ORDINANCE NO. 3186

"AN ORDINANCE AMENDING THE STILLWATER CITY CODE REGARDING THE 2009 INTERNATIONAL BUILDING CODE, AMENDING CHAPTER 10, BUILDINGS AND BUILDING REGULATIONS, ARTICLE III. BASIC BUILDING CODE, SECTION 10-54; ARTICLE IV. ONE- AND TWO-FAMILY DWELLING CODE, SECTION 10-90; ARTICLE V. PROPERTY MAINTENANCE CODE, SECTIONS 10-111, 10-112 AND 10-113; ARTICLE VII. EXISTING BUILDINGS, SECTIONS 10-234, 10-235 AND BY CREATING SECTION 10-237; ARTICLE VIII. PLUMBING STANDARDS, SECTIONS 10-289, 10-290 AND 10-291; ARTICLE IX. GAS STANDARDS, SECTIONS 10-374, 10-375 AND 10-376; ARTICLE X. MECHANICAL STANDARDS, SECTIONS 10-396, 10-397 AND 10-398, AND BY AMENDING THE STILLWATER CITY CODE REGARDING THE 2011 NATIONAL ELECTRICAL CODE BY AMENDING ARTICLE XI. ELECTRICITY, SECTIONS 10-485 AND 10-486; AND BY AMENDING THE STILLWATER CITY CODE REGARDING THE 2009 INTERNATIONAL FIRE CODE BY AMENDING CHAPTER 20, FIRE PREVENTION AND PROTECTION, ARTICLE III. FIRE PREVENTION AND PROTECTION, SECTIONS 20-49 AND 20-50."

(AMENDMENTS HIGHLIGHTED BY STRIKETHROUGH AND UNDERLINING)

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF STILLWATER, OKLAHOMA THAT:

SECTION 1: That the Stillwater City Code, Chapter 10, Buildings and Buildings Regulations, Article III. Basic Building Code, Section 10-54, Deletions, modifications, amendments and insertions, be repealed and amended to read as follows:

ARTICLE III. BASIC BUILDING CODE

Sec. 10-54. Deletions, modifications, amendments and insertions.

The International Building Code, 2009 edition, is hereby amended in the following aspects.

101.1, Title. Insert the words "the City of Stillwater, Oklahoma" for and in exchange of the words "[Name of Jurisdiction]."

103.1, Creation of enforcement agency, is hereby deleted in its entirety and replaced with:
103.1 Creation of building safety division. The building safety division of the development services department is hereby created and the official in charge thereof shall be known as the building official.

103.2, Appointment. The following shall be inserted into the end of this paragraph: The chief appointing authority of the jurisdiction shall be the city manager.

103.3, Deputies, is hereby repealed and replaced to read:
The city manager shall appoint all employees within the building safety division and such employees shall have the powers as established by the city manager and/or as delegated by the building official.

104.1, General, is hereby repealed and replaced to read:
The building official is hereby authorized to enforce the provisions of this code. The building official shall have the authority and responsibility to identify and assess local conditions and prevailing building practices, to render interpretations of this code, and establish procedures to clarify the practical application of its provisions. Such interpretations and procedures shall be consistent with the intent of this code as it pertains to local conditions.

104.10, Modifications, is hereby repealed and replaced to read to:
Literal compliance. Wherever there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to accept

alternative or equivalent methods, processes, or materials in individual cases, upon application of the owner or owner's representative, provided the building official shall first find that existing circumstances make application of the strict letter of this code impractical and acceptance of an alternative or equivalent method, process, or material is consistent with the intent and purpose of this code and does not lessen health, accessibility, life or safety, or structural standards.

104.11, Alternative materials, design and methods of construction and equipment, is hereby repealed and replaced to read:
The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and consistent with the intent of 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 quality, strength, effectiveness, fire resistance, durability and safety.

105.2, Work exempt from permit, Building: 1, is hereby amended to read:
1. One-story detached accessory structures, provided the floor area does not exceed 200 square feet (11.15 m^2).

105.2, Work exempt from permit, Building: 4, is hereby amended to read:
4. Retaining walls with not over four feet (1,219 mm) of exposed wall height measured from finish grade to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.

105.2, Work exempt from permit, Building, is amended to add a new paragraph 14:
14. Ordinary maintenance including but not limited to reroofing, residing, acoustic ceiling replacement, wallboard and plaster replacement and window and door replacement.

105.2, Work exempt from permit, Electrical, Gas, Mechanical, Plumbing, are hereby repealed and deleted.

