an area for the storage of tires that exceeds 1,000 square feet shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the Building Code.

Section 903.2.9.3 Self-service storage facility, a new section, is added to read as follows:

903.2.9.3 Self-service storage facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Exception: One-story self-service storage facilities that have no interior corridors, with a one-hour fire barrier separation wall installed between every storage compartment.

Section 903.2.10, Group S-2 enclosed parking garages, shall be amended to change the conditions to read as follows:

If one of the following conditions exist, the building shall be sprinkled:

1. The fire area of the enclosed parking garage exceeds 5,000 square feet.
2. The enclosed parking garage is located beneath other occupancy groups.

Exception: The enclosed parking garage is located beneath a Group R-3 occupancy and the R-3 fire area is less than 5,000 square feet.

Section 903.2.11.3 Buildings 55 feet or more in height shall be amended to read as follows:

903.2.11.3 Buildings 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1510 of the International Building Code that is located 35 feet or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exception:

Open parking structures in compliance with Section 406.5 of the Building Code, having no other occupancies above the subject garage.

Section 903.2.11 Specific buildings areas and hazards shall be amended by adding new Sections 903.2.11.7 thru 903.2.11.9 to read as follows:

903.2.11.7 High-piled combustible storage. For any building with a clear height exceeding 12 feet, see Chapter 32 of the Fire Code, as adopted and amended by the Code of Ordinances, to determine if those provisions apply.

903.2.11.8 Spray booths and rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.2.11.9 Buildings over 5,000 square feet. An automatic sprinkler system shall be installed throughout all buildings 5,000 square feet and greater and in all buildings that are enlarged to be 5,000 square feet and greater. For the purpose of this provision, fire walls shall not define separate buildings.

Exceptions:

1. Open parking garages in compliance with Section 406.3 of the Building Code.
2. When of non-combustible construction, the area of awning extension or freestanding canopies, both sides, and not used for displaying or storage shall not be considered for requiring sprinkler protection for areas greater than 5,000 square feet but less than otherwise required by the Building Code.
3. Except for H and I occupancies, an addition with less than 1,000 square feet may be separated from the existing building without causing either the addition or the existing building to be sprinkled. The separation shall be a 2-hour fire barrier for types II and V construction and a 3-hour fire barrier for all other types of construction.

Section 903.3.1.1.1 Exempt locations is amended to read as follows:

903.3.1.1.1 Exempt locations. When approved by the Fire Marshal, automatic sprinklers shall not be required in the following rooms

or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 of the Building Code that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the Fire Marshal.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire resistance rating of not less than 2 hours.
4. Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

Section 903.3.1.2 shall be amended by adding a sentence to the end of the paragraph to read as follows:

Sprinkler systems installed in accordance with 13R shall include sprinkler protection in combustible attics of buildings 2 or more stories in height.

Section 903.3.1.2 NFPA 13R sprinkler system shall be amended by adding a new Sections 903.3.1.2.3 and 903.3.1.2.4 to read as follows:

Section 903.3.1.2.3 Attics and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, in accordance with NFPA 13 and or NFPA 13R requirements, and attached garages.

903.3.1.2.4 Small room rule. When fire sprinkler systems are required, the omission of sprinkler protection of bathrooms per Section 6.8.2 of NFPA 13R-2002 shall not be allowed.

Section 903.3.1.4 Freeze protection shall be added to read as follows:

903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this

section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

Section 903.3.5 Water supplies, shall be amended by adding a second paragraph to the end of the section to read as follows:

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

Section 903.3.7 Fire department connections, shall be amended by adding the following sentence to the end of the section:

The location of the fire department hose connection shall be approved by the fire department and all new and existing fire department connections shall be marked on the vertical piping with red reflective paint or tape and on the pavement with blue reflective markers.

Section 903.4 Sprinkler system supervision and alarms, shall be amended by adding a second paragraph after the exceptions to read as follows:

Sprinkler and standpipe system water flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe system, except for fire department hose connection valves, shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Section 903.4.2 Alarms shall be amended to add second paragraph to read as follows:

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 905.2 Installation standard, shall be amended by adding a sentence to the end of the section to read as follows:

Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

Section 905.3.2 Group A, shall be amended by deleting exceptions 1 and 2 in their entirety.

Section 905.3.4 Stages shall be deleted in its entirety.

Section 905.3 Required installations, shall be amended to add Section 905.3.9 and exception to read as follows:

905.3.9 Buildings exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.
2. R-2 occupancies of four stories or less in height having no interior corridors.

Section 905.4 Location of Class I standpipe hose connections shall be amended to change Item 1, 3, and 5, and add Item 7 to read as

follows:

1. In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
2. *{No change.}*
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.
Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a... *{No change to rest.}*
4. *{No change.}*
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way hose connection located to serve the roof or at the highest landing of an exit stairway with stair access to the roof provided in accordance with Section 1011.12.
6. *{No change.}*
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

Section 905.5 Location of Class II standpipe hose connections, shall be deleted in its entirety.

Section 905.6 Location of Class III standpipe hose connections, shall be deleted in its entirety.

Section 905.9 Valve supervision shall be amended by adding a second paragraph after the exceptions to read as follows:

Sprinkler and standpipe system water flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems, except for fire department hose connection valves, shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Section 907.1 General shall be amended by adding a new Section 907.1.4 to read as follows:

907.1.4 Design standards. All new alarm systems shall be addressable fire detection systems. Alarm systems serving more than 20 smoke detectors shall be analog intelligent addressable fire detection systems.

Exception: Existing systems need not comply unless the total building or remodel or expansion initiated after the effective date of the Building Code, as adopted, exceeds 30-percent of the building.

Section 907.2.1 Group A shall be changed to read as follows:

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the International Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: *{No change.}*

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

Section 907.2.3 Group E shall be amended to read as follows:

907.2.3 Group E. A manual and automatic fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100 feet open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm

systems.

Exceptions: {*unchanged.*}

Section 907.2.3 Group E shall be further amended by adding a new "1.1" to exception 1 to read as follows:

- 1.1 Residential in-home day-care operations with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2-1/2 or less years of age, see Section 907.2.6 of the Building Code.)

Section 907.2.6 Group I shall be amended to read as follows:

907.2.6 Group I. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I occupancies. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be provided in accordance with Sections 907.2.6.1, 907.2.6.2, 907.2.6.3.3 and 907.2.6.4.

Exceptions: {*unchanged.*}

Section 907.2.6 Group I shall be further amended by adding 907.2.6.4 as follows:

907.2.6.4 Group I-4 Occupancies. An approved smoke detection system shall be installed in Group I-4 occupancies. Where automatic fire sprinklers are not provided, a full-coverage smoke detection system shall be provided in all Group I-4 occupancies.

Section 907.2.12.4 Emergency voice/alarm communication system, shall be amended to read as follows:

907.2.12.4. Emergency voice/alarm communication system. The operation of any automatic fire detector, sprinkler water flow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions on a general or selective basis to the following terminal areas on a minimum of the alarming floor above, and the floor below in accordance with the building's fire safety and evacuation plans required by Section 404 of the Fire Code as adopted and amended by the Code of Ordinances.

1. Elevator lobbies.
2. Corridors.
3. Rooms and tenant spaces exceeding 1,000 square feet in area.
4. Dwelling units or sleeping units in Group R-2 occupancies.
5. Sleeping units in Group R-1 occupancies.
6. Areas of refuge as defined in Section 1002 of the Building Code.

Section 907.2.13 High-rise buildings, shall be amended to read as follows:

907.2.13 High-rise buildings. In buildings that have any floor located more than 55 feet above the lowest level of fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water flow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic fire detection devices or suppression systems.

Section 907.2.13, High-rise buildings. Exception 3 shall be changed to read as follows:

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.

Section 907.4 Initiation devices, shall be amended by adding a second sentence to the end of the section to read as follows:

Manual alarm actuating devices shall be an approved double-action type.

Section 907.4.2 Manual fire alarm boxes, shall be amended to add Section 907.4.2.7 to read as follows:

907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

Section 907.6. 1 Wiring shall be amended to read as follows:

907.6.1 Wiring. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All initiating circuit conductors shall be Class "A" wired with a minimum of six feet separation between supply and return circuit conductors. IDC - Class "A" Style D; SLC - Class "A" Style 6; NAC - Class "B" Style Y. The IDC from an addressable device used to monitor the status of a suppression system may be wired Class B, Style B provided the distance from the addressable device is within 10-feet of the suppression system device.

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

Section 907.6.3 Initiation device identification, shall be amended to delete all four Exceptions.

Section 907.6.6 Monitoring, shall be amended to add sentence at end of paragraph to read as follows:

See 907.6.3 for the required information transmitted to the supervising station.

Section 909.22 Stairway or ramp pressurization alternative, is added to read as follows:

909.22 Stairway or ramp pressurization alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft

relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the Fire Department as per Section 105.7.

909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

909.22.1.1 Ventilation systems. Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour

rated cable or cable system.

2. Where encased with not less than 2 inches (51 mm) of concrete.

3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

909.22.1.2 Standby power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

909.22.1.3 Acceptance and testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

Section 910.2 Where required, shall be amended to change Exception 2 and 3 to read as follows:

2. Only manual smoke and heat removal shall ~~not~~ be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.

3. Only manual smoke and heat removal shall be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m^*S)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

Section 910.3 Smoke and heat vents, shall be amended to add section 910.3.4 to read as follows:

910.3.4 Vent operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically.

The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only system per 910.2

910.3.4.2 Nonsprinklered buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

Section 910.4.3.1 Makeup air shall be changed to read as follows:

910.4.3.1 Makeup air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust.

Section 910.4.4 Activation shall be changed to read as follows:

910.4.4 Activation. The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

Section 1004.1.2 Areas without fixed seating shall be amended by deleting the exception in its entirety.

Section 1006.2.2.6 Electrical rooms, shall be added follows:

1006.2.2.6 Electrical rooms. For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.

Section 1009.1 Accessible means of egress required, shall be amended by adding a new exception to read as follows:

4. Buildings regulated under state law and built in accordance with state registered plans, including any variances or waivers granted by the state, shall be deemed to be in compliance with the requirements of Section 1007 of the Building Code.

Section 1010.1.9.4 Bolt Locks is amended by amending exceptions 3 and 4 as follows:

Exceptions:

3. Where a pair of doors serves an *occupant load* of less than 50 persons in a Group B, F, M or S occupancy. *{Remainder unchanged}*
4. Where a pair of doors serves a Group A, B, F, M or S occupancy *{Remainder unchanged}*

Section 1015.8 Window Openings shall be amended to revise text as follows:

First paragraph unchanged

1. Operable windows where the top of the sill of the opening is located more than 55 feet (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

Balance unchanged

Section 1020.1 Construction shall be amended by adding new exceptions 6 and 7 to read as follows:

6. Corridor walls and ceilings need not be fire-resistive construction within a single-tenant space in other than A, E or H occupancies when the tenant space is equipped with an automatic smoke detector system installed within the corridor in accordance with the smoke detector's listing. The actuation of any detector shall activate alarms audible in all areas served by the corridor. The smoke detection system shall be connected to the building's fire alarm system where such a system is provided.
7. In Group B occupancies, corridor walls and ceilings need not be of fire resistive construction within a single tenant space when the space is equipped with an approved automatic smoke detection system within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas served by the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

Section 1025.1 General, shall be amended to read as follows:

1025.1 General. Approved luminous egress path markings delineating the exit path shall be provided in high-rise buildings of Groups A, B, E, I, M and R-1 occupancies in accordance with

Sections 1025.1 thru 1025.5 of the Building Code.

Exceptions:

1. Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1027.1, exception 1.
2. Luminous egress path markings shall not be required in areas of open parking garages that serve as part of the exit path in accordance with Section 1027.1, exception.

Section 1029.1.1.1 Spaces under grandstands and bleachers shall be deleted in its entirety.

Section 1101.1 Scope shall be amended to add exception to read as follows:

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

Section 1101.2 Design shall be amended to add an exception to read as follows:

Exception: Buildings regulated under state law and built in accordance with state registered plans, including any variances or waivers granted by the state, shall be deemed to be in compliance with the requirements of this chapter of the Building Code.

Section 1203.1 General shall be amended to read as follows:

1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the International Mechanical Code.

Where air infiltration rate in a dwelling unit is 5 air changes or less per hour when tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with Section 402.4.1.2 of the International Energy Conservation Code, the dwelling unit shall be ventilated by mechanical means in accordance with Section 403 of the International Mechanical Code.

1405.3 Vapor retarders, is amended to add the following sentences to the section:

In all framed walls, floors and roofs/ceilings comprising elements of the building thermal envelope, a vapor retarder, when installed, shall be installed in a manner so as to not trap moisture. Vapor retarders shall be tested in accordance with ASTM E 96.

Table 1505.1 Minimum Roof Covering Classification for Types of Construction shall be amended by replacing footnote "b" adding "d" as follows:

b. Nonclassified roof coverings shall be permitted on buildings of U occupancies having not more than 120 square feet of projected roof area. When exceeding 120 square feet of projected roof area, buildings of U occupancies may use nonrated, noncombustible roof coverings.

d. All individual replacement shingles or shakes shall comply with the rating required by this table.

Section 1505.7 Special purpose roofs, shall be deleted in its entirety.

Section 1511.1 General shall be amended to read as follows:

1511.1 General. Materials and methods of applications used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15. All individual replacement shingles or shakes shall be in compliance with the rating required by Table 1505.1.

{text of exception unchanged}

Section 1612 Flood Load shall be deleted in its entirety.

Section 1704.2, Special inspections and tests shall be amended to read as follows:

1704.2 Special inspections and tests. Where application is made to the Building Official for construction as specified in Section 105, the owner or the owner's authorized agent, or the registered design professional in responsible charge, other than the contractor, shall employ one or more approved agencies to provide special inspections and tests during construction on the types of work listed under Section 1705 and identify the approved agencies to the Building Official. The special inspector shall not be employed by the contractor. These special inspections and tests are in addition to the inspections identified by the Building Official that are identified in Section 110.

