

Requested by: Michael Hurlbert

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AN ORDINANCE AMENDING CHAPTER 500, BUILDING CODES AND COUNTY BUILDING COMMISSION, ORDINANCES OF ST. CHARLES COUNTY, MISSOURI (“OSCCMO”), BY ADOPTING ST. CHARLES COUNTY AMENDMENTS AND MODIFICATIONS OF THE FOLLOWING 2015 INTERNATIONAL CODES: BUILDING, RESIDENTIAL CODE FOR ONE AND TWO-FAMILY DWELLINGS, EXISTING BUILDING, MECHANICAL, FUEL GAS, PLUMBING, PRIVATE SEWAGE DISPOSAL, ENERGY CONSERVATION, FIRE, SWIMMING POOL AND SPA, AND THE 2014 NATIONAL FIRE PROTECTION ASSOCIATION 70-NATIONAL ELECTRIC CODE

WHEREAS, The Department of Community Development has studied the 2015 International Codes for more than a year to review changes recommended since 2009; and

WHEREAS, Department of Community Development staff met with concerned members of the St. Charles County building trade industries, members of the public and the Building Commission in preparation of drafting of the bill; and

WHEREAS, after much study, the Department of Community Development recommended some 300 modifications to the 2015 International Codes thereby reducing the

regulatory burden being placed on those building within the unincorporated areas of St. Charles County; and

WHEREAS, the Building Commission has recommended the adoption of the following 2015 International Codes, Building, Residential One and Two-Family Dwellings, Existing Building, Mechanical, Fuel Gas, Plumbing, Sewage Disposal, Energy Conservation, Swimming Pool and Spa Code, and the 2014 National Fire Protection Association 70-National Electric Code with amendments, additions, and related provisions as provided herein; and

WHEREAS, most municipalities in St. Charles County have studied and adopted modified provisions of these codes so that the building and trade industry finds consistency amongst the jurisdictions; and

WHEREAS, Article II, Section 2.529 of the St. Charles County Charter (2014) provides that the Council may exercise legislative power pertaining to public health and welfare, police and traffic, building construction, and planning and zoning, in the part of the County outside incorporated cities, towns, and villages, and on such other subjects as may be authorized by the Constitution or by applicable law; and

WHEREAS, the County Council finds that it is in the public interest to amend Chapter 500, Building Codes and County Building Commission, OSCCMo, and adopt the codes as provided herein.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNTY COUNCIL OF ST. CHARLES COUNTY, MISSOURI, AS FOLLOWS:

Section 1. Article I, Building Code, OSCCMo Section 500.010, is hereby repealed and a new Article I (RESERVED) Section 500.010 is adopted to read as follows.

Section 500.010 (RESERVED)

Section 2. Article II, Mechanical Code , OSCCMo Section 500.020, is hereby repealed and a new Article II Building Code, Section 500.100 is adopted to read as follows.

ARTICLE II: BUILDING CODE

Section 500.100. Adoption of Building Code of St. Charles County.

A. St. Charles County hereby adopts the 2015 International Building Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, including Appendixes C and K, with the following amendments by additions, insertions, deletions to read as follows:

(CHAPTER 1 ADMINISTRATION) (SECTION 101 GENERAL)

101.1 Title. These regulations shall be known as the Building Code of **St. Charles County** [~~NAME OF JURISDICTION~~], hereinafter referred to as “this code.”

101.4.90 Aquatic recreation facilities. The provisions of the International Swimming Pool and Spa Code shall apply to the construction, alteration, movement, renovation, replacement, repair and

maintenance of aquatic recreation facilities, pools and spas. The pools and spas covered by this code are either permanent or temporary, and shall be only those that are designed and manufactured to be connected to a circulation system and that are intended for swimming, bathing or wading.

(SECTION 103 DEPARTMENT OF BUILDING SAFETY)

103.1 Creation of enforcement agency. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division's director shall be the building official or code official referred to in this Code. ~~[The Department of Building Safety is hereby created and the official in charge thereof shall be known as the Building Official.]~~**

103.2 Appointment. The Building Official shall be appointed **as provided by ordinance** ~~[by the chief appointing authority of the jurisdiction].~~

(SECTION 105 PERMITS)

105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area is not greater than 120 square feet (11 m²).
2. Fences not over **6 feet** [~~7 feet~~] (2134 mm) high.
3. Oil derricks.
4. Retaining walls that are not over 4 feet (1219 mm) in height measured from **the adjacent grade** [~~the bottom of the footing~~] to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18 925 L) and the ratio of height to diameter or width is not greater than 2:1.
6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route.
7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18 925 L) and are installed entirely above ground.

10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.

11. Swings and other playground equipment accessory to detached one- and two-family dwellings.

12. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.

13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

14. Temporary structures that are located in agricultural districts and which use is primarily agricultural in nature, that are not accessible to the general public.

15. Flag poles less than 40 feet in height.

16. Replacement of doors and windows where the opening size is not increased or decreased.

Electrical:

Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Radio and television transmitting stations: The provisions of this code shall not apply to electrical

equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

Temporary testing systems: A permit shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (0.75 kW) or less.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
- 3. Fixture replacement with similar fixtures where plumbing connections are not relocated.**

105.5 Expiration. Every permit issued shall become invalid **and expired** unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and **shall be granted only upon a showing of justifiable cause and substantial progress. If a permit expires pursuant to this provision, the building official may issue a new permit upon advance payment of an administrative penalty of the original permit fee or one hundred dollars (\$100.00), whichever is less. The reissued**

permit must be picked-up within seven (7) days of the issued date. [~~justifiable cause demonstrated.~~]

(SECTION 107 SUBMITTAL DOCUMENTS)

107.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted **as required by the building official** [~~in two or more sets~~] with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

107.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is

authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION 110 INSPECTIONS)

110.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION 113 BOARD OF APPEALS)

113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, *the County Building Commission shall serve as a board of appeals* [~~there shall be and is hereby created a board of appeals~~]. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure.

The board shall adopt rules of procedure for conducting its business.

113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall not have authority to waive requirements of this code.

113.3 Qualifications. *See Section 500.110, Ordinances of St. Charles County, Missouri* [~~The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.~~]

113.90 [113.4] Means of appeal. *Except as provided in Section 115.12, a person shall have the right to appeal a decision of the building official to the Building Commission. An application for appeal shall be based on a claim that the true intent of this Code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this Code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the building official within twenty (20) days after the notice was served. The filing fee for an appeal to the Building Commission shall be one hundred dollars (\$100.00); however, if costs related to the appeal incurred by the County are less than one hundred dollars (\$100.00), the remaining amount shall be reimbursed to the*

applicant. If the applicant's appeal is successful, the full amount of appeal fees shall be reimbursed.

(SECTION 114 VIOLATIONS)

114.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, **shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense** [~~shall be subject to penalties as prescribed by law~~].

(SECTION 115 STOP WORK ORDER)

115.2 Issuance. The stop work order shall be in writing and shall be given to the owner of the property involved, the owner's authorized agent or the person performing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work will be permitted to resume. *Any person served with a stop work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).*

(SECTION 116 UNSAFE STRUCTURES AND EQUIPMENT)

116.1 Conditions. Structures or existing equipment that are or hereafter become unsafe, insanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or that constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in ~~[this]~~ section **500.520, Ordinances of St. Charles County, Missouri**. A vacant structure that is not secured against entry shall be deemed unsafe.

116.2 Record. The building official shall cause a report to be filed on an unsafe condition *as provided for in Section 500.520, Ordinances of St. Charles County, Missouri*. The report shall state the occupancy of the structure and the nature of the unsafe condition.