106.1, Live loads posted, is hereby amended to read:
Where the live loads for which each floor or portion thereof that is used for storage in a commercial or industrial building is or has been designed to exceed 50 psf (2.40 kN/m^2), such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

109.2 Schedule of permit fees, is hereby repealed and amended to read:
Permit fees shall be established by resolution of the city council, no portion of which shall be refundable.

109.6, Refunds is hereby deleted in its entirety.

Section 113, Board of Appeals, is deleted in its entirety and replaced with the following:

The Building Trades Board shall hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code.

310.1 Residential Group R, is hereby amended to read:
Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the International Residential Code in accordance with Section 101.2. Residential occupancies shall include the following:
R-1 Residential occupancies containing sleeping units where the occupants are primarily transient in nature including:

- Boarding houses (transient),
- Hotels (transient),
- Motels (transient),

- Congregate living facilities (transient)

Congregate living facilities with 10 or fewer occupants are permitted to comply with the construction requirements for Group R-3, except as otherwise provided for in this code, or shall comply with the International Residential Code®, provided the building is protected by an automatic sprinkler system installed in accordance with Section 903.2.8.

R-2 Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primarily permanent in nature including:

- Apartment houses,
- Boarding houses (non-transient),
- Convents,
- Dormitories,
- Fraternities and sororities,
- Hotels (non-transient),
- Live/work units,
- Monasteries,
- Motels (non-transient),
- Vacation time share properties
- Congregate living facilities

Congregate living facilities with 16 or fewer occupants are permitted to comply with the construction requirements for Group R-3, except as provided for in this code, or shall comply with the International Residential Code®, provided the building is protected by an automatic sprinkler system installed in accordance with Section 903.2.8.

R-3 Residential occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two *dwelling units*.
- Adult care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.
- Child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours.
- Congregate living facilities with 16 or fewer persons.

Adult care and child care facilities that are within a single-family home are permitted to comply with the International Residential Code.

R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living facilities including more than five but not more than 16 occupants, excluding staff.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code or shall comply with the International Residential Code provided the building is protected by an automatic sprinkler system installed in accordance with Section 903.2.8.

423.1, General, is hereby amended to read:

General. In addition to other applicable requirements in this code, storm shelters shall be constructed in accordance with ICC-500, FEMA 320, FEMA 361 or other equivalent approved engineered system.

423.21 Storm Shelter, is hereby amended to read:

STORM SHELTER. A building, structure, or portion(s) thereof, constructed in accordance with the standards listed in Section 423.1 and designated for use during a severe wind storm event, such as a hurricane or tornado.

~~*903.2.1.2, Group A-2,* is hereby amended to read:~~

~~An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists:~~

~~1. The fire area exceeds 5,000 square feet (464.5 m^2);~~

~~2. The fire area has an occupant load of 200 or more; or~~

~~3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.~~

903.2.7, Group M, is hereby amended to read:

An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 12,000 square feet (1,115 m^2).

2. A Group M fire area is located more than three stories above grade plane.
3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2,230 m^2).
4. A Group M occupancy where the cumulative area used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 square meters).

903.6, Pump and riser room size, is hereby added to read:
Fire pump and automatic sprinkler system riser rooms shall be designed with adequate space for all equipment necessary for the installation, as defined by the manufacturer with sufficient working room around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances shall be sufficient to allow inspection, service, repair, or replacement without removing such elements of permanent construction or disabling the function of a required fire resistance-rated assembly. Fire Pump and automatic sprinkler riser room shall be provided with a door(s) and unobstructed passageway large enough to allow removal of the largest piece of equipment.

911.1.3, Size, is hereby amended by adding an exception to read:
The room shall be a minimum of 200 square feet (19 square meters) with a minimum dimension of 10 feet (3048 mm). Exception: When approved by the fire code official the fire command center can be reduced in size to not less than a minimum of 96 square feet (9 square meters) with a minimum dimension of 8 feet (2438 mm).

1005.1, Minimum required egress width, is hereby amended by adding two additional exceptions to read:
The means of egress width shall not be less than required by this section. The total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.3 inches (7.62 mm) per occupant for stairways and by 0.2 inches (5.08 mm) per occupant for other egress components. The width shall not be less than specified elsewhere in this code. Multiple means of egress shall be sized such that the loss of any one means of egress shall not reduce the availability capacity to less than 50 percent of the required capacity. The maximum capacity required from any story of a building shall be maintained to the termination of the means of egress. Exceptions:

1. Means of egress complying with Section 1028.
2. For other than H and I-2 occupancies, the capacity, in inches (mm), means of egress stairways shall be calculated multiplying the occupant load served by a stairway by a means of egress capacity factor of 0.2 inches (5.08 mm) per occupant in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.1.1 or 903.1.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.2
3. For other than H and I-2 occupancies, the capacity, in inches (mm), means of egress components other than stairways shall be calculated multiplying the occupant load served by such component by a means of egress capacity factor of 0.15 inches (3.81 mm) per occupant in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.1.1 or 903.1.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

1210.2, Walls, is hereby amended by adding the following paragraph:
Smooth, hard nonabsorbent surface is considered as, but not limited to, epoxy paint (listed for use in bathrooms/restrooms and meets interior finish flammability criteria), smooth/sealed concrete, metal, aluminum, stainless steel, slate, granite, marble, ceramic tile, glass block, tile board, FRP (fiber reinforced plastic) wall board or other materials approved by the building official.