Section 1704.2.1 Special inspector qualifications shall be amended to read as follows:

1704.2.1 Special inspector qualifications. Prior to the start of construction and or upon request, the approved agencies shall provide written documentation to the registered design professional in responsible charge and the building official demonstrating the competence and relevant experience or training of the special inspectors who will perform the special inspections and tests during construction. *[Remainder unchanged]*

Section 1704.2.4 Report requirement shall be amended to read as follows:

1704.2.4 Report requirement. Approved agencies shall keep records of special inspections and tests. The approved agency shall submit reports of special inspections and tests to the Building Official upon request, and to the registered design professional in responsible charge. Individual inspection reports shall indicate that work inspected or tested was or was not completed in conformance to approved construction documents. *[Remainder unchanged]*

Section 1704.2.5.2 Fabricator approval shall be amended to read as follows:

1704.2.5.1 Fabricator approval. Special inspections during fabrications required by Section 1704 are not required where the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved agency, or a fabricator that is enrolled in a nationally accepted inspections program. At completion of fabrication, the acceptable or approved fabricator shall submit a certificate of compliance to the owner or the owner's authorized agent or the registered design professional in responsible charge stating that the work was performed in accordance with the approved construction documents. The certificate of compliance shall also be made available to the Building Official upon request.

Section 1801.2 Design Basis shall be amended by adding new Sections 108.2.2 and 1801.2.3 to read as follows:

1801.2.2 Foundation repairs. All foundation repairs that exceed \$2,000.00 shall be designed and monitored by an engineer licensed

in the state.

1801.2.3 Foundations over 1,000 square feet. All commercial foundations supporting an area of 1,000 square feet or more shall be designed by an engineer licensed in the state.

Section 1803.1 General is amended by adding the following sentences to the end of the section to read as follows:

The requirements for protection of adjacent property and the depth to which the protection is required shall be defined by prevailing law. Lateral support of adjoining property is of a civil nature between adjoining property owners.

Section 1804.4 Site Grading is amended to add the following:

Grading and drainage shall be designed and maintained in conformance with the City of Garland Technical Standards Manual.

Section 2308.2 Limitations shall be amended by adding a new Section 2308.2.7 to read as follows:

2308.2.7 Application to engineered design. When accepted by the Building Official, any portion of this section is permitted to apply to buildings that are otherwise outside the limitations of this section provided that:

1. The resulting design will comply with the requirements specified in Chapter 16 of the Building Code;
2. The load limitations of various elements of this section are not exceeded; and
3. The portions of this section which will apply are identified by an engineer in the construction documents.

Section 2902.1 Minimum number of fixtures shall be amended to read as follows:

2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number as shown in Table 2902.1 based on the actual use of the building or space. Uses not shown in Table 2902.1 shall be considered individually by the building official. The number of occupants shall be determined by this code. In other than E Occupancies, the minimum number of fixtures in Table 2902.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduced number and approved by the Building

Official.

Plumbing fixtures shall be provided for the type of occupancy and in the minimum number as follows:

1. Assembly occupancies: at least one drinking fountain shall be provided at each floor level in an approved location.
Exception: a drinking fountain need not be provided in a drinking or dining establishment.
2. Groups A, B, F, H, I, M and S occupancies: buildings or portions thereof where persons are employed shall be provided with at least one water closet for each sex except as provided for in Section 2902.2 of the Building Code.
3. Group E occupancies: shall be provided with fixtures as shown in Table 2902.1 of the Building Code.
4. Group R occupancies: shall be provided with fixtures as shown in Table 2902.1 of the Building Code.

Table 2902.1 Minimum Number of Required Plumbing Fixtures shall be amended to add footnote "f" to read as follows:

f. Drinking fountains are not required in M Occupancies with an occupant load of 100 or less, B Occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

Section 2902.1.3 Additional fixtures for food preparation facilities shall be added to read as follows:

2902.1.3 Additional fixtures for food preparation facilities. In addition to the fixtures required in this Chapter, all food service facilities shall be provided with additional fixtures set out in this section.

2902.1.3.1 Hand washing lavatory. At least one hand washing lavatory shall be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

2902.1.3.2 Service sink. In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tool and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the Jurisdiction's health department.

Section 3002.1 Hoistway Enclosure Protection shall be amended to add exceptions to read as follows:

Exceptions:

1. Elevators wholly located within atriums complying with Section 404 shall not require hoistway enclosure protection.
2. Elevators in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall not require hoistway enclosure protection.

Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces, shall be amended by altering the first sentence in this section to read as follows:

Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces Elevator machine rooms, control rooms, control spaces and machinery spaces shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.

[Remainder unchanged]

Section 3005.7 Fire protection in machine rooms, control rooms, machinery spaces and control spaces shall be added to read as follows:

3005.7 Fire Protection in Machine rooms, control rooms, machinery spaces and control spaces.

3005.7.1 Automatic sprinkler system. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.7.2.1.

3005.7.2 Prohibited locations. Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoist-ways.

3005.7.3 Sprinkler system monitoring. The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

3005.7.4 Water protection. An approved method to prevent water from infiltrating into the hoistway enclosure from the

operation of the automatic sprinkler system outside the elevator lobby shall be provided.

3005.7.5 Shunt trip. Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

Section 3005.8 Storage, shall be added to read as follows:

3005.8 Storage. Storage shall not be allowed within the elevator machine room, control room, machinery spaces and or control spaces. Provide approved signage at each entry to the above listed locations stating: "No Storage Allowed."

Section 3006.2, Hoistway opening protection required, condition #5 shall be amended to read as follows:

5. The building is a high rise and the elevator hoistway is more than 55 feet (16,764 mm) in height. The height of the hoistway shall be measured from the lowest floor at or above grade to the highest floors served by the hoistway.

Section 3106 Marquees shall be deleted in its entirety.

Section 3107 Signs shall be deleted in its entirety.

Section 3307.1 Protection required shall be amended to read as follows:

3307.1 Protection of adjoining property. The requirements for protection of adjacent property and the depth to which the protection is required shall be defined by prevailing law. Lateral support of adjoining property is of a civil nature between adjoining property owners.

Section 3

Section 30.17 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby deleted and removed in its entirety.

Section 4

Section 30.22 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.22 Definitions

In this article:

Building Code means the International Building Code, 2015 edition, promulgated by the International Code Council and adopted by the City Council.

Section 5

Section 30.40 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.40 Adoption of the National Electrical Code

- (A) The National Electrical Code, 2014 edition, is hereby adopted by reference. One (1) copy is to remain on file in the City Secretary's office. Unless deleted, amended, expanded or otherwise changed herein, all provisions of this Code shall be fully applicable, binding, and of full force and effect.
- (B) These regulations shall be known as the "Electrical Code," may be cited as such, and will be referred to herein as "this Code."
- (C) Amendments, modifications and deletion. The following articles of the National Electrical Code adopted by subsection (A) of this section are amended, modified or deleted as follows:

Article 90.1 "Purpose" be amended by adding subsection (D) "Conflicting Provisions" as follows:

(D) Conflicting Provisions. Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

Article 90.2 "Scope" is amended by adding subsection (D) "Alternate materials and methods of construction" as follows:

(D) Alternate materials and methods of construction.

(1) The provisions of this Code are not intended to prevent the use of any material or method of construction not specifically prescribed in this Code, provided any alternate has been approved and its use authorized by the Building Official.

(2) The Building Official may approve any alternate material or method of construction, provided he finds that the proposed design is satisfactory, complies with the provisions of this Code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this Code in suitability, strength, effectiveness, fire resistance, durability and safety.

(3) The Building Official shall require any person seeking approval of an alternate material or method of construction to provide sufficient evidence or proof that the alternate material or method of construction satisfies the requirement of subsection (B) above. Provided, however, that the approval or authorization of any alternate shall not be construed as warranting or representing the safety of any approved alternate.

Article 90.4 "Enforcement" shall be amended by adding subsection (A) "Modifications" as follows:

(A) Modifications. The electrical regulations of this article may be modified or waived in writing by the Building Official pursuant to section 90.4 of the Electrical Code provided he shall first find that:

(1) A special individual reason makes the strict letter of this Code impractical;

(2) The modification is in conformity with the intent and purpose of this Code; and

(3) That such modification does not lessen health, life and fire safety requirements.

Any waiver or modification shall be obtained from the Building Official prior to starting the work, and a copy of the modification or waiver shall be filed in the office of the Building Official by the applicant.

Article 90.4 "Enforcement" shall be amended by adding subsection (B) "Powers and duties of the Building Official" as follows:

(B) Powers and duties of Building Official

(1) General. The Building Official is hereby authorized to enforce all the provisions of this Code, which authority includes, but is not limited to the authority to issue a citation to any person who violates any of its provisions. He shall cause a record to be kept of all permits issued and inspections made.

(2) Deputies. In accordance with prescribed procedures and with the approval of the appointing authority, the Building Official may appoint technical officers and inspectors and other employees as shall be authorized from time to time. Such employees shall have powers as delegated by the Building Official.

(3) Conflict of interest. It shall be unlawful for an employee of the Building Inspection Department to engage in the business of selling, installing, or maintenance of electrical fixtures, devices, equipment or materials, and they shall have no financial interest in any concern engaged in such business at any time while employed by the City.

(4) Right of entry.

(a) Whenever necessary to make an inspection to enforce any of the provisions of this Code, or whenever the Building Official or his authorized representative has reasonable cause to believe that there exists in any building or upon any premises any condition or violation which makes such building or premises unsafe, dangerous or hazardous, the Building Official or his authorized representative, in accordance with applicable law, may enter such building or premises at all reasonable times to inspect the same or to perform any duty imposed upon the Building Official by such Codes, provided that if such building or premises be occupied, he shall first present proper credentials and request entry. If such building or premises is unoccupied, he shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. If entry be refused, the Building Official or his authorized representative shall have recourse to every remedy provided by law to secure entry.

(b) When the Building Official or his authorized representative shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, no owner or occupant or any other persons having charge, care or control of any building or premises shall fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the Building Official or his authorized representative for the purpose of inspection and examination pursuant to this Code.

(5) Notice.

(a) When any order or notice is issued pursuant to the provisions of this Code to any person who cannot be found after a reasonable search, such order or notice may be served by posting it in a conspicuous place upon the premises occupied by him or upon the premises where the defects are alleged to exist. Such posting of the notice shall be considered equivalent to personal service of such order or notice. An order sent by mail in a sealed envelope with postage prepaid and directed to the address of the electrical contractor, owner, lessee, or occupant of the premises shall be equivalent to personal service of such order.

(b) Inspectors are hereby empowered to attach to the nearest electrical cabinet or equipment feeding defective or hazardous wiring, any official notice or seal to prevent use of electricity in that area, and it shall be unlawful for any other person to place or attach such seal, or to break, change, destroy, tear, mutilate, cover or otherwise deface or injure any such official notice or seal posted by an inspector.

(6) Stop orders. Whenever any work is being done contrary to the provisions of this Code, the Building Official may order the work stopped by notice in writing served on any persons engaged in the doing or causing such work to be done, and any such persons shall forthwith stop such work until authorized by the Building Official to proceed with the work.

(7) Authority to disconnect utilities in emergencies. The Building Official or his authorized representative shall have the authority to disconnect any electric power or energy service supplied to the building, structure or building service equipment therein regulated by this Code in case of emergency where necessary to eliminate an immediate hazard to life or property. The Building Official shall whenever possible notify the serving utility, the owner and occupant of the building, structure or building service equipment, in writing, of such disconnection immediately thereafter.

(8) Authority to condemn electrical system and equipment.

(a) Whenever the Building Official ascertains that any

electrical system or equipment regulated in this Code has become hazardous to life, health or property, he may order in writing that such electrical system or equipment either be removed or restored to a safe condition, whichever is appropriate. The written notice itself shall fix a time limit for compliance with such order. No person shall use or maintain defective electrical system or equipment after receiving such notice.

(b) When such equipment or installation is to be disconnected, a written notice of such disconnection and causes therefor shall be given within 24 hours of the order to disconnect to the serving utility, the owner and occupant of such building, structure or premises.

(c) When any electrical system or equipment is maintained in violation of this Code and in violation of any notice issued pursuant to the provisions of this section, the Building Official shall institute any appropriate action to prevent, restrain, correct or abate the violation.

(9) Connection after order to disconnect. No person shall make connections from any energy or power supply nor supply power to any electrical system or equipment which has been disconnected or ordered to be disconnected by the Building Official or the use of which has been ordered to be discontinued by the Building Official until the Building Official authorizes the reconnection and use of such electrical system or equipment.

(10) Liability.

(a) The Building Official, or his authorized representative charged with the enforcement of this Code, acting in good faith and without malice in the discharge of his duties, shall not thereby render himself personally liable for any damage that may accrue to persons or property as a result of any act or by reason of any act or omission in the discharge of his duties. Any suit brought against the Building Official or employee because of such act or omission performed by him in the enforcement of any provision of this Code shall be defended by legal counsel provided by this jurisdiction until final termination of such proceedings.

(b) This Code shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any building, structure or building service equipment therein for any damages to persons or property caused by defects, nor shall the code enforcement agency or its parent jurisdiction be held as assuming any such liability by reason of the inspections authorized by the Code or approvals issued under this Code.

(11) Cooperation of other officials and officers. The Building Official may request, and shall receive so far as is required in the discharge of his duties, the assistance and cooperation of other officials of this jurisdiction.

Article 110.3 (B) "Installation and Use" shall be amended by adding subsection (A) "Unsafe electrical systems or equipment" as follows:

(A) Unsafe electrical systems or equipment.

(1) All electrical systems or equipment regulated by this Code which constitute a fire hazard or are otherwise dangerous to human life are, for the purpose of this section, unsafe. Any use of electrical systems or equipment regulated by this Code constituting a hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment is, for the purpose of this section, an unsafe use.

(2) All such unsafe electrical systems or equipment are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal in accordance with the procedures set forth in Article II of Chapter 30 or Article I of Chapter 32 of the Code of Ordinances of the City of Garland, as applicable, or such alternate procedure as may be adopted by this jurisdiction. As an alternative, the Building Official or other employee or official of the City as designated by the governing body may institute any other appropriate action to prevent, restrain, correct or abate the violation.