116.4 Method of service. *Notice shall be served as provided for in Section 500.520, Ordinances of St. Charles County, Missouri.* ~~[Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address with the return receipt requested; or (c) delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing that the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.]~~

(CHAPTER 3 USE AND OCCUPANCY)
(SECTION 310 RESIDENTIAL GROUP R)

310.5.1 Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

Exception:

Child day care facilities in existing buildings complying with the International Residential Code shall not be required to be sprinklered.

(CHAPTER 12 INTERIOR ENVIRONMENT)
(SECTION 1203 VENTILATION)

1203.90 Roof vents. The roof system of one (1) story buildings of unlimited area when of types 2, 3 or 4 construction shall be provided with smoke and heat vents.

Exception: Vents are not required for buildings subdivided into spaces not greater than ten thousand (10,000) square feet with fire separation assemblies of not less than one (1) hour fire-resistance rating.

1203.91 Vent size and spacing. Smoke and heat vents shall be spaced at a maximum spacing of one hundred fifty (150) feet between centers. One (1) square foot of

open vent area is required per three hundred (300) square feet of floor area.

(CHAPTER 16 STRUCTURAL DESIGN)
(SECTION 1612 FLOOD LOADS)

1612.3 Establishment of flood hazard areas. **For flood hazard areas, see Article XI, Sections 405.245 et seq. of the Unified Development Ordinance of St. Charles, County, Missouri, Ordinances of St. Charles County, Missouri.** ~~[To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled “The Flood Insurance Study for [INSERT NAME OF JURISDICTION],” dated [INSERT DATE OF ISSUANCE], as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.]~~

(CHAPTER 31 SPECIAL CONSTRUCTION)

(SECTION 3107 SIGNS)

3107.1 General. Signs shall be designed, constructed and maintained in accordance with this code **and the Ordinances of St. Charles County, Missouri.**

(SECTION 3109 SWIMMING POOL ENCLOSURES
AND SAFETY DEVICES)

3109.1 General. Aquatic recreation facilities shall comply with the Swimming Pool and Spa Code of St. Charles County, Missouri.

3109.2 Definition. Delete in its entirety.

3109.3 Public swimming pools. Delete in its entirety.

3109.4 Residential swimming pools. Delete in its entirety.

3109.4.1 Barrier height and clearances. Delete in its entirety.

3109.4.1.1 Openings. Delete in its entirety.

3109.4.1.2 Solid barrier surfaces. Delete in its entirety.

3109.4.1.3 Closely spaced horizontal members. Delete in its entirety.

3109.4.1.4 Widely spaced horizontal members. Delete in its entirety.

3109.4.1.5 Chain link dimensions. Delete in its entirety.

3109.4.1.6 Diagonal members. Delete in its entirety.

3109.4.1.7 Gates. Delete in its entirety.

3109.4.1.8 Dwelling wall as a barrier. Delete in its entirety.

3109.4.1.9 Pool structure as barrier. Delete in its entirety.

3109.4.2 Indoor swimming pools. Delete in its entirety.

3109.4.3 Prohibited locations. Delete in its entirety.

3109.5 Entrapment avoidance. Delete in its entirety.

Section 3. Article III, Electrical Code , OSCCMo Section 500.040, is hereby repealed and a new Article III Residential Code for One and Two-Family Dwellings, Section 500.150 is adopted to read as follows.

ARTICLE III: RESIDENTIAL CODE FOR ONE AND TWO-FAMILY DWELLINGS

Section 500.150. Adoption of Residential Code For One and Two-Family Dwellings of St. Charles County.

B. St. Charles County hereby adopts the 2015 International Residential Code for One- and Two-Family Dwellings, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, including Appendices E, G, I, J, K, M, and P, with the following amendments by additions, insertions, deletions and changes to read as follows:

(CHAPTER 1 ADMINISTRATION)

(SECTION R101 GENERAL)

R101.1 Title. These provisions shall be known as the Residential Code for One- and Two-family Dwellings

of **St. Charles County, Missouri**, [~~NAME OF JURISDICTION~~] and shall be cited as such and will be referred to herein as “this code.”

(SECTION R103 DEPARTMENT OF BUILDING SAFETY)

R103.1 Creation of enforcement agency. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division's director shall be the building official or code official referred to in this Code.** [~~The department of building safety is hereby created the official in charge thereof shall be known as the building official.~~]

(SECTION R105 PERMITS)

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 this jurisdiction. Permits shall not be required for the following:

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed **120** [~~200~~] square feet (**11.15 m²** [~~18.58 m²~~]) **or 200 square feet (19m²) for portable structures.**

2. Fences not over 6 [7] feet (1829 mm) high; **and, fences located in the agricultural district as defined in Section 405.060, excluding platted subdivisions in said district.**
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the **adjacent grade** [~~bottom of the footing to the top of the wall~~], unless supporting a surcharge.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
5. Sidewalks and driveways.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
8. Swings and other playground equipment.
9. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
10. Decks not exceeding **120** [200] square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a dwelling, **and** do not serve the exit door required by Section R311.4.

11. Flag poles 40 feet or less in height.

12. Replacement of doors and windows where the opening size is not increased or decreased.

Electrical:

1. Listed cord-and-plug connected temporary decorative lighting.
2. Reinstallation of attachment plug receptacles but not the outlets therefor.
3. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
4. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
5. Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Gas:

1. Portable heating, cooking or clothes drying appliances.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
3. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

1. Portable heating appliances.
2. Portable ventilation appliances.
3. Portable cooling units.
4. Steam, hot- or chilled-water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.
3. **Fixture replacement with similar fixtures, not including water heaters, where plumbing connections are not relocated.**

R105.5 Expiration. Every permit issued shall become invalid **and expired** unless the work authorized by such permit is commenced within **one year** [~~180 days~~] after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of **one year** [~~180 days~~] after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and [~~justifiable cause demonstrated~~]**shall be granted only upon a showing of justifiable cause and substantial progress. If a permit expires pursuant to this provision, the building official may issue a new permit upon advance payment (subject to refund if overestimated) of an administrative penalty of one hundred dollars (\$100.00) for each 90 days or fraction thereof expected to lapse between the issuance of the new permit and the issuance of certificate of occupancy upon final inspection as pursuant to Section R110 of this Code.**

(SECTION R106 CONSTRUCTION DOCUMENTS)

R106.1 Submittal documents. Submittal documents consisting of construction documents, and other data

shall be submitted as required by the Building Official [~~shall be submitted in two or more sets~~] with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that reviewing of construction documents is not necessary to obtain compliance with this code.

R106.3.1 Approval of construction documents. Where the building official issues a permit, the construction documents shall be approved in writing or by a stamp that states “REVIEWED FOR CODE COMPLIANCE.” One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, **may be kept at the site of work or made available at time of inspection,** [~~shall be kept at the site of work~~] and shall be open to inspection by the building official or a duly authorized representative.

R106.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of

documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION R108 FEES)

R108.6 Work commencing before permit issuance. Any person who commences work requiring a permit on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the applicable governing authority that shall be in addition to the required permit fees.

Exceptions [~~Exemptions~~]:

- 1. Rough grading less than 5,000 square feet, not to include excavating for basements [~~Earthwork less than 5,000 square feet.~~]**
- 2. Stakeouts and other similar preparatory actions [~~necessary planning procedures~~]"**

(SECTION R109 INSPECTIONS)

R109.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION R112 BOARD OF APPEALS)

R112.1 General. **For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 113 of 500.010.** ~~[In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The building official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render decisions and findings in writing to the appellant with a duplicate copy to the building official.]~~

(Sections 112.2, 112.3, & 112.4 are deleted in their entirety.)