1611.1, Design rain loads, is hereby amended to read:
Each portion of a roof shall be designed to sustain the load of rainwater that will accumulate on it if the primary drainage system for that portion is blocked plus the uniform load caused by water that rises above the inlet of the secondary drainage system at its design flow. The design rainfall shall be based on two conditions: 1) the 100-year hourly rainfall rate indicated in Figure 1611.1; and 2) the 100-year, 5-minute duration rainfall rate of 10.2 inches per hour. Alternately, the 100-year, one-

hour and 100-year, 5-minute duration rainfall rates may be determined from approved local weather data.

1612.3, Establishment of flood hazard areas, is hereby amended by inserting the words "the City of Stillwater, Oklahoma" for and in exchange of the words "name of jurisdiction" and the date "May 16, 2007, and subsequent revisions" for and in exchange of the words "insert date of issuance."

1802.1, General, is hereby amended to read:
Foundation and soils investigations, where required by the building official, shall be conducted by a registered design professional licensed by the State of Oklahoma.

1802.2, Where required, is hereby amended to read:
The owner or applicant shall submit a foundation and soils investigation for review by the building official:

1. When pile and pier foundation design is proposed.
2. When the water table, as determined by the Soil Survey of Payne County, Oklahoma, or successor registration, is above or within five feet of the bottom of the footing.
3. When foundations are constructed on fill exceeding 18 inches in depth, unless constructed on engineered fill in accordance with IBC 1803.5.
4. For any buildings more than 10,000 square feet or more than two stories in height.
5. For any buildings with basement or crawl space foundations.

1809.4, Depth and width of footings, is hereby amended to read:
The minimum depth of footings below the undisturbed ground surface shall be 12 inches (305 mm). Where applicable, the requirements of Section 1809.5 shall also be satisfied. The minimum width of footings shall be 12 inches (305 mm).
Exception: Single story free-standing building meeting all of the following conditions shall be permitted without footings:

1. Assigned to Occupancy Category 1, in accordance with Section 1604.5;
2. Light-frame wood or metal construction;
3. Area of 400 square feet (37 square meters) or less;
4. Eave height of 10 feet (3048 mm) or less; and
5. Building height of 15 feet (4575 mm) or less.

Such buildings shall have an approved wooden floor, or shall be placed on a concrete slab having a minimum thickness of 3 1/2 inches (89 mm). Buildings shall be anchored to resist uplift as required by Section 1609.

1910.1, General, is hereby amended to read:
The thickness of concrete floor slabs supported directly on the ground shall not be less than 3½ inches (89 mm).

2902.1, Minimum number of fixtures, is hereby amended to read:
Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 2902.1. Exceptions:

1. Water fountains are not required in any occupancy, but when provided must comply with Chapter 11
2. Toilets, lavatories and service sinks shall not be required in S occupancy buildings used solely for storage when there are no accessory uses or mixed-uses in the building and the building is not heated.
3. Service sinks shall not be required in B and M occupancies with an occupant load of 15 or less.

Types of occupancies not shown in Table 2902.1 shall be considered individually by the building official. The number of occupants shall be determined by this code. Occupancy classification shall be determined in accordance with Chapter 3.

3201.3, Other Laws, is hereby amended to read:
The provisions of this chapter shall not be construed to permit the violation of other laws or ordinances regulating the use and occupancy of public property or to prevent the holders of public right-of-way to grant special permission for encroachments in their rights-of-way greater than those permitted in Section 3202.

~~*3401.5, Alternative compliance,* is hereby amended to read:~~

~~Work performed in accordance with the City of Stillwater Existing Buildings Rehabilitation and Change of Use Code 2007 shall be deemed to comply with the provisions of this chapter.~~

3402.1, Definitions, the definition of Existing Structure is hereby modified to read: EXISTING BUILDING OR EXISTING STRUCTURE: A building or structure on which construction was begun at least ten (10) years prior to the date of adoption of this code.