Article 90.4 "Enforcement" shall be amended by adding subsection (C) "Violations" as follows:

(C) Violations. It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use or maintain any electrical system or equipment or cause or permit the same to be done in violation of this Code. Any violation of this Code is a misdemeanor and shall be punishable as provided by Section 10.05 of the Code of Ordinances of the City of Garland. The issuance or granting of a permit or approval of plans and specifications or the completion or approval of an inspection shall not be deemed or construed to be a permit for, or an approval of, any violation of any of the provisions of this Code. No permit presuming to give authority to violate or cancel the provisions of this Code shall be valid, except insofar as the work or use which is authorized is

lawful.

Article 90.4 "Enforcement" shall be amended by adding subsection (D) "Appeals" as follows:

(D) Appeals. Any person aggrieved by any decision or ruling made by the Building Official under the provisions of this Code may appeal to the Electrical Board (the "board").

(1) Time for filing appeal/grounds. The appeal must be in writing and received in the office of the Building Official within thirty (30) days of the decision or ruling to be appealed, and must set forth the specific grounds for the appeal. The Building Official shall forward the appeal to the board, along with all information constituting the record upon which the decision was made.

(2) Notice of hearing. The board shall meet upon notice from the chairman and within thirty (30) days of the date the appeal was filed.

(3) Decision of board. The board shall render a written decision reversing, affirming or modifying the decision, in whole or in part, within thirty (30) days of the hearing, and may issue appropriate orders consistent with its decision. All decisions of the board shall be by a majority vote, and reflect how each of the board members participating in the decision voted. The decision of the board shall be filed promptly in the office of the Building Official and the City Secretary's office. The Building Official shall be responsible for the enforcement of the board's decisions.

Article 90.4 "Enforcement" shall be amended by adding subsection (E) "Board composition/powers and duties" as follows:

(E) Board composition/powers and duties.

(1) Composition. The "Electrical Board" (the "board") shall consist of nine (9) voting members who shall be appointed by the City Council. The appointive members of the board shall consist of qualified electrical professionals such as electrical contractors, licensed electricians, inspectors, professional engineers and electrical designers. The term of office for members of the board shall be two (2) years. The Building Official or his designee shall be an ex officio member of the board, without voting privileges.

(2) Compensation. The appointive members of the board shall serve without compensation.

(3) **Secretary.** The Building Official or his designee shall act as secretary to the board, and shall be responsible for keeping written minutes of the meeting.

(4) **Election of officers.** An annual election of the chairman and vice chairman of the board shall be held during the first meeting after September 1 of each year.

(5) **Powers and duties.**

(a) **Generally.** The board shall meet upon call of the chairman to consider proposed revisions to this Code and as needed for the consideration of appeals of decisions of the Building Official.

(b) **Amendments.** The board shall recommend to the City Council amendments to this Code, when such amendments are deemed appropriate or desirable for the protection of the public health, safety and welfare. Any interested person may submit proposed amendments to the board. The board shall consider the recommendation of the Building Official concerning any proposed amendment. In order for the board to recommend an amendment to the City Council, a concurring vote of two-thirds (2/3) of the members of the board present at the meeting is required.

(c) **Appeals.** The board shall have the authority to hear appeals of decisions or rulings of the Building Official made under the provisions of this Code. In that connection, the board shall have the limited power to determine whether the true intent of this Code and the rules adopted thereunder have been correctly interpreted, whether the provisions of this Code apply fully, or whether an equally good or better form or construction or material was proposed and may be used. The board shall have no power to limit, modify, change or waive any requirement of this Code.

Article 90 "Introduction" be amended by adding Article 90.10 "Electrical Licensing and Registration" as follows.

90.10 Electrical Licensing and Registration.

(A) License Required

(1) Every person engaged in the construction, installation, maintenance, extension, repairing or replacement of electrical wiring, apparatus or equipment that performs work prescribed by a person, firm or corporation registered under the provisions of this Article must have on their person proof of an electrical license, electrical apprentice or electrical

sign apprentice license issued by the Texas Department of Licensing and Regulation.

(2) It shall be unlawful for a person, firm or corporation registered with the City of Garland to engage in any phase of the electrical business or perform any work in the electrical trade other than such business or work authorized by the registration, the class of license or the permit held by that person, provided, however, that an apprentice electrician or apprentice sign electrician may perform electrical work prescribed for him when issued an Electrical Apprentice License by the Texas Department of Licensing and Regulation enabling said holder to do such work, and then only when in the presence of and being supervised by an electrician with the proper electrical license issued by the Texas Department of Licensing and Regulation.

(3) A properly licensed electrician is required to be on the same platted lot as the work which is taking place and for the apprentice to know how to quickly locate the properly licensed electrician. All electricians on the jobsite must have a valid TDLR issued electricians apprentice registration or wireman, journeyman, or master electricians license.

(4) A journeyman, or master electrician must be present on the jobsite at all times when electrical work is being performed.

(B) Registration Required

(1) Any person providing services as an electrical contractor in the City must register with the Building Inspection Department as a contractor. To register with the City as a contractor, application shall be made in writing on forms furnished for that purpose and filed with the Building Official. The application shall show the contractor's name, local address and telephone number, a copy of the applicant's state electrical contractor's license, and such other information as may reasonably be required to properly identify the contractor. Such application shall be accompanied by the fee prescribed in the fee schedule located in section 30.301 of this Code.

(2) Except as provided in subsection (3), all provisions of the Texas Electrical Safety and Licensing Act, found in the State Occupations Code, title 8, chapter 1305 and the Administrative Rules of the state department of licensing and regulation, 16 Texas Administrative Code, chapter 73 shall be in full force within the City.

(3) Any electrical license or registration issued by the City which has not expired by the adoption date of the

ordinance codified in this article shall remain valid and in full effect until the expiration date of said license. Upon the expiration date of said license, the City will not renew or honor the rights previously granted by the license. When all such licenses are expired, the electrical licensing program of the City shall cease.

Article 90 "Introduction" is amended by adding Article 90.11 "Permits" as follows:

90.11 Permits

(A) Permits required. Except as specified in subsection (C) of this section, no electrical system regulated by this Code shall be installed, altered, repaired, replaced or remodeled unless a separate electrical permit for each building or structure has first been obtained from the Building Official, or without first submitting a subcontractor's affidavit form for work authorized under a combined building permit.

(B) Permit non-transferable. It shall be unlawful for any person to lend, rent, or transfer an electrical permit or subcontractor's affidavit, or permit a person without proper license or registration to do the work, or for any person to make use of any such permit or affidavit which is not actually his own, and any such permit obtained or affidavit submitted under these conditions shall be null and void.

(C) Exempt work. An electrical permit shall not be required for the following:

(1) Portable motors or other portable appliances energized by means of a cord or cable having an attachment plug end to be connected to an approved receptacle when that cord or cable is permitted by this Code.

(2) Repair or replacement of fixed motors, transformers or fixed approved appliances of the same type and rating in the same location.

(3) Temporary decorative lighting.

(4) Repair or replacement of current-carrying parts of any switch, contactor or control device.

(5) Reinstallation of attachment plug receptacles, but not the outlets therefor.

(6) Repair or replacement of any overcurrent device of the required capacity in the same location.

(7) Repair or replacement of electrodes or transformers of

the same size and capacity for signs or gas tube systems.

(8) Taping joints.

(9) Removal of electrical wiring.

(10) Temporary wiring for experimental purposes in suitable commercial and industrial experimental laboratories.

(11) The wiring for temporary theater, motion picture or television stage sets.

(12) Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.

(13) Low-energy power, control and signal circuits of classes II and III as defined in this Code.

(14) A permit shall not be required for the installation, alteration or repair of electrical wiring, apparatus or equipment or the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of intelligence by a public or private utility in the exercise of its function as a serving utility.

Exemption from the permit requirements of this Code shall not be deemed to grant authorization for any work to be done in violation of the provisions of this Code or any other laws or ordinances.

(D) Application. To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the code enforcement agency for that purpose. Every such application shall:

(1) Identify and describe the work to be covered by the permit for which application is made.

(2) Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.

(3) Indicate the use or occupancy for which the proposed work is intended.

(4) Be accompanied by plans, diagrams, computations and specifications and other data as required in subsection (B) of this section.

(5) Be signed by permittee, or his authorized agent.

(6) Give such other data and information as may be required by the Building Official.

(E) Plans and specifications. With each application for a permit, and where required by the Building Official for enforcement of any provision of this Code, plans, specifications and calculations shall be submitted in the quantity deemed

necessary by the Building Official. When deemed necessary by the Building Official to ensure code compliance, the Building Official may require plans and specifications to be prepared and designed by an engineer licensed by the state. All drawings, specifications and accompanying data involved with the practice of engineering, such as structural, mechanical, plumbing, electrical, heating and cooling, energy, fire, life and safety systems, shall comply with state and local laws governing the practice of engineering as required by the Texas Engineering Practice Act, Chapter 1001 of the Texas Occupations Code.

(F) Information on plans and specifications. Plans and specifications shall be drawn to scale upon substantial paper and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this Code and all relevant laws, ordinances, rules and regulations.

(G) Issuance.

(1) The applications, plans and specifications, and other data, filed by an applicant for permit may be reviewed by other departments of the City to determine compliance with any applicable laws under their jurisdiction. If the work described in an application for a permit and the plans, specifications and other data filed therewith conforms to the requirements of this Code and other pertinent laws and ordinances, and the fees prescribed in the fee schedule (section 30.301 of this Code) have been paid, the Building Official may issue a permit therefor to the applicant.

(2) When the Building Official issues the permit where plans are required, he shall endorse in writing or stamp the plans and specifications "APPROVED." Such approved plans and specifications shall not be changed, modified or altered without authorizations from the Building Official, and all work shall be done in accordance with the approved plans.

(3) The Building Official may issue a permit for the construction of part of an electrical system before the entire plans and specifications for the whole system have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this Code. The holder of such permit shall proceed at his own risk with assurance that the permit for the entire building, structure or building service will be granted.

(H) Retention of plans. One set of approved plans and specifications shall be returned to the applicant and shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress. One set of approved plans, specifications and computations shall be retained by the Building Official until final approval of the work.

(I) Validity of permit.

(1) The issuance of a permit or approval of plans and specifications shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this Code, or of any other ordinance of the City, nor shall the issuance of a permit or approval of plans be construed as representing or warranting the safety or lack of defects of any electrical work described therein. No permit presuming to give authority to violate or cancel the provisions of these Codes shall be valid.

(2) The issuance of a permit based upon plans, specifications and other data shall not prevent the Building Official from thereafter requiring the correction of errors in said plans, specifications and other data, or from preventing building operations being carried on thereunder when in violation of these Codes or of any other ordinances of the City.

(J) Expiration. An individual permit issued by the Building Official shall expire by limitation and become null and void on the expiration of one (1) year after its issuance if no progress has been made toward the completion of the project, or upon expiration of the project. (A project shall expire immediately after the first anniversary of the date the first permit application was filed for the project if no progress had been made towards completion of the project.) Once a permit for particular work has expired, a new permit must be applied for and obtained before the work can be commenced. The permit fee shall be the full amount required for a new permit for such work. The Building Official or his designee shall determine the extent to which the work must comply with any new regulations that were not in effect at the time the original permit was issued.

(K) Suspension or revocation. The Building Official may, in writing, suspend or revoke a permit issued under the provisions of this Code whenever the permit is issued in error or on the basis of incorrect information supplied, or in violation of any ordinance or regulation of the City.

Article 90 "Introduction" is amended by adding Article 90.12 "Inspections" as follows:

90.12 Inspections

(A) General. All electrical systems and equipment for which a permit is required by this Code shall be subject to inspection by the Building Official. No portion of any electrical system intended to be concealed shall be concealed until inspected and approved. Neither the Building Official nor the City shall be liable for expense entailed in the removal or replacement of any material necessary to allow inspection. When the installation of an electrical system and equipment is complete, an additional and final inspection shall be made. Electrical systems and equipment regulated by this Code shall not be connected to the energy source until authorized by the Building Official.

(B) Inspection requests.

(1) It shall be the duty of the person doing the work authorized by a permit to notify the Building Official that such work is ready for inspection. The Building Official may require that every request for inspection be filed at least one working day before such inspection is desired. Such request may be in writing, online, or by telephone at the option of the Building Official.

(2) It shall be the duty of the person requesting inspections required by this Code to provide access to and means for proper inspection of such work.

(C) Operation of electrical equipment. The requirements of this section shall not be construed to prohibit the operation of any electrical system or equipment installed to replace existing equipment. The request for inspection of such equipment must have been filed with the Building Official not more than 48 hours after such replacement work is completed and before any portion of such electrical system is concealed by any permanent portion of the building.

(D) Other inspections. In addition to the called inspections required by this Code, the Building Official may make or require other inspections of any work to ascertain compliance with the provisions of this Code and other laws which are enforced by the code enforcement agency.

(E) Re-inspections.

(1) A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when required corrections are not made.

(2) This provision is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this Code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection or when required corrections are not made.

(3) Reinspection fees may be assessed when the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the Building Official.

(4) The applicant shall pay the reinspection fee prior to requesting a reinspection.

(5) In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

(6) On the first offense, the inspection is refused, failed and a re-inspection fee is assessed. If there are subsequent violations, additional action may be taken ranging from citations to suspension of the City of Garland Electrical Contractors Business Registration.

Article 90 "Introduction" is amended by adding Article 90.13 "Connection to Electric Utilities" as follows:

90.13 Connection to Electric Utilities

(A) Energy connections. An electrical system or equipment regulated by this Code for which a permit is required shall not be connected to a source of energy or power until approved by the Building Official.

(B) Temporary connections. The Building Official may authorize the temporary connection of the electrical system or equipment to the source of energy or power for the purpose of testing the equipment, or for the use under a temporary certificate of occupancy. The temporary wiring shall not be left energized while unattended.