(SECTION R113 VIOLATIONS)

R113.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, **shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense.** [~~of not more than one thousand dollars (\$1,000.00) or by a term not exceeding one (1) year, or by both such fine and imprisonment, and each day's continuance of a violation shall be deemed a separate offense.~~]

(SECTION R114 STOP WORK ORDER)

R114.1 Notice to owner or the owner's authorized agent. **For the purposes of this code, all Stop Work Orders shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 115 of 500.010.** [~~Upon notice from the building official that work on any building or structure is being executed contrary to the provisions of this code or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's authorized agent or to the person performing the work and shall state the conditions under which work will be permitted to resume. Any person served with a stop~~

~~work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).]~~

(Section 114.2 is deleted in its entirety.)

(CHAPTER 2 DEFINITIONS)

(SECTION R202 DEFINITIONS)

STORY ABOVE GRADE PLANE. Any story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor next above is ~~either of the following:~~

1. More than 6 feet (1829 mm) above grade plane., **and**
2. **More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter, and**
3. More than 12 feet (3658 mm) above the finished ground level at any point.

(CHAPTER 3 BUILDING PLANNING)
 (SECTION R301 DESIGN CRITERIA)

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

GROUND SNOW LOAD		20 PSF
WIND DESIGN	Speed (MPH)	115 MPH
	Topographic effects	No
	Special wind region	No
	Wind-borne debris	No
SEISMIC DESIGN CATEGORY		SDC C
SUBJECT TO DAMAGE FROM	Weathering	Severe
	Frost line depth	30 inches
	Termite	Moderate to Heavy
WINTER DESIGN TEMP		6° F
ICE BARRIER UNDERLAYMENT		No
FLOOD HAZARDS		(See Floodplain Administrator)
AIR FREEZING INDEX		963
MEAN ANNUAL TEMP		55° F

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index, “negligible,” “moderate” or “severe” for concrete as determined from Figure R301.2(3). The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.

- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.
- c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.
- d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(4)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 97 1/2-percent values for winter from Appendix D of the International Plumbing Code. Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.
- g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of the

currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.

h. In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall fill in this part of the table with “NO.”

i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table “Air Freezing Index-USA Method (Base 32°F).”

j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table “Air Freezing Index-USA Method (Base 32°F).”

k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall indicate “NO” in this part of the table.

l. In accordance with Figure R301.2(4)A, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with “YES” and identify any specific

requirements. Otherwise, the jurisdiction shall indicate “NO” in this part of the table.

m. In accordance with Section R301.2.1.2.1, the jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate “NO” in this part of the table.

(SECTION R302 FIRE-RESISTANT CONSTRUCTION)

R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1); or dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 shall comply with Table R302.1(2).

Exceptions:

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the fire separation distance.
2. Walls of dwellings and accessory structures located on the same lot.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits 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.
4. Detached garages accessory to a dwelling located within **5** [~~2~~] feet (610 mm) of a lot line are permitted to

have roof eave projections not exceeding 4 inches (102 mm).

5. Foundation vents installed in compliance with this code are permitted.

6. Cantilevered manufactured fireplaces meeting the requirements of the Unified Development Ordinance (UDO) of St. Charles County and protected with 5/8 Type X gypsum.

7. Uncovered decks meeting the requirements of the Unified Development Ordinance (UDO) of St. Charles County.

R302.2 Townhouses. Common walls separating townhouses shall be assigned a fire-resistance rating in accordance with Section R302.2, Item 1 or 2. The common wall shared by two townhouses shall be constructed without 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 in accordance with Chapters 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302.4.

1. Where a fire sprinkler system in accordance with Section P2904 is provided, the common wall shall be not less than a 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263.

2. Where a fire sprinkler system in accordance with Section P2904 is not provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263, **or the common wall shall be two independent 1-hour fire-resistance-rated wall assemblies.**

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1-3/8 inches (35 mm) thick, or 20-minute fire-rated doors[~~;~~ ~~equipped with a self-closing device~~].

R302.13 Fire protection of floors. **This section has been deleted in its entirety.**

(SECTION R303 LIGHT, VENTILATION AND HEATING)

R303.1.90 Basements and cellars. The glazing area in basements and cellars shall not be less than one percent (1%) of the floor area served and shall be openable for natural ventilation.

R303.4 Mechanical ventilation. Where the air infiltration rate of a dwelling unit is **less than** 5 air changes per hour [~~or less~~] where tested with a blower door at a pressure of 0.2 inch w.c (50 Pa) in accordance with Section N1102.4.1.2, the dwelling unit shall be provided with whole-house mechanical ventilation in accordance with Section M1507.3.

R303.5.2 Exhaust openings. Exhaust air shall not be directed **below 6 feet and 8 inches** onto **public** walkways.

R303.8 Exterior stairway illumination. Exterior stairways shall be provided with an artificial light source [~~located at the top landing of the stairway~~]. Exterior stairways providing access to a basement from the outdoor grade level shall be provided with an artificial light source located at the bottom landing of the stairway.

(SECTION R306 SANITATION)

R306.90 Hose bibb. Every dwelling shall be equipped with two (2) remote outside frost-proof hose bibbs which shall be protected from backflow in accordance with Section P2902.4.3 of this Code.

R306.91 Floor drain. All basements shall be equipped with a floor drain within twenty (20) feet of heating/cooling system(s) and water heaters and which shall comply with Chapter 27, Section P2719 of this Code.

(SECTION R309 GARAGES AND CARPORTS)

R309.5 Fire sprinklers. Private garages shall be protected by fire sprinklers where the garage wall has been designed based on Table R302.1(2), Footnote a, **and the homeowner has opted to purchase a fire sprinkler system for their residence in accordance with RSMo 67.281.** Sprinklers in garages shall be connected to an automatic sprinkler system that complies with Section P2904. Garage sprinklers shall

be residential sprinklers or quick-response sprinklers, designed to provide a density of 0.05 gpm/ft². Garage doors shall not be considered obstructions with respect to sprinkler placement.

(SECTION R310 EMERGENCY ESCAPE AND RESCUE OPENINGS)

R310.1 Emergency escape and rescue opening required. Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exceptions:

1. Storm shelters and basements used only to house mechanical equipment not exceeding a total floor area of 200 square feet (18.58 m²).
2. **Emergency escape and rescue openings are not required in basements (other than sleeping rooms) provided the basement was built prior to January 1, 2016.**

(SECTION R311 MEANS OF EGRESS)

R311.3 Floors and landings at exterior doors. There shall be a landing or floor on each side of each exterior door. The width of each landing shall not be less than the door served. Every landing shall have a dimension

of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not to exceed 1/4 unit vertical in 12 units horizontal (2 percent).

Exceptions:

1. Exterior balconies less than 60 square feet (5.6 m²) and only accessible from a door are permitted to have a landing less than 36 inches (914 mm) measured in the direction of travel.
2. **Doors that are not required egress doors and are served by a stairway with no more than 3 risers.**
3. **Doors protected by a guard in accordance with this code.**
4. **Doors protected in a manner approved by the Building Official.**

R311.3.2 Floor elevations for other exterior doors.

Doors other than the required egress door shall be provided with landings or floors not more than 7 3/4 inches (196 mm) below the top of the threshold.

Exception: A top landing is not required where a stairway of not more than **three** [~~two~~]risers is located on the exterior side of the door, provided that the door does not swing over the stairway.