3412.2, Applicability, is hereby amended by inserting "1966" for and in exchange of the words "date to be inserted by the jurisdiction."

SECTION 2: That the Stillwater City Code, Chapter 10, Buildings and Buildings Regulations, Article IV. One- and Two-Family Dwelling Code, Section 10-90, Deletions, modifications, amendments and insertions, be repealed and amended to read as follows:

ARTICLE IV. ONE- AND TWO-FAMILY DWELLING CODE

Sec. 10-90. Deletions, modifications, amendments and insertions.

The International Residential Code for One- and Two-Family Dwellings, 2009 edition, is hereby amended in the following aspects:

R101.1, Title. Insert: City of Stillwater, Oklahoma.

R102.7.1, Additions alterations or repairs, is hereby amended to read:
Additions, alterations or repairs to any structure shall conform to that required for a new structure without requiring the existing structure to comply with all of the requirements of this code, unless the addition, alteration or repair causes the existing electrical, plumbing, mechanical or fuel gas system or the structure to become unsafe or adversely affects the performance of the building.

R103.1, Creation of enforcement agency, is hereby deleted in its entirety and replaced with: R103.1 Creation of building safety division. The building safety division of the development services department is hereby created and the official in charge thereof shall be known as the building official.

R103.2, Appointment. The following shall be inserted into the end of this paragraph:
The chief appointing authority of the jurisdiction shall be the city manager.

R103.3, Deputies, is hereby repealed and replaced to read:
The city manager shall appoint all employees within the building safety division and such employees shall have the powers as established by the city manager and/or as delegated by the building official.

R104.1, General, is hereby repealed and replaced to read:
The building official is hereby authorized to enforce the provisions of this code. The building official shall have the authority and responsibility to identify and assess local conditions and prevailing building practices, to render interpretations of this code, and establish procedures to clarify the practical application of its provisions. Such interpretations and procedures shall be consistent with the intent of this code as it pertains to local conditions.

R104.10, Modifications, is hereby repealed and replaced to read:
Literal compliance. Wherever there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to accept alternative or equivalent methods, processes, or materials in individual cases, upon application of the owner or owner's representative, provided the building official shall first find that existing circumstances make application of the strict letter of this code impractical and acceptance of an alternative or equivalent method, process, or material is consistent with the intent and purpose of this code and does not lessen health, accessibility, life or safety, or structural standards.

R104.11, Alternative materials, design and methods of construction and equipment, is hereby repealed and replaced to read:
The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code.

An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and consistent with the intent of 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 quality, strength, effectiveness, fire resistance, durability and safety.

R105.2, Work exempt from permit, Building: subsection 3, is hereby amended to read:
Retaining walls with not over four feet (1,219 mm) of exposed wall height measured from finish grade to the top of the wall, unless supporting a surcharge.

R105.2, Work exempt from permit, Building: subsection 10, is hereby amended to read:
Decks not exceeding 200 square feet (18.58 m^2) in area, that are not more than 30 inches (762 mm) above grade at any point.

R105.2, Work exempt from permit, Building: 11, is hereby added:
Ordinary maintenance including but not limited to reroofing, re-siding, acoustic ceiling replacement, wallboard and plaster replacement and window and door replacement.

R105.2, Work exempt from permit electrical, 6 and 7, are hereby added to read:
6. The replacement of switches, luminaires, lampholders and fans, but not the outlets therefor.
7. The extension of an existing individual branch circuit or the installation of additional openings in an existing branch circuit provided that the work is not associated with a building permit..

R105.2, Work exempt from permit, is hereby amended by adding a new section, Plumbing, to read:
Plumbing: 1. The replacement of plumbing fixtures and faucets provided such replacement does not involve the rearrangement of piping.

R105.2.2, Repairs, is hereby amended to read:
Application or notice to the building official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, requiring the removal or relocation of electrical, plumbing, mechanical or fuel gas systems, or the removal or cutting of any structural wall, beam or load bearing support, or the removal or change of any required means of egress or emergency escape and rescue opening, or rearrangement of parts of a structure affecting egress requirements or the emergency escape and rescue opening or exit path; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

R105.3, Application for permit, is hereby amended to read:
To obtain a permit, the applicant shall first file an application in writing on a form furnished by the department of building safety for that purpose. 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 and occupancy for which the proposed work is intended.
4. Be accompanied by construction documents and other information as required in section R106.1.
5. Be signed by the applicant, or the applicant's authorized agent.

R108.2, Schedule of permit fees, is hereby amended to read:
Permit fees shall be established by resolution of the city council, no portion of which shall be refundable.

R108.6, Refunds is hereby deleted in its entirety.