Article 90 "Introduction" is amended by adding Article 90.14

"Working Hours" as follows:

90.14 Working hours

(A) Hours established. Any outside work being done adjacent to an occupied residential subdivision or adjacent to an occupied residential use, including multifamily uses, shall be allowed only between 7:00 a.m. and 8:00 p.m. each day of the week. Any outside work being done adjacent to an occupied residential subdivision or adjacent to an occupied residential use, including multifamily uses, shall be prohibited between 8:00 p.m. and 7:00 a.m. each day of the week.

(B) Other regulations unaffected. This section does not authorize violation of any other legally established regulation, either public or private, regulating noise nuisance to residents.

(C) Exceptions. These regulations do not affect emergency work being done to secure a structure or to reestablish utility service to a structure.

(D) Variance. The Director of Health, in accordance with section 22.76 of the Code of Ordinances of the City of Garland, may issue a permit of variance to these regulations.

Chapter 1 "General", Article 100 "Definitions", I. "General" shall be amended by adding the following definitions:

Approved, as to materials, equipment and method of construction, refers to approval by the Building Official as the result of investigation and tests conducted by him, or by reason of accepted principles or tests by recognized authorities, technical or scientific organizations.

Approved agency is an established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the Building Official.

Building Code is the Building Code as adopted by the City.

Building Official is the officer charged with the administration and enforcement of this Code, or his duly authorized representative, and is the authority having jurisdiction for this Code.

Electrical Code is the National Electrical Code promulgated by the

National Fire Protection Association, as adopted by the City.

Electrical system. In this article, any reference to electrical system shall mean electrical conductors, equipment, and raceways; signaling and communications conductors, equipment, and raceways; and optical fiber cables and raceways.

Multiple occupancy building is a building having more than one tenant and may be of single or mixed use groups as classified by the Building Code.

Article 110.3 "Examination, Identification, Installation, and Use of Equipment" shall be amended by adding subsection (C) through (K) as follows.

(C) Testing:

(1) Whenever there is insufficient evidence of compliance with any of the provisions of this Code, or evidence that materials or construction do not conform to the requirements of this Code, the Building Official may require tests as evidence of compliance to be made at the sole expense of the person providing such materials or performing such construction.

(2) Test methods shall be as specified by this Code or by other recognized test standards. In the absence of recognized and accepted test methods for the proposed alternate, the Building Official may determine test procedures.

(3) All tests shall be made by an approved agency and a report indicating the results of such tests filed with the Building Official. Reports of such tests shall be retained by the Building Official for a period deemed appropriate by the Building Official.

(D) Additions, alterations or repairs.

(1) Additions, alterations or repairs may be made to any electrical system and equipment without requiring the entire existing electrical system to be upgraded to meet this Code, provided that any addition, alteration or repair conforms to the requirements for a new electrical system and provided further that no hazard to life, health or safety will be created by such additions, alterations or repairs.

(2) Minor additions, alterations and repairs to existing electrical systems and equipment may be made in accordance with the law in effect at the time the original installation was

made, when approved by the Building Official.

(E) Existing installations. Electrical systems and equipment lawfully in existence at the time of the adoption of this Code may have their use, maintenance or repair continued if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property has been created by such electrical system and equipment. Except in regards to electrical service, meter base, panel and breakers that are being replaced -repaired, whereas the replacement -repair would need to meet 2014 NEC and utility service provider specifications. Example # 1. If existing panel was in a closet the new panel may not be installed in a closet. Example # 2 .If meter base is repaired or replaced the height must be installed per utility company specifications. Example # 3. If overhead service being repaired or replaced the point of attachment may not be lower than 2014 NEC standards and meet utility company requirements. Example # 4. Existing panel must be grounded and if the existing panel is the first means of disconnect it must have no more than 6 disconnecting means to remove power from all circuits.

(F) Change in building occupancy. Electrical systems and equipment which are a part of any building or structure undergoing a change in use or occupancy, as defined in the Building Code, shall comply with the requirements of this Code which are applicable to the new use or occupancy.

(G) Maintenance. All electrical systems and equipment, both existing and new, and all parts thereof shall be maintained in a proper operating condition in accordance with the original design and in a safe and hazard-free condition. All devices or safeguards which are required by this Code shall be maintained in conformance with this Code. The owner or his designated agent shall be responsible for the maintenance of the electrical system. To determine compliance with this subsection, the Building Official may cause any electrical system to be reinspected.

(H) Moved building. Electrical systems and equipment which are a part of buildings or structures moved into or within the City shall comply with the provisions of this Code for new installations.

(I) Appliances in attics. Attics containing appliances requiring access for maintenance, repair, or replacement shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall

not be less than 30 inches high and 22 inches wide and not more than 20 feet in length measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous unobstructed solid flooring not less than 22 inches wide. A level service space not less than 30 inches deep and 30 inches wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches or shall be larger where such dimensions are not large enough to allow removal of the largest appliance. As a minimum, access to the attic space shall be provided by one of the following:

1. A permanent stair;
2. A pull down stair with a minimum 300 lb. capacity;
3. An access door from an upper floor level; or
4. An access panel may be used in lieu of items 1, 2, or 3 with prior approval of the Building Official due to building conditions.

Exception: The passageway and level service space are not required where the appliance is capable of being removed through the required

(J) Equipment and appliances on roofs or elevated structures.

Where equipment or appliances requiring access for maintenance, repair, or replacement are installed on roofs or elevated structures at an aggregate height exceeding 16 feet, such access shall be provided by a permanent approved means of access. Permanent exterior ladders providing roof access need not extend closer than 12 feet to the finish grade or floor level below and shall extend to the equipment or appliance's level service space. Such access shall not require climbing over obstructions greater than 30 inches high or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope).

(K) Sloped roofs. Where appliances, equipment, fans or other components that require service for maintenance, repair, or replacement are installed on roofs having slopes greater than 4 units vertical in 12 units horizontal and having an edge more than 30 inches above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches above the

platform, shall be constructed so as to prevent the passage of a 21-inch-diameter sphere and shall comply with the loading requirements for guards specified in the International Building Code.

Article 230.2 "Number of Services", (A) "Special conditions" is amended by adding a subsection (7) as follows:

(7) In supplying electrical service to multifamily dwellings, two or more laterals or overhead service drops shall be permitted to a building when both of the following conditions are met:

(a) The building has six or more individual gang meters and all meters are grouped at the same location.

(b) Each lateral or overhead service drop originates from the same point of service.

Article 230.70 "General" (1) "Readily Accessible Location" is amended to read as follows:

(1) Ready Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside the nearest point of entrance of the service conductors. If located inside, the disconnecting means must be located not more than 5 feet from an exterior wall and a passage door installed to allow access to the equipment. The door must have a permanent sign stating that the electrical disconnecting means is directly inside - ELECTRIC ROOM. Upon entry from the exterior the equipment needs to be insight and readily accessible. Lettering at the exterior door the must be 2" tall and ½" wide and be visible from the utility company power source.

Article 230.71 "Maximum Number of Disconnects", (A) "General" is amended by adding the following exception.

Exception: Multi- occupant buildings. Individual service disconnecting means is limited to six for each occupant. The number of individual disconnects at one location may exceed six.

Article 310.15 "Ampacities for Conductors Rated 0-2000 Volts", (B) "Tables", (7) 120/240 Volt, Single-Phase Dwelling Services and Feeders" is amended by adding subsection (5) as follows:

(5) This Article shall not be used in conjunction with Article 220.82.

Article 310.106 "Conductors" (A) Minimum Size Conductors" is amended by amended to read as follows:

(A) Minimum Size of Conductors. The minimum size of conductors shall be shown in Table 310.106 (A), except as permitted elsewhere in this Code. Aluminum and copper-clad aluminum conductors may be used in services and feeders only. The use of aluminum and copper-clad aluminum conductors shall be limited to #1 AWG and larger sizes.

Article 600.6 "Disconnects" (A) "Location" (2) "Within Sight of the Sign" is amended to read as follows:

(2) Within Sight of the Sign. The disconnecting means shall be within sight of the sign or outline lighting system that it controls. Where the disconnecting means is out of line of sight from any section that is able to be energized, the disconnecting means shall be lockable in accordance with 100.25. The disconnecting means shall be readily accessible.

Article 600.6 "Disconnects" (A) "Location" (3) "Within Sight of the Controller" is amended by adding subsection (4) as follows:

(4) The disconnecting means shall be readily accessible.

Article 680.25 "Feeders" (A) "Wiring Methods" (1) "Feeders" is amended by adding the following permissible wiring methods:

- (7) Nonmetallic-sheathed cable
- (8) Type SE cable

Section 6

Section 30.75 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.75 Adoption of the International Mechanical Code

The International Mechanical Code ("Mechanical Code"), 2015 edition, is hereby adopted by reference. A copy shall be kept on file in the office of the City Secretary. Unless deleted, amended, expanded or otherwise changed herein, all provisions of the Mechanical Code shall be fully applicable, binding, and of full force and effect within the City.

Section 7

Section 30.76 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.76 Amendments, modifications, and deletions

The following sections of the International Mechanical Code ("Mechanical Code"), as adopted in section 30.75 above, are amended, modified, or deleted as follows:

Section 102.8 Referenced code and standards, shall be amended to read as follows:

102.8 Referenced Codes and Standards. The codes and standards referenced herein shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 or the *National Electrical Code* (NEC) shall mean the Electrical Code as adopted.

Section 304.3 Elevation of ignition source, shall be amended by adding the following exception:

Exception: Elevation of the ignition source is not required for water heaters that are listed as flammable vapor resistant and for installation without elevation.

Section 304.7 Private Garages, shall be deleted in its entirety.

Section 306.3 Appliances in attics, shall be amended to read as follows:

306.3 Appliances in attics. Attics containing appliances requiring access for maintenance, repair, or replacement shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches high and 22 inches wide and not more than 20 feet in length measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous unobstructed solid flooring not less than 22 inches wide. A level service space not less than 30 inches deep and 30 inches wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches or shall be larger where such dimensions are not large enough to allow removal of the largest appliance. As a minimum, access to the attic space shall be provided by one of the following:

1. A permanent stair;
2. A pull down stair with a minimum 300 lb capacity;
3. An access door from an upper floor level; or
4. An access panel may be used in lieu of items 1, 2, or 3 with prior approval of the Building Official due to building conditions.

Exception: The passageway and level service space are not required where the appliance is capable of being removed through the required opening.

Section 306.5 Equipment and appliances on roofs or elevated structures, shall be amended to read as follows:

306.5 Equipment and appliances on roofs or elevated structures. Where equipment or appliances requiring access for maintenance, repair, or replacement are installed on roofs or elevated structures at an aggregate height exceeding 16 feet, such access shall be provided by a permanent approved means of access. Permanent exterior ladders providing roof access need not extend closer than 12 feet to the finish grade or floor level below and shall extend to the equipment or appliance's level service space. Such access shall not require climbing over obstructions

greater than 30 inches high or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope).

A receptacle outlet shall be provided at or near the equipment and appliance location in accordance with the Electrical Code.

Section 306.5.1 Sloped roofs shall be amended to read as follows:

306.5.1 Sloped roofs. Where appliances, equipment, fans or other components that require service for maintenance, repair, or replacement are installed on roofs having slopes greater than 4 units vertical in 12 units horizontal and having an edge more than 30 inches above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter sphere and shall comply with the loading requirements for guards specified in the International Building Code.

Section 306.6 Water heaters above the ground floor shall be added to read as follows:

306.6 Water heaters above the ground floor. When the mezzanine or platform in which a water heater is installed is more than 8 feet about the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A maximum 10 gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet above the ground or floor level and may be reached with a portable ladder.

Section 306.6.1 Convenience lighting and outlet, shall be added to read as follows:

306.6.1 Convenience lighting and outlet. Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with Section 306.3.1 of the Mechanical Code.

Section 307.2.2 Drain pipe material and sizes, shall be amended

to read as follows:

307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC or, where exposed to ultraviolet light, schedule 80 PVC pipe or tubing. All components shall be selected for the pressure, temperature, and exposure rating of the installation. Condensate waste and drain line size shall be not less than 3/4-inch internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with an approved method. All horizontal sections of drain piping shall be installed in uniform alignment at a uniform slope.

Section 307.2.3 Auxiliary and secondary drain system, shall be amended by amending item 2 to read as follows:

2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. The overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection. However, the conspicuous point shall not create a hazard such as dripping over a walking surface or other areas so as to create a nuisance.

Section 403.2.1 Recirculation of air, shall be amended by adding an item 5 to read as follows:

4. Toilet rooms within private dwellings that contain only a water closet, lavatory or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

Section 501.2 Independent system required, shall be amended by adding a third exception to read as follows:

3. Bathroom exhaust ducts may terminate in an attic, warehouse or shop area when infiltration of outside air is present. Vents shall be installed so as not to be blocked by blown insulation or other obstructions.

Section 501.3 Exhaust discharge, shall be amended to read as follows:

501.3 Exhaust Discharge. The air removed by every mechanical

exhaust system shall be discharged outdoors at a point where it will not cause a public nuisance and not less than the distances specified in Section 501.3.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic, crawl space, or be directed onto walkways.

Exceptions:

1. Whole-house ventilation-type attic fans shall be permitted to discharge into the attic space of dwelling units having private attics.
2. Commercial cooking recirculating systems.
3. Where installed in accordance with the manufacturer's instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled domestic ductless range hoods shall not be required to discharge to the outdoors.
4. Toilet room exhaust ducts may terminate in a warehouse or shop area when infiltration of outside air is present.

Section 504.6 Makeup air shall be amended by adding a sentence at the end of the paragraph to read as follows:

The size of duct shall not be reduced along its developed length nor at the point of termination.

Section 607.5.1 shall be amended to read as follows:

607.5 .1 Fire Walls. Ducts and air transfer openings permitted in fire walls in accordance with Section 705.11 of the International Building Code shall be protected with listed fire dampers installed in accordance with their listing. For hazardous exhaust systems see Sections 510.1 thru 510.9 of the Mechanical Code.