R311.7.6 Landings for stairways. There shall be a floor or landing at the top and bottom of each stairway. The width perpendicular to the direction of travel shall be not less than the width of the flight served. Landings of

shapes other than square or rectangular shall be permitted provided that the depth at the walk line and the total area is not less than that of a quarter circle with a radius equal to the required landing width. Where the stairway has a straight run, the depth in the direction of travel shall be not less than 36 inches (914 mm).

Exception:

1. A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided that a door does not swing over the stairs.

2. **Where not required by Section R311.3 and Section R311.3.2.**

(SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS)

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhouses, **in accordance with R313.90.**

Exception:

An automatic residential fire sprinkler system shall not be required where additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

R313.2 One- and two-family dwellings automatic fire systems. An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings, **in accordance with R313.90.**

Exception:

An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.

R313.90 Sprinklers in Residential Structures.

Notwithstanding the provisions of the Building Code and International Residential Code, as amended and adopted by St. Charles County, Missouri, and in accordance with RSMo 67.281, a builder of one or two-family dwellings shall offer to any purchaser on or before the time of entering into the purchase contract the option, at the purchaser's cost, to install or equip fire sprinklers in the dwelling, residence, or unit. Notwithstanding any other provision of law to the contrary, no purchaser of such a one or two-family dwelling shall be denied the right to choose or decline to install a fire sprinkler system in such dwelling or residence being purchased.

(CHAPTER 4 FOUNDATIONS)

(SECTION R403 FOOTINGS)

Section R403.1.1 Minimum size. The minimum width, W, and thickness, T, for concrete footings shall be in accordance with Tables R403.1(1), through **R403.1(4)** [~~R403.1(3)~~] and Figure R403.1(1) or R403.1.3, as applicable. The footing width shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Footing projections, P, shall be not less than 2 inches (51 mm) and shall not exceed the thickness of the footing. Footing thickness and projection for

fireplaces shall be in accordance with Section R1001.2. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood foundations shall be in accordance with the details set forth in Section R403.2, and Figures R403.1(2) and R403.1(3).

Table R403.1(4)
MINIMUM WIDTH AND THICKNESS OF CONCRETE,
PRECAST AND MASONRY FOOTINGS (inches)

	LOAD BEARING VALUE OF SOIL (psf)			
	1,500	2,000	3,000	>=4,000
Conventional light-frame construction				
1-story	17	16	16	16
2-story	20	16	16	16
3-story	23	17	16	16
Masonry veneer over light frame				
1-story	21	16	16	16
2-story	26	20	16	16
3-story	32	24	16	16

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kPa.

R403.1.4.1 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended below the frost line specified in Table R301.2.(1).

2. Constructed in accordance with Section R403.3.
3. Constructed in accordance with ASCE 32.
4. Erected on solid rock.

Exceptions:

1. Protection of freestanding accessory structures with an area of **200 square feet (18.5 m²)** [~~600 square feet (56 m²)~~] or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
2. Protection of freestanding accessory structures with an area of **200 square feet (18.5 m²)** [~~400 square feet (37 m²)~~] or less, of other than light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
3. Decks not supported by a dwelling **and not more than 4 feet (1.22 m) above the surrounding grade** need not be provided with footings that extend below the frost line.

R403.1.7 Footings on or adjacent to slopes. The placement of buildings and structures on or adjacent to slopes steeper than one unit vertical in three units horizontal (33.3-percent slope) shall conform to Sections R403.1.7.1 through R403.1.7.4. **or designed and sealed by a registered engineer licensed in the State of Missouri with approval from the Building Official.**

(SECTION R404 FOUNDATION AND RETAINING WALLS)

R404.1.3.2 Reinforcement for foundation walls.

Concrete foundation walls shall be laterally supported at the top and bottom. Horizontal reinforcement shall be provided in accordance with Table R404.1.2(1).

Vertical reinforcement shall be provided in accordance with Table R404.1.2(2), R404.1.2(3), R404.1.2(4), R404.1.2(5), R404.1.2(6), R404.1.2(7) or R404.1.2(8).

Vertical reinforcement for flat basement walls retaining 4 feet (1219 mm) or more of unbalanced backfill is permitted to be determined in accordance with Table R404.1.2(9). For basement walls supporting above-grade concrete walls, vertical reinforcement shall be the greater of that required by Tables R404.1.2(2) through R404.1.2(8) or by Section R608.6 for the above-grade wall. In buildings assigned to Seismic Design Category D0, D1 or D2, concrete foundation walls shall also comply with Section R404.1.4.2.

Exception:

Where unstable soil or ground water conditions do not exist, concrete foundation walls may be constructed in accordance with Table R404.1.2(10).

Table R404.1.2(10) Concrete Foundation Walls

Maximum Wall Height	Maximum Depth of Unbalanced Backfill	Minimum Nominal Wall Thickness
8'-0"	7'-6" or less	8" (Note a)
9'-0"	8'-6" or less	10" (Note b)
10'-0"	9'-6" or less	12" (Note c)

- a. Concrete foundation walls may be constructed a minimum of nominal 8 inches thick where the wall height from the top of the footing to the top of the wall does not exceed 8 feet. A minimum of two #4 reinforcing bars shall be placed horizontally in the top and bottom of the foundation wall. A minimum of two #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24 inches beyond the corners of the openings.

- b. Concrete foundation walls may be constructed a minimum of nominal 10 inches thick. A minimum of two #5 reinforcing bars shall be placed horizontally in the top, middle, and bottom of the foundation wall. A minimum of two #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24 inches beyond the corners of the openings.

- c. Concrete foundation walls may be constructed a minimum of nominal 12 inches thick. A minimum of three #5 reinforcing bars shall be placed horizontally in the top, middle, and bottom of the foundation wall. A minimum of two #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24 inches beyond the corners of the openings.**
- d. The concrete minimum wall thickness shall be 8 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when maximum wall height is 8 feet.**
- e. The concrete minimum wall thickness shall be 10 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when the maximum wall height is 9 feet.**
- f. The concrete minimum wall thickness shall be 12 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when the maximum wall height is 10 feet.**

(SECTION R405 FOUNDATION DRAINAGE)

R405.1 Concrete or masonry foundations. Drains shall be provided around concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or

crushed stone drains shall extend not less than 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51 mm) of washed gravel or crushed rock not less than one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material.

Exception:

1. A drainage system is not required where the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I soils, as detailed in Table R405.1.
2. **Drains provided as detailed in Section R405.1.90 are approved as an alternative method to meet the requirements of this Section.**

R405.1.90 Soil evaluations. An evaluation of the soil for the presence or absence of ground water is required. The evaluation report shall be based on either a subsurface soil investigation or satisfactory data from adjacent areas together with an inspection of the excavation prior to pouring concrete.

R405.1.90.1 Ground water present. Provide drain tile, perforated pipe or other approved foundation drainage systems (such as water channel system) around perimeter of the outside of the foundation and inside the foundation. Drain discharge shall be by gravity to daylight or be connected to a basement floor sump.

R405.1.90.2 No ground water present. Provide drain tile, perforated pipe or other approved foundation drainage systems (such as water channel system) around perimeter of the outside of the foundation or inside the foundation. Drain discharge shall be by gravity to daylight or be connected to a basement floor sump.

R405.1.90.3 Filter membranes. An approved filter membrane shall be placed over the top of the joints/pipe perforations. The tile/pipe shall be placed on 2 inches minimum gravel or crushed stone and have 6 inch minimum cover.