Section R112,Board of Appeals, is hereby deleted in its entirety and replaced with the following:

The Building Trades Board shall hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code.

Table R301.2(1), Climatic and Geographic Design Criteria, insert:

Ground snow load = Ten psf
Wind speed = 90 mph (three sec. gust), Exposure B
Seismic design category = B
Weathering = Moderate
Frost line depth = 18 inches
Termite = Moderate to heavy
Decay = Slight to moderate
Winter design temp = 13
Ice shield underlayment required = No
Flood hazards = FIRM #405380, revised May 16, 2007, as amended
Air freezing index = 500
Mean annual temperature = 60

R302.1, Exterior walls, is hereby amended to read:
Exterior walls with a fire separation distance less than three feet (914 mm) shall have not less than a one-hour fire-resistive rating with exposure from both sides.
Exception: Walls of dwellings and accessory structures located on the same lot. Projections shall not extend to a point closer than two feet (610 mm) from the line used to determine the fire separation distance.
Exception: Detached garages accessory to a dwelling located within two feet of a lot line shall be permitted to have roof eave projections not exceeding four 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.
Exception: Tool and storage sheds, playhouses and similar 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.

R302.1.1, Openings is hereby amended to read:
Openings shall not be permitted in the exterior wall of a dwelling or accessory building with a fire separation distance less than three feet (914 mm). This distance shall be measured perpendicular to the line used to determine the fire separation distance.

Exceptions:
1. Openings shall be permitted in walls that are perpendicular to the line used to determine the fire separation distance.
2. Foundation vents installed in compliance with this code are permitted.

R302.1.2, Penetrations is hereby amended to read:
Penetrations located in the exterior wall of a dwelling with a fire separation distance less than three feet (914 mm) shall be protected in accordance with section R317.3.

Exception: Penetrations shall be permitted in walls that are perpendicular to the line used to determine the fire separation distance.

R303.3, Bathrooms, Exception, is hereby amended to read:
Exception: The glazed areas shall not be required where artificial light and a mechanical ventilation system are provided. The minimum ventilation rates shall be 50 cfm for intermittent ventilation or 20 cfm for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside or to a properly ventilated attic space complying with IRC section R806. When terminated in a ventilated attic space the exhaust shall terminate not less than 12 inches above insulation so as not to be covered or blocked by insulation and secured to the structure to prevent movement.

~~*R310.1.1, Minimum opening area,* is hereby amended by to read:~~
~~All emergency escape and rescue openings shall have a minimum net clear opening of five square feet (0.465 m^2).~~

R311.7.2, Headroom, is hereby amended by adding an exception to read:
The minimum headroom in all parts of the stairway shall not be less than six feet eight inches (2,036 mm) measured vertically from the sloped plane adjoining the tread nosing or from the floor surface of the landing or platform.
Exception: Doorways serving only attic storage areas and not part of the required building egress or emergency escape and rescue opening.

R311.7.4, Stair treads and risers, is hereby amended by adding an exception to read:
Stair treads and risers shall meet the requirements of this section. For the purposes of this section all dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.
Stair treads and risers shall meet the requirements of this section.
Exception: An interior flight of stairs serving only attic storage areas and not part of the required building egress or emergency escape and rescue opening shall be permitted to have risers not exceeding eight inches (203 mm) in height and treads not less than nine inches (229 mm) in depth. Risers in excess of eight inches (203 mm) will be considered as a ladder.

R311.5.4, Landings for stairways, is hereby amended by adding an exception to read:
There shall be a floor or landing at the top and bottom of each stairway.
Exception:
1. A floor or landing is not required at the top of an interior flight of stairs, provided a door does not swing over the stairs.
2. A landing is not required at the bottom of an interior flight of stairs serving only attic storage areas provided the stairway is not part of a required building egress or emergency escape and rescue opening.

R313.2, One- and two-family dwellings automatic fire systems, is hereby deleted in its entirety.

R314.3.1, Alterations, repairs and additions, is hereby amended to read:
In existing individual dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings when any of the following permits are required:
1. When a building permit is required for alterations, repairs or additions in which the value of the work covered by the permit exceeds $1,000.00, or
2. When a building permit is required to add or create one or more sleeping rooms, or
3. When an electrical permit is required for work performed as part of an interior renovation that does not require a building permit but where more than 50 percent of the dwelling unit ceiling coverings will be removed as part of the renovation.

R314.4, Power source, is hereby amended by adding a definition to Exception 2 to read:
Accessible attic space is herein defined as any portion of the attic where a smoke detector would be required to be installed that is accessible from the attic access by a continuous path that is a minimum of 24 inches high by 24 inches wide. Such path shall not be required to be in a straight line and shall be allowed to be over or under obstructions such as duct work provided that the minimum height and width of the path are not diminished.