Section 8

Section 30.80 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.80 Adoption of the International Plumbing Code

The International Plumbing Code ("Plumbing Code"), 2015 edition, is herewith adopted by reference. A copy of the Plumbing Code shall be kept on file in the office of the City Secretary. Unless deleted, amended, expanded or otherwise changed herein, all provisions of the Plumbing Code shall be fully applicable and binding and of full force and effect within the City. This adoption includes appendices B, D, and E of the Plumbing Code.

Section 9

Section 30.81 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.81 Amendments, modifications, and deletions

The following sections of the International Plumbing Code ("Plumbing Code"), as adopted in section 30.80, are amended, modified, or deleted as follows:

Section 102.8 Referenced codes and standards shall be amended to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where the differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 or the *National Electrical Code* (NEC) shall mean the Electrical Code as adopted.

Section 305.4.1 Sewer depth shall be amended to read as follows:

305.4.1 Sewer depth. Building sewers shall be a minimum of 12 inches (304 mm) below grade.

Section 305.7 protection of components of plumbing system shall be amended to read as follows:

305.7 Protection of components of plumbing system. Components of a plumbing system installed within 3 feet along alleyways, driveways, parking garages or other locations in a manner in which they could be exposed to damage shall be recessed into the wall or otherwise protected in an *approved* manner.

Section 305.10 Exterior hydrants shall be amended by adding a new Section to read as follows:

305.10 Exterior hydrants. Exterior hydrants installed through the walls shall be installed with a copper or brass pipe nipple from the threaded female drop ear ninety-degree elbow to the water hydrants with an appropriate vacuum breaker. Frost-proof hydrants shall be installed when subject to freezing.

Section 312.2 Drainage and vent water test shall be amended to read as follows:

312.2 Drainage and vent water test. A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest opening of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 5 foot head of water. In testing successive sections, at least the upper 5 feet of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 5 feet of the system shall have been submitted to a test of less than 5 foot head of water. The water shall be kept in the system, or in the portion under test, for at least 15 minutes before inspection starts. The system shall then be tight at all points.

Section 312.9.2 Inspection and testing of backflow prevention assemblies shall be amended by adding a new Section to read as follows:

312.9.2 Inspection and testing of backflow prevention assemblies. Testing shall comply with the City's cross-connection control regulations. Cross-connection control regulations are set forth in article V, chapter 51 of the Code of Ordinances.

Section 312.10.1 Inspections shall be amended to read as follows:

312.10.1 Inspections. Annual inspections shall be made of all backflow prevention assemblies and air gaps to determine whether they are operable. In the absence of an authorized inspection by the City, the owner is responsible to ensure that proper testing is performed.

Section 312.10.2 Testing shall be amended to read as follows:

312.10.2 Testing. Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, pressure vacuum breaker assemblies, reduced pressure detector fire protection backflow prevention assemblies, double check detector fire protection backflow prevention assemblies, hose connection backflow preventers, and spill-proof vacuum breakers shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The testing procedure shall be performed in accordance with applicable local provisions. In the absence of local provisions, the owner is responsible to ensure that testing is done in accordance with one of the following standards: ASSE 5013, ASSE 5015, ASSE 5020, ASSE 5047, ASSE 5048, ASSE 5052, ASSE 5056, CSA B64.10 or CSA B64.10.1.

Section 314.2.1 Condensate disposal shall be amended to read as follows:

314.2 .1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Condensate shall not discharge into a street, alley, sidewalk, rooftop, or other areas so as to cause a nuisance.

Section 314.2.2 Drain pipe material and sizes shall be amended to read as follows:

314.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC, or, where exposed to ultraviolet light, schedule 80 PVC pipe or tubing. All components shall be selected for the pressure, temperature and exposure rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the Plumbing Code relative to the material type. Condensate waste and drain line size shall

not be less than 3/4- inch internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 314.2.2 of the Plumbing Code. All horizontal sections of drain piping shall be installed in uniform alignment at a uniform slope.

Section 401.1 Scope shall be amended by adding a sentence to read to the end of the section to read as follows:

The provisions of this chapter of the Plumbing Code are meant to work in coordination with the provisions of the Building Code. Should any conflicts arise between these two codes, the Building Official shall determine which provision will control, the presumption being that the more restrictive provision will apply.

Section 403.1 Minimum number of fixtures shall be amended to read as follows:

403.1 Minimum number of fixtures. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number as follows:

1. Assembly occupancies. At least one drinking fountain shall be provided at each floor level in an approved location.

Exception: A drinking fountain need not be provided in a drinking or dining establishment.

2. Groups A, B, F, H, I, M and S occupancies: Buildings or portions thereof where persons are employed shall be provided with at least one water closet for each sex except as provided for in Section 403.2.
3. Group E occupancies: Shall be provided with fixtures as shown in Table 403.1.
4. Group R occupancies: Shall be provided with fixtures as shown in Table 403.1.

It is recommended, but not required, that the minimum number of fixtures provided also comply with the number shown in Table 403.1. Types of occupancies not shown in Table 403.1 shall be considered individually by the Building Official. The occupancy classification and the number of occupants shall be determined by the Building Code.

Section 410.1 Approval shall be amended to read as follows:

410.1 Approval. Drinking fountains shall conform to ASME A112.19.1M, ASME A112.19.2M or ASME A112.19.9M, and water coolers shall conform to ARI 1010. Drinking fountains and water coolers shall conform to NSF 61, Section 9. (See Section 403 .1 of the Plumbing Code, as adopted and amended, to determine the occupancies that require drinking fountains and water coolers.) Electrically operated, refrigerated drinking water coolers shall be listed and labeled in accordance with UL 399.

Section 412.2.1 Required location shall be added to read as follows:

412.2.1 Required location. Floor drains shall be installed in the following areas:

1. In public coin-operated laundries and in the central washing facilities of multiple family dwellings, the rooms containing automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet of not less than 3 inches in diameter.
2. Commercial kitchens. In lieu of floor drains kitchens the Building Official may accept floor sinks.
3. Public restrooms

Section 417.5.2 Shower lining shall be amended to read as follows:

417.5.2 Shower lining. Floors under shower compartments, except where prefabricated receptors have been provided, shall be lined and made water tight utilizing material complying with Sections 417.5.2.1 thru 417.5.2.5 of the Plumbing Code. Such liners shall turn up on all sides at least 2 inches above the finished threshold level and shall extend outward over the threshold and fastened to the outside of the threshold jamb. Liners shall be recessed and fastened to an approved backing so as not to occupy the space required for wall covering, and shall not be nailed or perforated at any point less than 1 inch above the finished threshold. Liners shall be pitched one-fourth unit vertical in 12 units horizontal (2-percent slope) and shall be sloped toward the fixture drains and be securely fastened to the waste outlet at the seepage entrance, making a water-tight joint between the liner and the outlet. The completed liner shall be tested in accordance with Sections 312.9 and 417.7 of the Plumbing Code.

Section 417.7 Test for shower lining shall be adding as a new Section to read as follows:

417.7 Test for shower lining. Shower receptors shall be tested for water tightness by filling with water to the level of the rough threshold. The drain shall be plugged in a manner so that both sides of pans shall be subjected to the test at the point where it is clamped to the drain.

Section 502.3 Water heaters installed in attics, shall be amended by adding the following to end of the section as follows:

502.3 Water heaters installed in attics. Attics containing a water heater shall be provided with an opening and unobstructed passageway large enough to allow removal of the water heater. The passageway shall not be less than 30 inches in height and 22 inches in width and not more than 20 feet in length when measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring not less than 24 inches in width. A level service space not less than 30 inches in length and 30 inches in width shall be present at the front or service side of the water heater. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions be not less than 20 inches by 30 inches (508mm by 762mm) where such dimensions are large enough to allow removal of the water heater. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb (136 kg) capacity.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Section 502.6 Water heaters above ground or floor shall be added as a new section as follows:

502.6 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

502.6.1 Illumination and convenience outlet. Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with Section 502 .1 of the Plumbing Code.

Section 504.6 Requirement for discharge piping shall be amended to read as follows:

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

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

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the Building Official and permitted by the manufacture's installation instructions and installed per those instructions.

5. Discharge to an indirect waste receptor or to the outdoors. Where discharging to the outdoors in areas subject to freezing, discharge piping shall be first piped to an indirect waste receptor through an air gap located in a conditioned area.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate less than 6 inches or more than 24 inches above grade.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.

Section 504.7.1 Pan size and drain shall be amended to read as follows:

504.7.1 Pan size and drain. The pan shall be not less than 1 1/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4. Multiple pan drains may terminate to a single discharge piping system when *approved* by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

Section 604.4.1 State maximum flow rate shall be added as a new section as follows:

604.4.1 State maximum flow rate. Where the State mandated maximum flow rate is more restrictive than those of this section, the State flow rate shall take precedence.

Section 606.1 Location of full-open valves shall be amended by deleting items 4 and 5.

Section 606.2 Location of shutoff valves shall be amended by deleting item 2.

Section 608.1 General shall be amended to read as follows:

608.1 General. A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from non-potable liquids, solids or gases being introduced into the potable water supply through cross-connections or any other piping connections to the system. Backflow preventer applications shall conform to the City's cross-connection control regulations, Table 608.1 of the Plumbing Code, except as specifically stated in Sections 608.2 thru 608.16.10.

Section 608.16.5 Connections to lawn irrigation systems shall be amended to read as follows:

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

principle backflow preventer.

Section 608.17 Protection of individual water supplies shall be amended to read as follows:

608.17 Protection of individual water supplies. An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with the City's cross-connection control program. When not regulated by the City's cross-connection control program, installation shall be in accordance with Sections 608.17.1 thru 608.17.8 of the Plumbing Code.

Section 610.1 General shall be amended to read as follows:

610.1 General. New or repaired potable water systems shall be purged of deleterious matter and disinfected prior to utilization. The method to be followed shall be that prescribed by the health authority or water purveyor having jurisdiction or, in the absence of a prescribed method, the procedure described in either AWWA C651 or AWWA C652, or as described in this section. This requirement shall apply to "on-site" or "in-plant" fabrication of a system or to a modular portion of a system.

1. The pipe system shall be flushed with clean, potable water until dirty water does not appear at the points of outlet.
2. The system or part thereof shall be filled with a water/chlorine solution containing at least 50 parts per million (50 mg/L) of chlorine, and the system or part thereof shall be valved off and allowed to stand for 24 hours; or the system or part thereof shall be filled with a water/chlorine solution containing at least 200 parts per million (200 mg/L) of chlorine and allowed to stand for 3 hours.
3. Following the required standing time, the system shall be flushed with clean potable water until the chlorine is purged from the system.
4. The procedure shall be repeated where shown by a bacteriological examination that contamination remains present in the system.

Exception: With prior approval the Code Official may waive this requirement when deemed un-necessary.

Section 701.2.1 Availability determination shall be adding as a new section to read as follows:

701.2 .1. Availability determination. The availability of the public sewer to the building, lot or premises shall be

determined by the City Director of Engineering.

Section 703.6 Combined sanitary and storm public sewer shall be deleted in its entirety.

Section 704.5 Single stack fittings shall be added as a new section to read as follows:

704.5 Single stack fittings. Single stack fittings with internal baffle, PVC schedule 40 or cast iron single stack shall be designed by a registered engineer and comply to a national recognized standard.

Section 705.11.2 Solvent cementing shall be amended by deleting the exceptions in their entirety.

Table 710.1(1) Building Drains and Sewers and Table 710.1(2) Horizontal Fixtures Branches and Stacks shall be amended by adding a footnote "d." to read as follows:

d. Minimum 2 inch DWV piping is required below the first floor level of a slab on grade or similar foundation.
[Annotation "d" to be placed after each table title.]

Section 712.5 Dual pump system shall be added as a new section as follows:

712.5 Dual Pump System. All sumps shall be automatically discharged and, when in any "public use" occupancy where the sump serves more than 10 fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see Section 1113.

Section 714 Title shall be amended as follows:

SECTION 714
ENGINEERED DRAINAGE DESIGN

Section 714.1 Design of drainage system shall be amended to read as follows:

714.1 Design of drainage system. The sizing, design and layout of the drainage system shall be designed by a registered engineer using *approved* design methods.

Section 804.2 Special waste pipe, fittings and components shall be added as a new section to read as follows:

804.2 Special waste pipe, fittings, and components. Pipes, fittings, and components receiving or intended to receive the discharge of any fixture into which acid or corrosive chemicals are placed shall be constructed of CPVC, high silicone iron, PP, PVDF, chemical resistant glass, or glazed ceramic materials.

Section 904.1 Roof extension shall be amended to read as follows:

904.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than 6 inches above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purpose, open vent pipes shall terminate not less than 7 feet above the roof.

Section 915.1 Type of fixture shall be amended to read as follows:

915.1 Type of fixture. A combination waste and vent system shall not serve fixtures other than standpipes, floor drains, sinks, lavatories and drinking fountains. Combination waste and vent systems shall not receive the discharge from food waste disposer or clinical sink.

Section 915.2 Installation shall be amended to read as follows:

915.2 Installation. The only vertical pipe of a combination drain and vent system shall be the connection between the fixture drain of a sink, standpipe, and the horizontal combination drain and vent pipe. The maximum vertical distance shall be 8 feet.

Section 917 Single stack vent system shall be deleted in its entirety.

Section 918.2.1 Installation approval shall be adding as a new section to read as follows:

918.2.1 Installation approval. The installation of air admittance valves shall not be permitted without first obtaining permission from the Building Official. The valves shall be installed in accordance with the requirements of this section and the manufacturer's installation instructions. Installation plans for air admittance valve systems must be submitted, in duplicate, specifically showing the location of all air admittance valves, relief vents, and vent stacks. One copy of the approved plan shall be required to remain on the job site until all inspections are completed. Air admittance valves shall be installed after the DWV testing required by Plumbing Code Section 312.2 or 312.3 has been performed.

Section 1002.10 Plumbing in mental health centers shall be deleted in entirety.