R405.1.90.4 Drainage system. Drainage system shall discharge by gravity to daylight or be connected to an approved sump (18 inches in diameter x 24 inches deep with fitted cover) with pump. A sump pit shall be provided in each basement with pump discharge by an approved method, exception may be granted by a code official.

R507.2.4 Deck lateral load connection. [~~The lateral load connection required by Section R507.1 shall be permitted to be in accordance with Figure R507.2.3(1) or R507.2.3(2). Where the lateral load connection is~~

~~provided in accordance with Figure R507.2.3(1), hold-down tension devices shall be installed in not less than two locations per deck, within 24 inches of each end of the deck. Each device shall have an allowable stress design capacity of not less than 1,500 pounds (6672 N). Where the lateral load connections are provided in accordance with Figure R507.2.3(2), the hold-down tension devices shall be installed in not less than four locations per deck, and each device shall have an allowable stress design capacity of not less than 750 pounds (3336 N).]~~

The lateral load connection required by Section R507.1 shall be one of the following methods:

- 1. In accordance with Figure R507.2.3(1) with hold-down tension devices installed in not less than two locations per deck, within 24 inches of each end of the deck. Each device shall have an allowable stress design capacity of not less than 1,500 pounds (6672 N).**
- 3. In accordance with Figure R507.2.3(2) with hold-down tension devices installed in not less than four locations per deck, and each device shall have an allowable stress design capacity of not less than 750 pounds (3336 N).**
- 4. Using knee braces extending from the floor system to the posts.**
- 5. Using a diagonal brace across the floor system installed below the floor system and attached using (2) 10d nails through the brace into each joist, or by**

a metal diagonal brace “cut-in” and attached to the top chords of the joist.

(CHAPTER 6 WALL CONSTRUCTION)
 (SECTION R602 WOOD WALL FRAMING)

R602.7.5: Delete in its entirety and replace with the following table:

**Table R602.7.5
 MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END
 OF HEADERS IN EXTERIOR WALLS^a**

MAXIMUM HEADER SPAN (feet)	ULTIMATE DESIGN WIND SPEED AND EXPOSURE CATEGORY	
	<140 mph, Exposure B or < 130 mph, Exposure C	<115 mph, Exposure B^b
4	1	1
6	2	1
8	2	1
10	3	2
12	3	2
14	3	2
16	4	2
18	4	2

- a. For header spans between those given above, use the minimum number of full-height studs associated with the larger header span.
- b. The tabulated minimum number of full-height studs is applicable where jack studs are provided to support the header at each end in accordance with Table R602.7(1). Where framing anchors are used to support the header in lieu of a jack stud in accordance with footnote “d” of Table R602.7(1), the minimum number of full-height studs at each

end of a header shall be in accordance with requirements for wind speed <140 mph, Exposure B.

R602.10.5.90 Tall wall areas. Provided the required number and size of brace wall panels is provided for each story in accordance with this code, and the requirements for walls in R602 are followed, additional engineered design for tall wall areas such as atriums, foyers, stairs, great rooms, etc. shall not be required.

(CHAPTER 9 ROOF ASSEMBLIES)
(SECTION R905 REQUIREMENTS FOR ROOF COVERINGS)

R905.2.8.2 Valleys. Valley linings shall be installed in accordance with the manufacturer's instructions before applying shingles. Valley linings of the following types shall be permitted:

1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be not less than 24 inches (610 mm) wide and of any of the corrosion-resistant metals in Table R905.2.8.2.
2. For open valleys, valley lining of two plies of mineral-surfaced roll roofing, complying with ASTM D 3909 or ASTM D 6380 Class M, shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer not less than 36 inches (914 mm) wide.
3. For closed valleys (valley covered with shingles), valley lining of [~~one ply of smooth roll roofing~~] **two ply of 15 pound felt [or]** complying with **ASTM D 226 Type I, ASTM D 4869 Type I, or ASTM D 6757.**

~~[ASTM D 6380 and not less than 36 inches wide (914 mm)]~~ or valley lining as described in Item 1 or 2 shall be permitted. Self-adhering polymer modified bitumen underlayment complying with ASTM D 1970 shall be permitted in lieu of the lining material.

R905.2.8.5 Drip edge. A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of drip edge shall be overlapped not less than 2 inches (51 mm). Drip edges shall extend not less than 1/4 inch (6.4 mm) below the roof sheathing and extend up back onto the roof deck not less than 2 inches (51 mm). Drip edges shall be mechanically fastened to the roof deck at not more than 12 inches (305 mm) o.c. with fasteners as specified in Section R905.2.5. Underlayment shall be installed over the drip edge along eaves and under the underlayment along rake edges.

Exception: Unless drip edge specifically is required by the Manufacturer's Installation Instructions of the roofing, metal wrapped fascia extending 1 inch under the roof covering with the underlayment installed over it shall be deemed to meet the requirements of this section.

(CHAPTER 10 CHIMNEYS AND FIREPLACES)
(SECTION R1004 FACTORY-BUILT FIREPLACES)

R1004.90 Required fire separation enclosure. All prefabricated metal chimneys shall be enclosed in a fire-resistant shaft with one (1) layer of five-eighths (5/8) inch type "X" gypsum board from the fireplace connector to the underside of the roof sheathing, securely attached with framing material. When the

chimney chase is located on an exterior wall of the structure, it need only be separated by lining the wall between the chimney chase and the exterior wall with five-eighths (5/8) type "X" inch gypsum board. All joints are to be tight within one-eighth (1/8) of an inch or tape with joint compound. Required clearances shall be maintained between the chimney and the gypsum board per chimney manufacturer's specifications.

(SECTION R1005 FACTORY-BUILT CHIMNEYS)

R1005.7 Factory-built chimney offsets. Where a factory-built chimney assembly incorporates offsets, no part of the chimney shall be at an angle of more than 30 degrees (0.52 rad) from vertical at any point in the assembly and the chimney assembly shall not include more than four elbows.

Exception: When allowed by the manufacturer's installation instructions.

(CHAPTER 11 ENERGY EFFICIENCY)
(SECTION N1101 GENERAL)

N1101.6 (R202) Defined terms.

PROJECTION FACTOR: The ratio of the horizontal depth of an 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.

N1101.13 (R401.2) Compliance. Projects shall comply with one of the following:

1. Sections N1101.14 through N1104 **as amended.**
2. Section N1105 and the provisions of Sections N1101.14 through N1104 labeled “Mandatory.”
3. An energy rating index (ERI) approach in Section N1106.

N1101.14 (R401.3) Certificate (Mandatory). **Unless otherwise presented to the homeowner and building official in writing,** a permanent certificate shall be completed by the builder or registered design professional and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall list the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, crawl space wall and/or floor) and ducts outside conditioned spaces; U-factors for fenestration and the solar heat gain coefficient (SHGC) of fenestration, and the results from any required duct system and building envelope air leakage testing done on the building. Where there is more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the types and efficiencies of heating, cooling and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the

residence, the certificate shall list “gas-fired unvented room heater,” “electric furnace” or “baseboard electric heater,” as appropriate. An efficiency shall not be listed for gas-fired unvented room heaters, electric furnaces or electric baseboard heaters.