R315.1 is hereby amended by adding exception 1 to read:
Carbon monoxide detection is not required in residences with attached garages when the door between the residence and the garage is weather-sealed and there are no fuel burning appliances in the garage or the residence.

R315.2, Where required in existing dwellings, is hereby amended to read:
In existing individual dwellings that have attached garages without weather-sealed connecting doors to the residence or in existing individual dwellings within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in the individual dwelling in accordance with section R315.1 when any of the following permits are required:
1. When a building permit is required for alterations, repairs or additions in which the value of the work covered by the permit exceeds $1,000.00, or

2. When a building permit is required to add or create one or more sleeping rooms, or
3. When a plumbing or mechanical permit is required to replace any fuel-fired appliance

R323.1, General, is hereby amended to read:
This section applies to the construction of storm shelters when constructed as separate detached buildings or when constructed as safe rooms within buildings for the purpose of providing safe refuge from storms that produce high winds, such as tornados and hurricanes.

R401.3, Drainage, is deleted in its entirety and replaced with the following:

R401.3, Finished floor elevation. The finished floor elevation for a structure constructed on a residential lot shall be established at least one foot above the lowest point where surface water drains from the lot.

R401.3.1, Finished floor elevation-construction located within floodplain boundary. No construction shall commence on a structure located within the boundaries of a floodplain until an earth change permit has been issued by the city. The finished floor elevation shall be established no less than one foot above the base flood elevation (BFE) as indicated on the FEMA elevation certificate. A FEMA elevation certificate indicating initial floor elevations as set forth in said requirements shall be completed and submitted with the building permit application.

R401.3.2, Conveyance of surface water drainage. Surface water drainage shall be diverted to a designated public stormwater conveyance or other approved point of collection.

R401.3.3, Grading adjacent to foundations. Lots shall be graded to drain surface water away from foundation walls. In addition:

a. Roofs, paved areas, yards, courts and courtyards shall be constructed to drain surface water away from the structure.
b. Masonry veneer construction. The finished grade shall be established no less than four inches below the finished floor elevation and shall fall no less than six inches within the first ten feet away from the structure as measured from the building face.
c. All other construction. The finished grade shall be established no less than six inches below the finished floor elevation and shall fall no less than six inches within the first ten feet away from the structure as measured from the building face.
d. Exception: Whenever a lot line, wall, slope or other physical barrier prohibits six inches of fall within the first ten feet as measured from the building face, drains or swales shall be provided to ensure sufficient surface water drainage away from the structure.
e. A driveway shall slope continuously away from the garage entry to a minimum elevation of six inches below the finished floor elevation of the structure, or the surface water shall be discharged in accordance with subsection R401.3.3(d). Driveway slope shall not exceed 15 percent within the right-of-way.

R401.3.4, Fencing. Fencing over a property line where surface water travels shall be elevated a minimum of two inches above the finished landscaped ground level. Fencing shall not obstruct or alter the path of any drainage easement and shall allow for unobstructed movement of surface water into such easement or drainage channel/area.

R401.3.5, Residential lot grading and drainage plan. A residential lot grading and drainage plan (RLP) shall be submitted by the residential building contractor and approved by the city before a building permit for any residential structure will be issued. The RLP drawing shall be prepared at a scale of one inch equals 20 feet. The plan shall include the following:

a. Title block in lower righthand corner with lot or parcel address;
b. Subdivision name, lot and block number, if located within a platted subdivision;
c. Name, address and telephone number of the property owner and building contractor;
d. Drawing scale and north arrow;
e. Location of statutory and any platted building setbacks;

f. Location of property boundaries including all lot dimensions;
g. Footprint(s) of all structures indicated by solid line, including distances to the property lines;
~~h. Relative finish floor elevation of the main level of the primary structure;~~
ih. Location of all easements labeled by type and width;
ji. Location of the existing and/or proposed public sidewalk, curb and gutter;
~~k~~j. Location and width of driveway, private sidewalks, decks, porches, patios;
~~l. Relative and proposed elevations of:~~
~~(1) Each corner of the lot and proposed discharge points;~~
~~(2) Key locations along drainage swales;~~
~~m~~k. Proposed drainage flow patterns indicated by flow arrows showing path that surface water will take to the site boundaries or points of discharge;
~~n. Key locations at and around existing obstructions, such as retaining walls, large structures, and large earth masses;~~
~~o~~l. Whenever properties are located within the floodplain, the applicant shall complete a FEMA elevation certificate.