Section 1003.2 Approval shall be amended to read as follows:

1003.2 Approval. The size, type and location of each interceptor and of each separator shall be designed and installed in accordance with the City's health Department requirements, manufacture's instruction and the requirements of this section based on the anticipated conditions of use. Wastes that do not require treatment or separation shall not be discharged into any interceptor or separator.

Section 1003.3 Grease interceptors, shall be amended to read as follows:

1003.3 Grease interceptors. Grease interceptors shall comply with all requirement established by the City and shall comply with the requirements of Sections 1003.3.1 through 1003.3.5.

Section 1106.1 General shall be amended to read as follows:

1106.1 General. The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on the 100-year hourly rainfall rate of 6 inches per hour.

Section 1101.8 Cleanouts required shall be amended to read as follows:

1101.8 Cleanouts required. Cleanouts or manholes shall be installed in the storm drainage system and shall comply with the provisions of this code for sanitary drainage pipe cleanouts.

Section 1108.3 Sizing of secondary drains shall be amended to read as follows:

1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 of the Plumbing Code. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7 of the Plumbing Code. Scuppers shall not have an opening dimension of less than 4 inches. The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Section 1109 Combined sanitary and storm public sewer shall be deleted in its entirety.

Section 1202.1 Nonflammable medical gases shall be amended by deleting exception 2.

Section 10

Section 30.82 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.82 Adoption of the International Fuel Gas Code

The International Fuel Gas Code ("Fuel Gas Code"), 2015 edition, is hereby adopted by reference. A copy shall be kept on file in the office of the City Secretary. Unless deleted, amended, expanded or otherwise changed herein, all provisions of the Fuel Gas Code shall be fully applicable, binding, of full force and effect within the City.

Section 11

Section 30.83 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.83 Amendments, modifications, and deletions

The following sections of the International Fuel Gas Code ("Fuel Gas Code"), as adopted in section 30.82 of the Code of Ordinances, are amended, modified, or deleted as follows:

Section 101.1 Title shall be amended to read as follows:

101.1 Title. These regulations shall be known as the *Fuel Gas Code* of the City of Garland, hereinafter referred to as "this code." Administration of the Fuel Gas Code shall be in accordance with Chapter 1 of the Plumbing Code, which includes all provisions of Chapter 1301 of the Texas Occupations Code ("the Plumbing License Law"). This code shall apply only to those gas systems specifically regulated by the Plumbing License Law.

Section 102.2 Existing installations, add an exception to read as follows:

Exception: Existing dwelling units shall comply with Section 621.2.

Section 102.8 Referenced codes and standards, shall be amended to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 8 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well.

Section 106.6.2 Fee schedule, shall be amended to read as follows:

106.6.2 Fee schedule. The fee for such permit shall be as prescribed by the Fee Schedule located in Article XVI of Chapter 30 of the Code of Ordinances.

Section 304.10 Louvers and grilles, shall be amended to read as follows:

304.10 Louvers and grilles. The required size of openings for combustion, ventilation and dilution air shall be based on the net free area of each opening. Where the free area through a design of louver, grille or screen is known, it shall be used in calculating the size opening required to provide the free area specified. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 25-percent free area and metal louvers and grilles will have 50-percent free area. Screens shall have a mesh size not smaller than -inch. Non-motorized louvers and grilles shall be fixed in the open position. Motorized louvers shall be interlocked with the appliance so that they are proven to be in the full open position prior to main burner ignition and during main burner operation. Means shall be provided to prevent the main burner from igniting if the louvers fail to open during burner start- up and to shut down the main burner if the louvers close during operation.

Section 304.11 Combustion air ducts, item #8 shall be amended to read as follows:

8. Combustion air intake openings located on the exterior of a building shall have the lowest side of such openings located not less than 12 inches vertically from the adjoining ground level or the manufactures recommendation, whichever is more restrictive.

Section 305.5 Private garages, shall be deleted in its entirety.

Section 306.3 Appliances in attics, shall be amended to read as follows:

306.3 Appliances in attics. Attics containing appliances shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches high and 22 inches wide and not more than 20 feet in length along the centerline of the passageway from the opening to the appliance. The passageway shall have a continuous solid flooring not less than 24 inches wide. A level service space not less than 30 inches deep and 30 inches wide shall be present at the front or service side of the *appliance*. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches, or larger where such dimensions are not large enough to allow removal of the largest *appliance*. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb (136 kg) capacity.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.
2. Where the passageway is not less than 6 feet high for its entire length, the passageway shall not be greater than 50 feet in length.

306.5 Equipment and appliances on roofs or elevated structures, shall be amended to read as follows:

306.5 Equipment and appliance on roofs or elevated structures. Where equipment requiring access or appliances are located on elevated structures or the roof of a building such that personnel will have to climb higher than sixteen (16) feet (4877mm) above grade to access such equipment or appliance, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than thirty (30) inches (762mm) in height or walking on roofs having a slope greater than four (4) units vertical in twelve (12) units horizontal (33-percent slope). Such access shall not

require the use of portable ladders. Permanent exterior ladders providing access need not extend closer than eight (8) feet (2438mm) to the finished grade.

Section 306.5.1 Sloped roofs, shall be amended to read as follows:

306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*.

Section 306.5.1.1 Catwalks, shall be added to read as follows:

306.5.1.1 Catwalks. On roof having slopes greater four (4) units vertical in twelve (12) units horizontal (33-percent slope), a catwalk at least twenty-four (24) inches wide with substantial cleats not more than sixteen (16) inches apart shall be provided from the roof access to the working platform at the appliance.

Section 306.7 Water heaters above the ground floor, shall be added read as follows:

306.7 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A maximum 10 gallon water heater (or larger when approved by the Building Official) is capable of being accessed through a lay-in ceiling or a water heater is installed is not more than 10 feet above the ground or floor level and may be reached with a portable ladder.

Section 306.7.1 Illumination and convenience outlet, shall be added to read as follows:

306.7.1 Illumination and convenience outlet. Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with Section 306.3.1 of the Fuel and Gas Code.

Section 401.5 Identification, shall be amended to read as follows:

Section 401.5 Identification. For other than steel pipe, exposed piping shall be identified by a yellow label marked "Gas" in black letters. The marking shall be spaced at intervals not exceeding 5 feet. The marking shall not be required on pipe located in the same room as the appliance served. Both ends of each section of medium pressure corrugated stainless steel tubing (CSST) shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum or stainless steel and the following working shall be stamped into the tag:

"WARNING
½ to 5 psi gas pressure
Do Not Remove"

Section 402.3 Sizing, shall be amended by adding an exception to read as follows:

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of ½".

Section 404.9 Minimum burial depth, is amended to read as follows:

404.9 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 18 inches below grade.

Section 406.4 Test pressure measurement, shall be amended to read as follows:

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

Section 406.4.1 Test pressure, shall be amended to read as follows:

406.4.1 Test pressure. The test pressure to be used shall be no

less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 ½"), a set hand, 1/10 pound incrimination and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½"), a set hand, a minimum of 2/10 pound incrimination and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

Section 406.4.2 Test duration, shall be amended to read as follows:

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

Section 409.1.4 Valves in CSST installations, shall be added as a new section to read as follows:

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

Section 410.1 Pressure regulators, shall be amended to read as follows:

410.1 Pressure regulators. A line pressure regulator shall be installed where the appliance is designed to operate at a lower pressure than the supply pressure. Line gas pressure regulators shall be listed as complying with ANSI Z21.80. Access shall be provided to pressure regulators. Pressure regulators shall be protected from physical damage. Regulators installed on the exterior of the building shall be approved for outdoor installation. Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

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

Section 503.6.11 Support of gas vents, shall be amended to read as follows:

503.6.11 Support of gas vents. Gas vents shall be supported and spaced in accordance with the manufacturer's installation instructions. Supports shall be installed at every offset and at the vent pipe where it extends through the roof flashing, roof jack or roof thimble. Adjustable fittings shall not be used as lateral support for roof penetration.

Section 621.2 Prohibited use, shall be amended to read as follows:

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

Exception: Existing approved unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Code Official unless an unsafe condition is determined to exist.

Section 12

Section 30.225 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.225 Adoption of the International Residential Code

The 2015 edition of the International Residential Code ("Residential Code") is hereby adopted by reference. A copy shall remain on file in the office of the City Secretary. Unless deleted, amended, expanded or otherwise changed herein, all provisions of this code

shall be fully applicable and binding and of full force and effect. The adoption of the Residential Code includes appendix sections A, B, C, and G (as amended herein). Such adoption does not include part VIII (Electrical) of the Residential Code.

Section 13

Section 30.226 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.226 Amendments, modifications, and deletions

The following sections of the 2015 International Residential Code, as adopted in section 30.225 of the Code of Ordinances, are amended, modified or deleted as described below:

Section 101.1 Title shall be amended to read as follows:

R101.1 Title. These regulations shall be known as the Residential Code of the City of Garland, hereinafter referred to as the "Residential Code."

Section R101.2 Scope, shall be amended by amending the exception to read as follows:

Exception: At the discretion of the Building Official, existing buildings undergoing repair, alteration or additions, and change of occupancy may with prior approval be permitted to comply with the Appendix J of this code or with the International Existing Building Code.

Section R102.4.1 Conflicts shall be amended to read as follows:

R102.4.1 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards the provisions of this code shall apply.

Where differences occur between provisions of this code and the Code of Ordinances the provisions of the Code of Ordinances shall control.

Section R103.1 Enforcement agency, shall be amended to read as follows:

R103.1 Enforcement agency. The Building Inspection Department shall enforce the provisions of this code.

The official in charge shall be the Building Official.

Section R105.2 Work exempt from permit, shall be amended to read as follows:

R105.2 Work exempt from permit. Exemption 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 the City of Garland. Permits shall not be required for the following:

Building:

1. Dog houses or detached accessory buildings not exceeding 20 square feet.
2. Minor foundation repair or minor roof repair of less than \$2,000.00.
3. Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge. See R404.4 of the Residential Code for additional requirements on unbalanced fill.
4. Decks not exceeding 200 square feet in area, that are not attached to a dwelling and do not obstruct the exit door required by Section R311.4. Uncovered decks not over 30 inches above grade.
5. Painting, papering, tiling, carpeting, counter tops, cabinets and similar finish work.
6. Prefabricated swimming pools that are less than 24 inches deep.
7. Swing sets, playhouses, children's forts, and tree houses not larger than 100 square feet located entirely in the rear yard.
8. Window awnings support by an exterior wall that do not project more than 54 inches from the exterior wall and do not require additional support, provided they do not extend into the required front yard or closer than 3 feet to a side or rear property line when fully extended.

{Balance of section unchanged}

Section R105.5 Expiration shall be amended to read as follows:

R105.5 Expiration. An individual permit issued by the Building Official shall expire by limitation and become null and void on the expiration of 2 years after its issuance if no progress has been made toward the completion of the project, or upon expiration of the project. (A project shall

expire immediately after the fifth anniversary of the date the first permit application was filed for the project if no progress had been made towards completion of the project.) Once a permit for particular work has expired, a new permit must be applied for and obtained before the work can be commenced. The permit fee shall be the full amount required for a new permit for such work. The Building Official shall determine the extent to which the work must comply with any new regulations that were not in effect at the time the original permit was issued.

Section R105.10 shall be amended by adding a new section and subsection to read as follows:

R105.10 Contractor registration and supervision of work. Any person providing services as a building, electrical, mechanical, roofing, irrigation, fire sprinkler or plumbing contractor in the City shall register with the Building Inspection Department as a contractor. Application shall be made in writing on forms furnished for that purpose and filed with the Building Official. The application shall show the contractor's name, local address and telephone number, a copy of the contractor's state license or registration (if applicable), and such other information as may reasonably be required to properly identify the contractor. Such registration shall include payment of a fee as prescribed in the fee schedule located in article XVI of chapter 30 of the Code of Ordinances.

R105.10.1 Roofing Contractors. Any roofing or roofing repair work that exceeds \$2000.00 must be performed by a contractor registered in conformance with R105.10. As a condition of the registration the roofing contractor shall provide the City with a certificate of insurance issued by a company or companies authorized to transact business in Texas and rated at least "A" or AM Best or other equivalent insurance rating service. A contractor must have and maintain, throughout the performance of the roofing work, a policy or policies of insurance for bodily injury, death and property damage insuring against all claims, demands or actions relating to the contractor's performance of its work with (1) a policy of comprehensive general liability insurance with combined single limit of not less than \$300,000.00 per occurrence for bodily injury and property damage with an aggregate of not less than \$600,000.00 and an aggregate of not less than \$300,000.00 for products and completed operations; and (2) a policy of automobile liability insurance covering any vehicles owned and/or operated by the contractors, its officers, agents, and employees, and used in the performance of its roofing work with minimum coverage of as provided by the Texas

Transportation Code. A certificate of insurance evidencing the required insurance will be submitted by the contractor to the owner of the dwelling unit upon request. The roofing permit shall contain the following notice:

'Your roofing contract may be subject to Chapter 58, Texas Business and Commerce Code. That law provide that, for disaster remediation work, unless your contractor has maintained a physical business address in either Dallas County, Texas or a county adjacent to Dallas County for at least one year preceding the date of your roofing contract, then your roofing contractor may not require full or partial payment (such as a deposit or down-payment) before the contractor begins work and, after the work begins, may not require partial payments in an amount that exceeds an amount reasonably proportionate to the work performed, including any materials delivered.'

Section R106.1 Submittal Documents shall be amended by adding a sentence to the end of the section to read as follows:

The Building Official may require documents to be submitted in an electrical format as an alternate to paper copies.

Section R109.1.5.2 Erosion Control shall be amended by adding a new subsections to read as follows:

R109.1.5.2 Erosion Control. Erosion control inspection will be conducted at various time during the construction process.

Section R109.5.3 Special Inspector shall be amended by adding a new subsection to read as follows:

R109.1.5.3 Special inspector. In addition to the inspections required by the Residential Code, the owner shall employ a special inspector specialized in that type of construction during construction when deemed necessary by the Building Official.

Section R110 Certificate of Occupancy is deleted in its entirety.