(SECTION N1102 BUILDING THERMAL ENVELOPE)

Table N1102.1.2 (R402.1.2) Delete in its entirety and insert the following table:

TABLE N1102.1.2 (R402.1.2)
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a

CLIMATE ZONE	4	
FENESTRATION U-FACTOR	0.35	
SKYLIGHT U-FACTOR	0.60 [0.55]	See Note B
GLAZED FENESTRATION SHGC	NR [0.40]	
CEILING R-VALUE	38 [49]	
WOOD FRAME WALL R-VALUE	13 [20 or]	
MASS WALL R-VALUE	8 / 13	See Note I
FLOOR R-VALUE	19	
BASEMENT WALL R-VALUE	0 [10 / 13]	See Note J
SLAB R-VALUE AND DEPTH	10, 2 ft	See Note D
CRAWL SPACE WALL R-VALUE	10 / 13	See Note C

a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.

b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.

c. “15/19” means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity

insulation at the interior of the basement wall. “15/19” shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. “10/13” means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Zones 1 through 3 for heated slabs.

e. –

f. –

g. –

h. –

i. The second R-value applies when more than half the insulation is on the interior of the mass wall.

j. Band boards and cripple walls shall be insulated to R-13.

Section N1102.1.5 (R402.1.5) Total UA alternative. If the total building thermal envelope UA (sum of U-factor times assembly area) is less than or equal to the total UA resulting from using the U-factors in Table N1102.1.4 (multiplied by the same assembly area as in the proposed building), the building shall be considered in compliance with Table N1102.1.2. The UA calculation shall be done using a method consistent

with the ASHRAE Handbook of Fundamentals and shall include the thermal bridging effects of framing materials. The SHGC requirements shall be met in addition to UA compliance.

Exception: In Climate Zone 4, permanently shaded vertical fenestration shall be permitted to satisfy SHGC requirements. The projection factor of an overhang, eave, or permanently attached shading device shall be greater than or equal to the value listed in Table N1102.2.2.1 for the appropriate orientation. The minimum projection shall extend beyond each side of the glazing a minimum of 12 inches. Each orientation shall be rounded to the nearest cardinal orientation (+/- 45 degrees or 0.79 rad) for purposes of calculations and demonstrating compliance.

TABLE N1102.1.5
MINIMUM PROJECTION FACTOR REQUIRED BY ORIENTATION
FOR SHGC

ORIENTATION	PROJECTION FACTOR
North	$\geq 0.40^a$
South	≥ 0.20
East	≥ 0.50
West	≥ 0.50

a. For the north orientation, a vertical projection located on the west-edge of the fenestration with the equivalent of $PF > 0.15$ shall also satisfy the minimum projection factor requirements.

N1102.2.4.90 Doors (except overhead garage doors). All metal doors shall be insulated.

Table N1102.4.1.1.1 (402.4.1.1)
Air Barrier and Insulation Installation

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
General requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within comers and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch mm1mum. Exterior

		thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.	
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.
Floors (including above garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing; and extends from the bottom to the top of all perimeter floor framing members.
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawl space walls.

Shafts,penetrations	Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.	
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed to the drywall.	Recessed light fixtures installed in the building thermal envelope shall be [air tight and IC rated] sealed to the drywall by means such as, but not limited to, a gasketed fixture.
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.

Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.	
HVAC register boots	HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor or drywall.	
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.	

N1102.4.1.2 (R402.4.1.2) Testing Option. If testing is elected, the building or dwelling unit shall be tested and verified as having an air leakage rate of less than [not exceeding] five air changes per hour [in Climate Zones 1 and 2, and three air changes per hour in

~~Climate Zones 3 through 8~~]. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

During testing:

- 1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weather stripping or other infiltration control measures.**
- 2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.**
- 3. Interior doors, if installed at the time of the test, shall be open.**
- 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.**
- 5. Heating and cooling systems, if installed at the time of the test, shall be turned off.**
- 6. Supply and return registers, if installed at the time of the test, shall be fully open.**

N1102.4.1.90 Inspection option. The items listed in Table N1102.4.1.1 (402.4.1.1), applicable to the method of construction, are field verified.

N1102.4.4 (R402.4.4) Rooms containing fuel-burning appliances. In Climate Zones 3 through 8, where open combustion air ducts provide combustion air to open combustion fuel-burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table N1102.1.2, where the walls, floors and ceilings shall meet a minimum of the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section N1103. The combustion air duct shall be insulated where it passes through conditioned space to a minimum of R-8.

Exceptions:

1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
2. Fireplaces and stoves complying with Sections N1102.4.2 and R1006.
- 3. Mechanical equipment in an unfinished space.**

(SECTION N1103 SYSTEMS)

N1103.1.1 (R403.1.1) Programmable thermostat.
Delete in its entirety.

N1103.3.2 (R403.3.2) Sealing (Mandatory). Ducts, air handlers and filter boxes shall be sealed. Joints and seams shall comply with either the International Mechanical Code or Section M1601.4.1 of this code, as applicable.

Exceptions:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.
2. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams, and locking-type joints and seams of other than the snap-lock and button-lock types.
3. **Sealing** [~~Duct sealing and tightness test~~] is not required **where** [~~if~~] the air handler and [~~most~~] ducts are located within conditioned space as determined by the Building Code Official.

N1103.3.3 (R403.3.3) Duct testing (Optional [Mandatory]). **Ducts may be pressure tested** [~~Ducts shall be pressure tested~~] to determine air leakage by one of the following methods:

N1103.3.5 (R403.3.5) Building cavities (Mandatory).
Delete in its entirety.

N1103.4.1 (R403.4.1) Protection of piping insulation. Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight,

moisture, equipment maintenance and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape shall not be permitted.

Exception: Line sets between the structure and the condensing unit.

N1103.5.3 (R403.5.3) Hot water pipe insulation (Prescriptive). Insulation for hot water pipe with a minimum thermal resistance (R-value) of R-3 shall be applied to the following:

1. Piping **larger than** 3/4 inch (19 mm) [~~and larger~~] in nominal diameter.
2. Piping serving more than one dwelling unit.
3. Piping located outside the conditioned space.
4. Piping from the water heater to a distribution manifold.
5. Piping located under a floor slab.
6. Buried in piping.
7. Supply and return piping in recirculation systems other than demand recirculation systems.

N1103.6 (R403.6) Mechanical ventilation [~~(Mandatory)~~]. **Mandatory where required by N1102.4.1.2. If, in accordance with N1102.4.1.2, the resulting air changes per hour (ACH) at 50 Pascals is less than 5 air changes per hour, the building shall be provided with ventilation that meets the**

requirements of Section M1507 of this code or the International Mechanical Code, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

(SECTION N1104 ELECTRICAL POWER AND LIGHTING SYSTEMS)

N1104.1 (R404.1) Lighting equipment (Optional [Mandatory]). Not less than 75 percent of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps or not less than 75 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.

Exception: Low-voltage lighting.