R401.3.6, Residential lot grading and drainage plan—Existing structures. Whenever an addition to an existing residential structure exceeds 300 square feet in area, a residential lot plan-existing structure (RLP-E) shall be submitted by the building contractor and approved by the city before a building permit for such addition will be issued. The requirements set forth in R401.3.1 through R401.3.4 shall apply to any addition to an existing structure unless specifically excepted. The following additional requirements shall apply:

a. The lot shall be graded locally away from and around the completed addition.
b. Drainage shall be properly transferred into the existing lot surface water drainage system.
c. Any area directly impacted by the addition shall be modified to restore existing surface water drainage.

The RLP-E drawing shall be prepared at a scale of one inch equals 20 feet. The plan shall include the following:

a. Title block in lower right hand corner with lot or parcel address;
b. Subdivision name, lot and block number, if located within a platted subdivision;
c. Name, address and telephone number of the property owner and building contractor;
d. Drawing scale and north arrow;
e. Footprint(s) of all structures indicated by solid line, including distances to property lines;
f. Location of property lines;
g. Relative finish floor elevation of the addition if it is different than that of the main level of the existing primary structure. When floor elevations are lower than that of the existing structure, then section 401.3.7 shall apply with regard to additional documentation;
h. Location of all easements, labeled by type and width,;
i. Location of the public sidewalk, curb and gutter if altered by the addition;
j. Location and width of driveway, private sidewalks, decks, porches, patios, if impacted by the addition or when it affects restoration of the local drainage;
k. Direction of surface water flow by use of arrows showing any new path(s) that such will take around the addition, continuing to the point of discharge. The terms "Exist" or (E) for existing drainage path(s) or "New" (N) for a new path(s) next to flow arrows shall be used to denominate such on the plan;
l. Whenever an addition or upgrade to an existing structure is located in the floodplain, the design of such addition or upgrade shall also be submitted to the stormwater program manager, who shall review such plans and identify any additional FEMA requirement(s).

R401.3.7, Residential location and elevation plan. A residential location and elevation plan (RLEP) prepared by an Oklahoma-licensed land surveyor, shall be submitted to and accepted by the city upon completion of the foundation forms or completion of the foundation and slab, before proceeding with further vertical construction on a residence or a residential accessory structure greater than 300 square feet. RLEPs are not required for lots that are 20,000 square feet or greater in size and that will have building setbacks that exceed all required setbacks by more than 10 feet. The RLEP drawing shall be prepared at a scale of one inch equals 20 feet. The plan shall include the following:

a. Title block in lower righthand corner with lot or parcel address;
b. Subdivision name, lot and block number, if located within a platted subdivision;
c. Name, address and telephone number of the property owner and building contractor;
d. Drawing scale and north arrow;
e. Footprint(s) of all structures indicated by solid lines, including distances to property lines;
~~f. The reference mark/point;~~
~~g~~f. Property lines and dimensions to corners of structure;
~~h~~g. Location ~~and measurement~~ of the relative finished floor elevation ~~at each corner~~ of the structure;
~~i~~h. The ~~existing~~ relative elevation of the ~~designated~~ discharge points ~~of the lot per the RLP or the RLP-E~~;
~~j~~i. Location of all easements, labeled by type and width;
~~k~~j. Surveyor's ~~or engineer's~~ signature and seal with date.

The acceptance of the RLEP by the city shall not relieve the residential building contractor and/or the property owner building his/her own residence of any responsibility for compliance with all applicable regulations and such acceptance shall not waive any requirements of this chapter or of the adopted IRC and local amendments thereto.

~~*R401.3.8, Compliance affidavit.* Upon completion of final grading, the residential building contractor shall complete an affidavit on a form provided by the city that confirms the final lot grading was completed in compliance with the approved surface water drainage plan. No certificate of occupancy shall be issued by the city until said affidavit is completed and submitted in accordance with this section.~~

R403.1 General is hereby amended by the addition of a new exception to read: All exterior walls shall be supported on continuous solid or fully grouted masonry or concrete footings, crushed stone footings, wood foundations, or other *approved* structural systems which shall be of sufficient design to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil. Footings shall be supported on undisturbed natural soils or engineered fill. Concrete footing shall be designed and constructed in accordance with the provisions of Section R403 or in accordance with ACI 332.

Exception: Single story free-standing building meeting all of the following conditions shall be permitted without footings:
(A) Assigned to Occupancy Category 1, in accordance with Section 1604.5;
(B) Light-frame wood or metal construction;
(C) Area of 400 square feet (37 square meters) or less;
(D) Eave height of 10 feet (3048 mm) or less; and
(E) Building height of 15 feet (4575 mm) or less.
Such buildings shall have an approved wooden floor, or shall be placed on a concrete slab having a minimum thickness of 3 1/2 inches (89 mm). Buildings on concrete slabs shall be anchored to the slab by means of approved fasteners. Buildings not anchored to slabs shall be anchored to the ground by an approved anchoring system.