Section R112 Appeals and Code Amendments is amended to read as follows:

**SECTION R112
APPEALS AND CODE AMENDMENTS**

R112.1. Chapters 1-11 Appeals and code amendments. Appeals and code amendments concerning Chapters 1-11 and appendix G shall be processed in accordance with the provisions set forth in the Building Code as adopted and amended in Chapter 30, Article I, of the City of Garland Code of Ordinances.

R112.2. Chapter 12-32 Appeals and code amendments. Appeals and code amendments concerning Chapters 12-32 and appendixes A, B and C shall be processed in accordance with the provisions set forth in the Mechanical Code as adopted and amended in Chapter 30, Article IV of the City of Garland Code of Ordinances.

Section R115 Working hours, shall be amended by adding a new section to read as follows:

**SECTION R115
WORKING HOURS**

R115.1 Construction hours established. Any outside work being done adjacent to an occupied residential subdivision or adjacent to an occupied residential use, including multifamily uses, shall be allowed only between 7:00 a.m. and 8:00 p.m. each day of the week. Any outside work being done adjacent to an occupied residential subdivision or adjacent to an occupied residential use including multifamily uses, shall be prohibited between the hours of 8:00 p.m. and 7:00 am each day of the week.

R115.2 Other regulations unaffected. This section does not authorize violation of any other legally established regulation, either public or private, regulating noise nuisance to residents.

R115.3 Exceptions. These regulations do not affect emergency work being done to secure a structure or to reestablish utility service to a structure.

R115.4 Variance. The Director of Health, in accordance with section 22.76 of the Code of Ordinances of the City, may issue a permit of variance to these regulations.

Section R202 Definitions shall be amended to redefine the following terms:

ACCESSORY STRUCTURE. A subordinate building, containing more than 20 square feet of area and more than 4 feet in height, which is detached from the main building and is clearly secondary and incidental to the main building on, and use of, the property.

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

Table R301.2(1) Climatic and Geographic Design Criteria table shall be amended by completing the table as follows:

Ground Snow Load...5lb/ft²
Wind Design
 Speed...115(3sec-gust)/76 fastest mile
 Topographic effects...No
 Special wind region...No
 Wind-borne debris zone...No
Seismic Design Category...A
Subject to Damage From:
 Weathering...Moderate
 Frost line depth...6 inches
 Termite... Very Heavy
Winter Design Temp...22°F
Ice Barrier Underlayment Required... No
Flood Hazards...Local Code
Air Freezing Index...69
Mean Annual Temp...64.6°F

Section R302.1 Exterior wall, shall be amended to read as follows:

R302.1 Exterior walls. Exterior walls with a fire separation distance less than 3 feet shall have not less than a one-hour fire-resistive rating with exposure from both sides. Projections shall not extend to a point closer than 2 feet from the line used to determine the fire separation distance.

Exception: Detached garages accessory to a dwelling located within 2 feet of a lot line may have roof eave projections not exceeding 4 inches.

Projections extending into the fire separation distance shall have not less than one-hour fire resistive construction on the underside. The above provisions shall not apply to walls which are perpendicular to the line used to determine the fire separation distance.

Exceptions:

1. Structures exempted from permits by R105.2 are not required to provide wall protection based on location on the lot. Projections beyond the

exterior wall shall not extend over the lot line.

2. Open metal carport structures may be constructed on the property line without fire-resistive or opening protection when the location of the carport is approved as provided by the Code of Ordinances.
3. Type U occupancies (not garages or carports), less than 145 square feet in size need not be separated from the use to which they are an accessory.

Section R302.2 Townhouses shall be amended by amending its applicable exception to read as follows:

Exception: A common two-hour fire-resistance-rated wall assembly, or one-hour fire-resistance-rated wall assembly, when equipped with a sprinkler system, is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43 of the Residential Code. Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

Section R302.2.4 Structural Independence shall be amended by amending exception 5 to read as follows:

5. Townhouses separated by a common two-hour fire resistance-rated wall, or one-hour fire resistant rated wall, when equipped with an automatic sprinkler system.

Section R302.3 Two-family dwellings, shall be amended by adding a new exception to read as follows:

3. Two-family dwelling units that are also divided by a property line through the structure shall be separated as required for townhouses.

Section R302.7 Under-stair protection shall be amended to read as follows:

R302.7 Under stair protection. Enclosed accessible space under stairs shall have walls, under stair surface and any soffits protected on the enclosed side with 5/8-inch fire-rated gypsum board or one-hour fire-resistive construction.

Section R303.3 Bathrooms shall be amended by amending its applicable exception to read as follows:

Exception: The glazed areas shall not be required where artificial light and local exhaust systems are provided. The minimum local exhaust rates shall be determined in accordance with Section M1507. Exhaust air from the space shall be exhausted out to the outdoors unless the space contains only a water closet, a lavatory or water closet and a lavatory may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

Section R 311.2 Egress Doors shall be amended by adding an exception to read as follows:

Exception: Exit doors may be provided with a night latch, dead bolt or security chain, provided such devices are mounted at a height not to exceed 48 inches above the finished floor.

Section 313.2 One- and two-family dwellings automatic fire systems shall be amended to read as follows:

R313.2 One and two-family dwellings automatic fire systems. An automatic sprinkler system shall be installed in any structure with more than 5,000 square feet of enclosed floor area. For the purpose of this section, a structure includes separate dwelling units that are physically connected, regardless of separation by fire rated walls and property lines. Areas under patio covers and carports shall not be required to be sprinklered.

Section R319.1 Address identification shall be amended to read as follows:

R319.1 Address identification. (A) Address numbers representing the actual, current, and accurate street address of the premises shall be placed and continuously displayed on any building that constitutes a residential premises.

(B) Address numbers shall:

(1) Be placed and continuously displayed in a position on the building that is readily visible from the street fronting the property;

(2) Be and remain legible;

(3) Contrast with the background on which they are placed;

(4) Consist solely of Arabic numbers or alphabetical letters, as appropriate to accurately reflect the address;

(5) Be not less than 4 inches in height with a stroke width of not less than 0.5 inches; and

(6) Be pre-manufactured or professionally lettered.

(C) Additional address numbering shall be placed and continuously displayed in compliance with subsection (B):

(1) Where required by the fire code official at additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from a street, a monument, pole or other sign or means may be required to identify the premises; and

(2) At the rear of the premises if the owner of the premises has maintenance responsibility for the area behind the premises, for example (but not in limitation) if the premises is served by an alley, common area, or easement. A requirement provided by other law or a deed restriction that a premises must have a gate or other access to the adjoining area of responsibility is prima facie evidence that addressing on the rear of the premises is required under this subsection."

Section R320.1 Scope shall be amended to read as follows:

R320.1 Scope. Accessible dwelling units shall comply with the Texas Accessibility Standards as applicable.

Section R322.2.1 Elevations requirements, shall be amended to read as follows:

R322.2.1 Elevation requirements.

1. Buildings and structures in flood hazard area, including flood hazards areas designated as Coastal A Zones, shall have the lowest floor elevation to or above the base flood elevation plus 2 feet or the design flood elevation.
2. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including basement) elevated to a height of not less than the highest adjacent grade as the depth number specified in feet on the FIRM plus 2 feet, or not less than 3 feet if a depth number is not

specified.

3. Basement floors that are below grade on all sides shall be elevated to or above the base flood elevation plus 2 feet or the design flood elevation, whichever is higher.

Exception: Enclosed areas below the design flood elevation, including basement with floors that are not below grade on all sides shall meet the requirements of Section R322.2.2.

Section R401.1 Application shall be amended by adding a new exception to read as follows:

3. In lieu of the requirements of this section, the Building Official may accept an alternative design if the foundation is designed by a professional structural engineer who is licensed by the State of Texas.

Section 401.2.1 Post tension foundations shall be amended by adding a subsection to read as follows:

401.2.1 Post tension foundations. Post tension foundations shall be designed by a professional structural engineer licensed by the State of Texas. Foundation construction shall be certified as meeting the design of the engineer by a special inspector or by the designing engineer.

Section R401.2.2 Foundation repair shall be amended by adding a new section to read as follows:

R401.2.2 Foundation repairs. Foundation repair shall be designed by a professional structural engineer licensed by the State of Texas. Foundation repair shall be certified as meeting the design of the engineer by a special inspector or by the designing engineer.

Section R401.3.1 Grading and drainage shall be amended by adding a new section to read as follows:

R401.3.1 Grading and drainage. Grading and drainage shall conform with Chapter 31, Article II, Section 31.24 of the City of Garland Code of Ordinances.

Section R401.3.2 Protection to adjoining property shall be amended by adding a new section to read as follows:

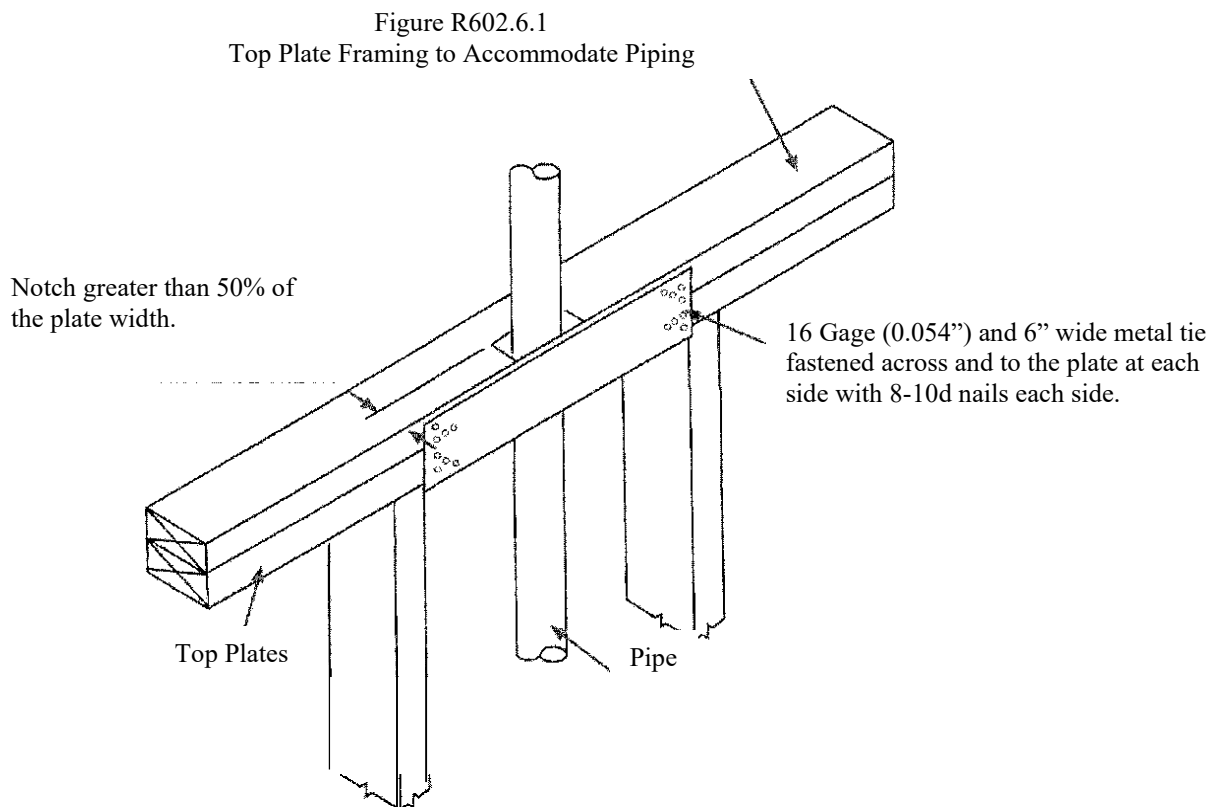
R401.3.2 Protection of adjoining property. The requirements for protection of adjacent property and the depth to which the protection is required shall be

defined by prevailing law. Lateral support of adjoining property is of a civil nature between adjoining property owners.

Section 602.6.1 Drilling and notching of top plate shall be amended to read as follows:

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

Figure R602.6.1 Top Plate Framing to Accommodate Piping shall be deleted in its entirety and the following figure shall be inserted in its place:



Section R703.8.4.1 shall be amended by adding a second paragraph to the end of the section to read as follows:

In stud framed exterior walls, all ties shall be anchored to studs as follows:

1. When studs are 16 inches o.c., stud ties shall be spaced no further apart than 24 inches vertically starting approximately 12 inches from the foundation; or
2. When studs are 24 inches o.c., stud ties shall be spaced no further apart than 16 inches vertically starting approximately 8 inches from the foundation.

Section R902.1 Roofing covering materials shall be amended to read as follows:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set for the in Section R904 and R905. Only class A, B, C roofing shall be installed. Class A, B and C roofing requirements by this section to be listed shall be tested in accordance with UL790 or ASTM E 108.

Exceptions:

1. {Text unchanged}
2. {Text unchanged}
3. {Text unchanged}
4. {Text unchanged}
5. Non-classified roof coverings shall be permitted on one-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 100 square feet.

Chapter 11 Energy Efficiency, the contents of Chapter 11 shall be deleted in their entirety and replaced with the following:

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

N1101.2 Compliance. Compliance shall be demonstrated by meeting the requirement of the residential provisions of the 2015 International Energy Conservation Code as amended in conformance with State law.

Section M1305.1.3Appliances in attics, shall be amended to read

as follows:

M1305.1.3 Appliances in attics. Attics containing appliances requiring access for maintenance, repair, or replacement shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches high and 22 inches wide and not more than 20 feet in length measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous unobstructed solid flooring not less than 22 inches wide. A level service space not less than 30 inches deep and 30 inches wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches or shall be larger where such dimensions are not large enough to allow removal of the largest appliance. As a minimum, access to the attic space shall be provided by one of the following:

1. A permanent stair;
2. A pull down stair with a minimum 300 lb capacity;
3. An access door from an upper floor level; or
4. An access panel may be used in lieu of items 1, 2, or 3 with prior approval of the Building Official due to building conditions.

Exception: The passageway and level service space are not required where the appliance is capable of being removed through the required opening.