(SECTION N1105 SIMULATED PERFORMANCE ALTERNATIVE)

TABLE N1105.5.2(1) [R405.5.2(1)]
SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS

BUILDING COMPONENT	STANDARD REFERENCED DESIGN	PROPOSED DESIGN
Above-grade walls	Type: mass wall if proposed wall is mass; otherwise wood frame	As proposed
	Gross area: same as proposed	As proposed
	U-factor: as specified in Table N1102.1.4	As proposed
	Solar absorptance = 0.75	As proposed
	Remittance = 0.90	As proposed

Basement and crawl space walls	Type: same as proposed	As proposed
	Gross area: same as proposed	As proposed
	U-factor: from Table N1102.1.4, with insulation layer on interior side of walls	As proposed
Above-grade floors	Type: wood frame	As proposed
	Gross area: same as proposed	As proposed
	U-factor: as specified in Table N1102.1.4	As proposed
Ceilings	Type: wood frame	As proposed
	Gross area: same as proposed	As proposed
	U-factor: as specified in Table N1102.1.4	As proposed
Roofs	Type: composition shingle on wood sheathing	As proposed
	Gross area: same as proposed	As proposed
	Solar absorptance = 0.75	As proposed
	Emittance = 0.90	As proposed
Attics	Type: vented with aperture = 1 ft ² per 300 ft ² ceiling area	As proposed
Foundations	Type: same as proposed	As proposed
	Foundation wall area above and below grade and soil characteristics: same as proposed	As proposed
Opaque doors	Area: 40 ft ²	As proposed
	Orientation: North	As proposed
	U-factor: same as fenestration from Table N1102.1.4	As proposed
Vertical fenestration other than opaque doors	Total area ^b = {(a) The proposed glazing area, where the proposed glazing area is less than 15 percent of the conditioned floor area (b)} 15 percent of the conditioned floor area[; where the proposed glazing area is 15 percent or more of the conditioned	As proposed

	floor area	
	Orientation: equally distributed to 4 cardinal compass orientations (N, E, S and W)	As proposed
	U-factor: as specified in Table N1102.1.4	As proposed
	SHGC: as specified in Table N1102.1.2, except that for climates with no requirement (NR) SHGC = 0.40 shall be used	As proposed
	Interior shade fraction: $0.92 - (0.21 \times \text{SHGC for the standard reference design})$	$0.92 - (0.21 \times \text{SHGC as proposed})$
	External shading: none	As proposed
Skylights	None	As proposed
Thermally isolated sunrooms	None	As proposed
Air exchange rate	<p>Air leakage rate of 5 air changes per hour [in Climate Zones 1 and 2, and 3 air changes per hour in Climate Zones 3 through 8] at a pressure of 0.2 inches w.g. (50 Pa). The mechanical ventilation rate shall be in addition to the air leakage rate and the same as in the proposed design, but no greater than $0.01 \times \text{CFA} + 7.5 \times (\text{Nbr} + 1)$</p> <p>where: CFA = conditioned floor area Nbr = number of bedrooms</p> <p>Energy recovery shall not be assumed</p>	<p>For residences that are not tested, the same air leakage rate as the standard reference design.</p> <p>For tested residences, the measured air exchange rate^a.</p> <p>The</p>

	for mechanical	mechanical ventilation rate ^b shall be in addition to the air leakage rate and shall be proposed.
Mechanical ventilation	None, except where mechanical ventilation is specified by the proposed design, in which case: Annual vent fan energy use: kWh/yr = $0.03942 \times \text{CFA} + 29.565 \times (\text{N}_{\text{br}} + 1)$ Where: CFA = conditioned floor area N_{br} = number of bedrooms	As proposed
Internal gains	$\text{IGain} = 17,900 + 23.8 \times \text{CFA} + 4104 \times \text{N}_{\text{br}}$ (Btu/day per dwelling unit)	Same as standard reference design
Internal mass	An internal mass for furniture and contents of 8 pounds per square foot of floor area	Same as standard reference design, plus any additional mass specifically designed as a thermal storage element ^c but not integral to the

		building envelope or structure.
Structural mass	For masonry floor slabs, 80% of floor area covered by R-2 carpet and pad, and 20% of floor directly exposed to room air	As proposed
	For masonry basement walls, as proposed, but with insulation required by Table R402.1.4 located on the interior side of the walls	As proposed
	For other walls, for ceilings, floors, and interior walls, wood frame construction	As proposed
Heating systems ^{d, e}	<p>As proposed for other than electric heating without a heat pump, where the proposed design utilizes electric heating without a heat pump the standard reference design shall be an air source heat pump meeting the requirements of Section C403 of the IECC Commercial Provisions.</p> <p>Fuel type: same as the proposed design</p> <p>Efficiencies:</p> <p>Electric: air-source heat pump with prevailing federal minimum standards.</p> <p>Non-electric furnaces: natural gas furnace with prevailing federal minimum standards.</p> <p>Non-electric boilers: natural gas boiler with prevailing federal minimum standards.</p>	As proposed

	Capacity: sized in accordance with Section N1103.7.	
Cooling systems ^{d, f}	Fuel type: electric Efficiency: in accordance with prevailing federal minimum standards Capacity: sized in accordance with Section N1103.7	As proposed
Service water heating ^{d, e, f}	[As proposed Use: same as proposed design] Fuel type: same as proposed design Efficiency: in accordance with prevailing federal minimum standards Use: gal/day = 30 + 10 x N_{br} Tank temperature: 120° F. Where: N_{br} = number of bedrooms	As proposed gal/day = 30 + (10 x N_{br}) Same as standard reference
Thermal distribution systems	Duct insulation: from Section N1103.2.1 A thermal distribution system efficiency (DSE) of 0.88 shall be applied to both the heating and cooling system efficiencies for all systems other than tested duct systems. For tested duct systems, the leakage rate shall be 4 cfm (113.3 L/min) per 100 ft ² (9.29 m ²) of conditioned floor area at a pressure of differential of 0.1 inches w.g. (25 Pa)	As tested or specified in Table R405.5.2(2) if not tested. Duct insulation shall be as proposed.
Thermostat	Type: Manual, cooling temperature setpoint = 75° F. Heating temperature setpoint = 72° F.	Same as standard reference

For SI: 1 square foot = 0.93 m²; 1 British thermal unit = 1055J; 1 pound per square foot = 4.88 kg/m²; 1 gallon (US) = 3.785 L; °C = (°F-32)/1.8; 1 degree = 0.79 rad

- a. Where required by the code official, testing shall be conducted by an approved party. Hourly calculations as specified in the ASHRAE Handbook of Fundamentals, or the equivalent, shall be used to determine the energy loads resulting from infiltration.
- b. The combined air exchange rate for infiltration and mechanical ventilation shall be determined in accordance with Equation 43 of 2001 ASHRAE Handbook of Fundamentals, page 26.24, and the "Whole-house Ventilation" provisions of 2001 ASHRAE Handbook of Fundamentals, page 26.19, for intermittent mechanical ventilation.
- c. Thermal storage element shall mean a component not part of the floors, walls or ceilings that is part of a passive solar system, and that provides thermal storage such as enclosed water columns, rock beds, or phase-change containers. A thermal storage element must be in the same room as fenestration that faces within 15 degrees (0.26 rad) of true south, or must be connected to such a room with pipes or ducts that allow the element to be actively charged.
- d. For a proposed design with multiple heating, cooling or water heating systems using different fuel types, the applicable standard reference design system capacities and fuel types shall be weighted in accordance with their respective loads as calculated by accepted engineering practice for each equipment and fuel type present.

- e. For a proposed design without a proposed heating system, a heating system with the prevailing federal minimum efficiency shall be assumed for both the standard reference design and proposed design.
- f. For a proposed design home without a proposed cooling system, an electric air conditioner with the prevailing federal minimum efficiency shall be assumed for both the standard reference design and the proposed design.
- g. For a proposed design with a non-storage-type water heater, a forty-gallon storage-type water heater with the prevailing federal minimum energy factor for the same fuel as the predominant heating fuel type shall be assumed. For the case of a proposed design without a proposed water heater, a forty-gallon storage-type water heater with the prevailing federal minimum efficiency for the same fuel as the predominant heating fuel type shall be assumed for both the proposed design and standard reference design.

(CHAPTER 13 GENERAL MECHANICAL SYSTEM
REQUIREMENTS)
(SECTION M1301 GENERAL)

M1301.2 Identification. Each length of pipe and tubing **as produced by the manufacturer and prior to use in the field**, and each pipe fitting utilized in a mechanical system shall bear the identification of the manufacturer.