R403.1.3.2, Slabs-on-ground with turn-down footings, is hereby amended to read: Exterior concrete footings shall be reinforced with a minimum of four number 4 reinforcing bars, placed in a box arrangement with a three-inch clearance from the bottom of the footing and a two-inch clearance from the side walls and joint overlap of not less than 40 bar diameters. Interior footings of one-story structures may be provided with an unreinforced monolithic slab 12 inches in width by ten inches in depth, bearing on undisturbed natural soils or engineered fill.
Where the slab is not cast monolithically with the footing, No. 3 or larger vertical dowels shall be provided in accordance with figure R403.1.3.2 except that hooks shall not be required.

R403.1.3.2, Slabs-on-ground with turned-down footings, Exception, is hereby deleted in its entirety.

R403.1.6, Foundation anchorage, is hereby amended by adding exception 4 to read: 4. Wood sole plates of braced wall panels at building interiors on monolithic slabs may be anchored using anchors with a shear capacity of 2,300 lbs. and a tensile

capacity of 800 lbs spaced not more than six feet apart. There shall be a minimum of two bolts per plate. Alternatively, the total required shear and tensile capacity may be achieved through the use of multiple anchors of lesser capacity provided that each foot of plate contains enough anchors to provide 384 lbs. of total shear capacity and 134 lbs. of total tensile capacity. There shall be a minimum of two anchors per plate.

R403.1.8, Foundations on expansive soils, is hereby deleted and amended to read:
Foundation and floor slabs for buildings located on expansive soils shall be designed in accordance with WRI/CRSI design of slab-on-ground foundations or PTI design and construction of post-tensioned slabs-on-ground or other foundation designs approved by the building official.

R404.2 is hereby amended by adding exception 1 to read:
Exception 1. Interior concrete slabs on grade and enclosed garage slabs are not required to be air entrained.

R406.2, Concrete and masonry foundation waterproofing, is hereby amended by adding number 8 to read:
8. Bentonite

R502.2.2.3, Deck lateral load connection, is hereby amended to read:
The lateral load connection required by section R502.2.2 shall be permitted to be in accordance with figure R502.2.2.3. Hold-down tension devices shall be installed in not less than two locations per deck, and each device shall have an allowable stress design capacity of not less than 1,500 pounds (6,672 N). When interior joists are not accessible for the attachment of hold-downs due to building finishes, other connections may be used upon approval of the building official.

R506.2.3, Vapor retarder, is hereby deleted in its entirety.

R703.7.5, Flashing, is hereby amended to read:
Flashing shall be located beneath points of support, including structural floors, shelf angles and lintels when masonry veneers are designed in accordance with section R703.7. See section R703.8 for additional requirements.
Exception: Flashing shall not be required beneath the first course of masonry above finished ground level above the foundation wall or slab.

R703.7.6, Weepholes, is hereby deleted in its entirety.

R801.3, Roof drainage, is hereby deleted in its entirety.

R802.5.1, Purlins. Installation of purlins to reduce the span of rafters is permitted as shown in figure R802.5.1. Purlins shall be sized no less than the required size of the rafters that they support. Purlins shall be continuous and shall be supported by braces installed to bearing walls at a slope not less than 45 degrees from the horizontal. The braces shall be spaced not more than four feet (1,219 mm) on center for two-inch by four-inch (51 mm by 102 mm) or six feet (1,829 mm) on center for two-inch by six-inch (51 mm by 152 mm) on center and the unbraced length of braces shall not exceed eight feet (2,438 mm).

R1005.1, Exterior air, is hereby amended to read:
Factory-built fireplaces shall be equipped with an exterior air supply where required by the manufacturer's instructions. Masonry fireplaces, if equipped with exterior air supply, shall meet the requirements of this section for installation.

N1101.1, Scope, is hereby repealed and replaced to read:
This chapter sets forth energy-efficiency related requirements for the design and construction of buildings regulated by this code within the City of Stillwater, Oklahoma.

N1101.2, Compliance, is hereby repealed and replaced to read:
Compliance with this chapter shall be demonstrated by meeting the requirements of the applicable sections and tables of this chapter. Where applicable, provisions are based on climate zone 3A per table N1101.2 for the City of Stillwater, Oklahoma. Alternatively, compliance may be demonstrated by the submission of a report from an approved energy auditing agency certifying that the building is in compliance with the requirements of the 2009 International Energy Conservation Code for detached