Section M1503.4 Makeup air required shall be amended to read as follows:

M1503.4 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute shall be provided with makeup air at a rate approximately equal to the difference between the exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception: Where all appliances in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute without providing make up air. Exhaust hood system capable of exhausting in excess of 600 cubic feet per minute shall be provided with a makeup air at a rate

approximately equal to the difference between the exhaust air rate and 600 cubic feet per minute.

Section M2005.2 Prohibited locations shall be amended to read as follows:

M2005.2 Prohibited locations. Fuel fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that combustion air will not be taken from the living space. Access to such enclosure may be from the bedroom or bathroom when through a solid door, weather stripped in accordance with the exterior door air leakage requirements of the international Energy Conservation Code and equipped with an approved self-closing device. Installation of direct-vent water heaters within enclosure is not required.

Section G2408.3 shall be deleted in its entirety.

Section G2415.2.1 Identification shall be amended by adding a new subsection to read as follows:

G2415.2.1 Identification. For other than steel pipe, exposed piping shall be identified by a yellow label marked "Gas" in black letters. The marking shall be spaced at intervals not exceeding 5 feet. The marking shall not be required on pipe located in the same room as the appliance served. Both ends of each section of medium pressure corrugated stainless steel tubing (CSST) shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum or stainless steel and the following working shall be stamped into the tag:

"WARNING
½ to 5 psi gas pressure
Do Not Remove"

Section G2414.5.3 Corrugated stainless steel tubing shall be amended to read as follows:

G2414.5.3 Corrugated stainless steel tubing. Corrugated stainless steel tubing shall be listed in accordance with ANSI LC1/CSA 6.26. Corrugated stainless steel tubing shall be a minimum of ½ inch in size.

Section G2415.12 Minimum burial depth shall be amended to read as follows:

G2415.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 18 inches below grade.

Section G2415.12.1 Individual outside appliances shall be deleted in its entirety.

Section G2417.4 Test pressure measurement, shall be amended to read as follows:

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

Section G2417.4.1 Test pressure, shall be amended to read as follows:

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

Section G2417.4.2 Test duration, shall be amended to read as follows:

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

Section G2420.1.4 Valves in CSST installations, shall be added as a new section to read as follows:

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

Section G 2421.1 Pressure regulators, shall be amended to read as follows:

G2421.1 Pressure regulators. A line pressure regulator shall be installed where the appliance is designed to operate at a lower pressure than the supply pressure. Line gas pressure regulators shall be listed as complying with ANSI Z21.80. Access shall be provided to pressure regulators. Pressure regulators shall be protected from physical damage. Regulators installed on the exterior of the building shall be approved for outdoor installation. Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

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

Section G2445.2 Prohibited use, shall be amended to read as follows:

G2445.2 Prohibited use. One or more unvented room heaters shall

not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing approved unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Code Official unless an unsafe condition is determined to exist.

Section G2448.1.1 Installation requirements shall be amended to read as follows:

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

Section P2801.6.1 Pan size and drain shall be amended to read as follows:

P2801.6.1 Pan size and drain. The pan shall be not less than 1 1/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

Section P2804.6.1 Requirement for discharge piping shall be amended to read as follows:

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

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

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by

the Building Official and permitted by the manufacture's installation instructions and installed per those instructions.

5. Discharge to an indirect waste receptor or to the outdoors. Where discharging to the outdoors in areas subject to freezing, discharge piping shall be first piped to an indirect waste receptor through an air gap located in a conditioned area.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate less than 6 inches or more than 24 inches above grade.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and *approved* for such use in accordance with ASME A112.4.1.

Section P2902.5.3 Lawn irrigation systems shall be amended to read as follows:

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

Section P3003.9 Solvent cementing shall be amended by deleting the exceptions in their entirety.

Section P3112.2 Installation shall be amended to read as follows:

P3112.2 Installation. Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drain board height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent

shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition then then through the roof to the open air or may be connected to their vents at a point not less than six (6) inches above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of $\frac{1}{4}$ inch per foot back to the drain shall be maintained. The return bend used under the drain-board shall be a one (1) piece fitting or be a forty-five (45) degree, a ninety (90) degree and a forty-five (45) elbows in the order named. Pipe sizing shall be as elsewhere required in this code. The island sink drain, upstream of the return vent shall serve no other fixtures. An accessible cleanout shall be installed on the vertical portion of the foot vent.

Section 14

Section 30.251 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.251 Adoption of the International Energy Conservation Code

The 2015 edition of the International Energy Conservation Code ("Energy Conservation Code") is hereby adopted by reference. A copy shall remain on file in the office of the City Secretary. Unless deleted, amended, expanded or otherwise changed herein, all provisions of the Energy Conservation Code shall be fully applicable and binding and of full force and effect.

Section 15

Section 30.252 of Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas is hereby amended to read as follows:

Sec. 30.252 Amendments, modifications, and deletions

The following sections of the International Energy Conservation Code, as adopted in section 30.251 of the Code of Ordinances, are amended as described below:

Sections C101.1 & R101.1 Title shall be amended to read as follows:

C101.1 & R101.1 Title. These regulations shall be known as the Energy Conservation Code of The City of Garland, Texas (hereinafter referred to as "the Energy Conservation Code") and shall be cited as such. It is referenced to herein as "this code."

Section C102.1.2 & R102.1.2 Alternative compliance shall be amended to read as follows:

C102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Building Official, be

considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

R102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Building Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance. Regardless of the program or the path to compliance, each 1- and 2-family dwelling shall be tested for air and duct leakage as prescribed in Section R402.4 and R403.3.3 respectively.

Sections C202 & R202 General Definitions shall be amended by adding the following definitions:

DYNAMIC GLAZING. Any fenestration product that has the fully reversible ability to change its performance properties, including *U*-factor, solar heat gain coefficient (SHGC), or visible transmittance (VT).

ENERGY STAR. ENERGY STAR is a joint program of the United States Environmental Protection Agency and United States Department of Energy. It provides technical information and resources related to energy efficiency, and it provides a recognition program for consumer goods as well as new homes and commercial and industrial buildings.

ENERGY SYSTEMS LABORATORY ("ESL"). ESL is a division of the Texas Engineering Experiment Station and a member of the Texas A&M University System. ESL assists with the calculation of emissions reduction benefits from energy efficiency and renewable energy initiatives as part of the Texas Emissions Reduction Program ("TERP").

GLAZING AREA. Total area of the glazed fenestration measured using the rough opening and including sash, curbing or other framing elements that enclose conditioned space. Glazing area includes the area of glazed fenestration assemblies in walls bounding conditioned basements. For doors where the daylight opening area is less than 50 percent of the door area,

the glazing area is the daylight opening area. For all other doors, the glazing area is the rough opening area for the door including the door and the frame.

HERS INDEX. A HERS Index of 100 represents the energy use of the "American standard building" and a HERS Index of 0 (zero) represents a building using no net purchased energy (a "zero energy building"). Lower HERS Index scores indicate greater energy efficiency.

HISTORIC BUILDING. Any building or structure that is listed in the State or National Register of Historic Places; designated as a historic property under local or state designation law or survey; certified as a contributing resource within a National Register-listed or locally designated historic district or with an opinion or certification that the property is eligible to be listed on the National or State Registers of Historic Places, either individually or as a contributing building, to a historic district by the State Historic Preservation Officer of the Keeper of the National Register of Historic Places.

HOME ENERGY RATER. A person who performs a standardized evaluation of the energy efficiency of a building. The rater conducts onsite inspections and tests, including a blower door test and a duct test, the results of which are used to generate a final HERS Index for a building.

HOME ENERGY RATING SYSTEM ("HERS"). A home energy rating is an analysis of a building's projected energy efficiency in comparison to a "reference home" (the current reference home is based on the 2006 International Energy Conservation Code, but is subject to change). A home energy rating involves analysis of a home's construction plans and onsite inspections and testing by a certified home energy rater. This analysis yields a projected, pre-construction HERS Index.

INTERNATIONAL CODE COMPLIANCE CALCULATOR ("IC3"). Developed by ESL, IC3 is a software tool that compares the energy efficiency of a proposed construction design to the energy efficiency of ESL's standard construction design.

PROJECTION FACTOR. The ratio of the horizontal depth of the overhang, eave, or permanently attached shading device, divided by the distance measured vertically from the bottom of the

fenestration glazing to the underside of the overhang, eave or permanently attached shading device.

Sections C303.1.5 & R303.1.5 Spray foam, shall be added to read as follows:

Sections C303.1.5 & R303.1.5 Spray foam. Where spray-applied polyurethane foam is installed, the installer must provide product information from the insulation manufacturer indicating a flame spread index of not more than 25 and a smoke-developed index of not more than 450 when tested in accordance with ASTM E84 or UL723.

Sections C402.2.7 & R402.2.14 Insulation installed in walls shall be added to read as follows:

Sections C402.2.7 & R402.2.14 Insulation installed in walls. To insure that insulation remains in place, insulation installed in walls shall be totally enclosed on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting or other equivalent material approved by the Building Official.

Section R402.3.2 Glazed fenestration SHGC, shall be added to read as follows:

R402.3.2 Glazed fenestration SHGC. Where vertical fenestration is shaded by an overhang, eave, or permanently attached shading device, the SHGC required in Table R402.1.2 shall be reduced by using the multipliers in Table R402.3.2 SHGC Multipliers for Permanent Projections.

Table R402.3.2 SHGC Multipliers for Permanent Projections shall be added to read as follows:

Table R402.3.2 SHGC Multipliers for Permanent Projections ^a

Projection Factor	SHGC Multiplier (all Other Orientation)	SHGC Multiplier (North Oriented)
0 - 0.10	1.00	1.00
>0.10 - 0.20	0.91	0.95
>0.20 - 0.30	0.82	0.91
>0.30 - 0.40	0.74	0.87
>0.40 - 0.50	0.67	0.84

>0.50 - 0.60	0.61	0.81
>0.60 - 0.70	0.56	0.78
>0.70 - 0.80	0.51	0.76
>0.80 - 0.90	0.47	0.75
>0.90 - 1.00	0.44	0.73

^a North oriented means within 45 degrees of true north.

R402.4.1.2 Testing, this paragraph shall be added to the end of the section as follows:

Mandatory testing shall only be performed by individuals that are certified to perform air infiltration testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure. The testing agency shall submit a Residential Testing Compliance Certificate to the Building Official.

R403.3.3 Duct Testing (Mandatory), this paragraph shall be added to the end of the section as follows:

Mandatory testing shall only be performed by individuals that are certified to perform duct testing leakage testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure. The testing agency shall submit a Residential Testing Compliance Certificate to the Building Official.

Section R405.6.2 Specific approval, this sentence shall be add to the end of this section to read as follows:

Acceptable performance software simulation tools may include, but are not limited to, REM Rate™, Energy Gauge and IC3. Other performance software programs accredited by RESNET BESTEST and having the ability to provide a report as outlined in R405.4.2 may also be deemed acceptable performance simulation programs and may be considered by the building official.

TABLE R406.4 MAXIMUM ENERGY RATING INDEX, shall be amended to read as follows:

TABLE R406.4¹
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	65

¹ This table is effective until August 31, 2019.

TABLE R406.4²
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	63

² The table is effective from September 1, 2019 to August 31, 2022.

TABLE R406.4³
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	59

³ This table is effective on or after September 1, 2022.

Section 16

That Chapter 30, "Building Inspection," of the Code of Ordinances is hereby amended by adding Sec. 30.270 to read as follows:

Sec. 30.270 Adoption of the International Property Maintenance Code

The following provisions (as are enumerated in Sec. 30.271) of the International Property Maintenance Code ("Property Maintenance Code"), 2015 edition, are hereby adopted by reference. A copy shall be kept on file in the Office of the City Secretary. If so adopted, the adopted provisions of the Property Maintenance Code shall be fully applicable, binding, and of full force and effect within the City. When any section of, or amendment to, the Property Maintenance Code conflicts with a provision of the Code of Ordinances, the Code of Ordinances shall control.

Section 17

That Chapter 30, "Building Inspection," of the Code of Ordinances is hereby amended by adding Sec. 30.271 to read as follows:

Sec. 30.271 Amendments, modifications, and deletions

The following sections of the International Property Maintenance Code are adopted as follows:

Section 101 Scope and Administration shall be adopted, provided that Section 101.2 shall be amended to read as follows:

101.2 Scope. The provisions of this code shall apply to all existing nonresidential structures and all existing nonresidential premises and constitutes the minimum requirements and standards for premises, structures, equipment and facilities for light, ventilation, space, heating, sanitation, protection from the elements, a reasonable level of safety from fire and other hazards, and for safe; and a reasonable level of sanitary maintenance; the responsibility of owners, owner's authorized agents, operators, and occupants; the occupancy of existing structures and premises, and for administration, enforcement and penalties.

Section 108 Unsafe structures and equipment shall be adopted.

Chapter 2 Definitions shall be adopted, with the exception of the definition of "inoperable vehicle," which is hereby deleted.

Section 301 General shall be adopted.

Section 304 Exterior Structure shall be adopted.

Section 305 Interior Structure shall be adopted.

Section 306 Component Serviceability shall be adopted.

Section 307 Handrails & Guardrails shall be adopted.

Chapter 8 Referenced Standards shall be adopted.

Appendix A Boarding Standard shall be adopted.

Section 18

That a violation of any provision of this Ordinance shall be a misdemeanor punishable in accordance with Sec. 10.05 of the Code of Ordinances of the City of Garland, Texas.

Section 19

That Chapter 30, "Building Inspection," of the Code of Ordinances of the City of Garland, Texas, amended, shall be and remain in full force and effect save and except as amended in this Ordinance.

Section 20

That the terms and provisions of this Ordinance are severable and are governed by Sec. 10.06 of the Code of Ordinances of the City of Garland, Texas.

Section 21

That this Ordinance shall pursuant to Texas Local Government Code Section 214.218 be and become effective 30 days after its passage and approval.

PASSED AND APPROVED this __16th__ day of ____August____, 2016.

CITY OF GARLAND, TEXAS

Mayor

ATTEST:

City Secretary