Exception: Line sets and similar materials, provided the installer can provide documentation related to the material used such as, but not limited to, a receipt, invoice, or container.

(SECTION M1305 APPLIANCE ACCESS)

M1305.1.4.1 Ground clearance. Equipment and appliances supported from the ground shall be level and firmly supported on a concrete slab or other ~~[approved material extending not less than 3 inches (76 mm) above the adjoining ground]~~ **approved material extending not less than 2 inches (50.8 mm) above the adjoining ground.** Such support shall be in accordance with the manufacturer's installation instructions. Appliances suspended from the floor shall have a clearance of not less than 6 inches (152 mm) from the ground.

M1305.1.4.3 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be installed at or near the appliance location in accordance with Chapter 39. Exposed lamps shall be protected from damage by location or lamp guards.

Exception: Basements

(SECTION M1307 APPLIANCE INSTALLATION)

M1307.2 Anchorage of appliances. Appliances designed to be fixed in position shall be fastened or anchored in an approved manner. In Seismic Design Categories D0, D1 and D2, ~~[and in townhouses in Seismic Design Category C]~~, water heaters and thermal storage units shall be anchored or strapped to resist horizontal displacement caused by earthquake motion in accordance with one of the following:

1. Anchorage and strapping shall be designed to resist a horizontal force equal to one-third of the operating weight of the water heater storage tank, acting in any horizontal direction. Strapping shall be at points within the upper one-third and lower one-third of the appliance's vertical dimensions. At the lower point, the strapping shall maintain a minimum distance of 4 inches (102 mm) above the controls.
2. The anchorage strapping shall be in accordance with the appliance manufacturer's recommendations.

(CHAPTER 14 HEATING AND COOLING
EQUIPMENT AND APPLIANCES)
(SECTION M1411 HEATING AND COOLING
EQUIPMENT)

M1411.3.1 Auxiliary and secondary drain systems. In addition to the requirements of Section M1411.3, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components will occur as a result of overflow from the equipment drain pan or stoppage in the condensate drain piping. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8 unit vertical in 12 units horizontal (1-percent slope). Drain piping shall be not less than 3/4-inch (19 mm) nominal pipe size. One of the following methods shall be used:

1. An auxiliary drain pan with a separate drain shall be installed under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall

have a minimum depth of 1.5 inches (38 mm), shall be not less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steel pans shall have a minimum thickness of not less than [~~0.0236 inch (0.6010 mm) (No. 24 Gage)~~] **No. 26 Gage**. Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).

2. A separate overflow drain line shall be connected to the drain pan installed with the equipment. This 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.
3. An auxiliary drain pan without a separate drain line shall be installed under the coils on which condensation will occur. This pan shall be equipped with a water level detection device conforming to UL 508 that will shut off the equipment served prior to overflow of the pan. The pan shall be equipped with a fitting to allow for drainage. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section.
4. A water level detection device conforming to UL 508 shall be installed that will shut off the equipment served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line or the equipment supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.

M1411.8 Locking access port caps. *Delete in its entirety.*

(CHAPTER 15 EXHAUST SYSTEMS)
(SECTION M1502 CLOTHES DRYER EXHAUST)

M1502.4.1 Material and size. Exhaust ducts shall have a smooth interior finish and be constructed of metal having a minimum thickness of 0.0157 inches (0.3950 mm) [~~No. 28 gage~~]. The duct shall be 4 inches (102 mm) nominal in diameter.

M1502.4.2 Duct installation. Exhaust ducts shall be supported at intervals not to exceed 12 feet (3658 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 [~~and shall be mechanically fastened~~]. Ducts shall not be joined with [~~screws or similar~~] fasteners that protrude more than 1/8 inch (3.2 mm) into the inside of the duct.

(SECTION M1503 RANGE HOODS)

M1503.4 Makeup air required. Exhaust hood systems capable of exhausting in excess of **600 cubic feet per minute (0.285m³/s)** [~~400 cubic feet per minute (0.19 m³/s)~~] shall be mechanically or naturally provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with not less than one damper. Each damper shall be a gravity damper or an electrically operated damper that automatically opens when the exhaust system operates. Dampers shall be accessible for inspection, service, repair and replacement without removing permanent

construction or any other ducts not connected to the damper being inspected, serviced, repaired or replaced.

(SECTION M1601 DUCT SYSTEMS)

M1601.1.1 Above-ground duct systems. Above-ground duct systems shall conform to the following:

1. Equipment connected to duct systems shall be designed to limit discharge air temperature to not greater than 250°F (121°C).
2. Factory-made ducts shall be listed and labeled, **as produced by the manufacturer and prior to use in the field**, in accordance with UL 181 and installed in accordance with the manufacturer's instructions.
3. Fibrous glass duct construction shall conform to the SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards.
4. Field-fabricated and shop-fabricated metal and flexible duct constructions shall conform to the SMACNA HVAC Duct Construction Standards—Metal and Flexible or ~~[except as allowed]~~ by Table M1601.1.1. Galvanized steel shall conform to ASTM A 653.
5. The use of gypsum products to construct return air ducts or plenums is permitted, provided that the air temperature does not exceed 125°F (52°C) and exposed surfaces are not subject to condensation.
6. Duct systems shall be constructed of materials having a flame spread index of not greater than 200.

7. Stud wall cavities and the spaces between solid floor joists to be used as air plenums shall comply with the following conditions:
 - 7.1. These cavities or spaces shall not be used as a plenum for supply air.
 - 7.2. These cavities or spaces shall not be part of a required fire-resistance-rated assembly.
 - 7.3. Stud wall cavities shall not convey air from more than one floor level. Stud wall cavities shall be sealed at the floor to not draft air from the living space between the flooring and drywall.
 - 7.4. Stud wall cavities and joist-space plenums shall be isolated from adjacent concealed spaces by tight-fitting fireblocking in accordance with Section R602.8.
 - 7.5. Stud wall cavities in the outside walls of building envelope assemblies shall not be utilized as air plenums.

M1601.4.1 Joints, seams and connections.

Longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in SMACNA HVAC Duct Construction Standards - Metal and Flexible and NAIMA Fibrous Glass Duct Construction Standards.

Joints of duct systems shall be made substantially airtight in an unconditioned area by means of tapes, mastics, liquid sealants, gasketing or other approved closure systems. Closure systems used with rigid fibrous glass ducts shall comply with UL 181A and shall be marked 181A-P for pressure-sensitive tape,

181A-M for mastic or 181A-H for heat-sensitive tape. Closure systems used with flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked 181B-FX for pressure sensitive tape or 181B-M for mastic. Duct connections to flanges of air distribution system equipment or sheet metal fittings shall be mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metal ducts shall have a contact lap of at least 1 inch and shall be mechanically fastened with at least three sheet metal screws or rivets equally spaced around the joint. Closure systems used to seal metal ductwork shall be installed in accordance with the manufacturer's installation instructions.

~~[Joints, longitudinal and transverse seams, and connections in ductwork shall be securely fastened and sealed with welds, gaskets, mastics (adhesives), mastic-plus embedded fabric systems, liquid sealants, or tapes. Tapes and mastics used to seal fibrous glass ductwork shall be listed and labeled in accordance with UL 181A and shall be marked "181A P" for pressure sensitive tape, "181 A M" for mastic or "181 A H" for heat-sensitive tape.~~

~~Tapes and mastics used to seal metallic and flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked "181 B FX" for pressure-sensitive tape or "181 BM" for mastic. Duct connections to flanges of air distribution system equipment shall be sealed and mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B C. Crimp~~

~~joints for round metallic ducts shall have a contact lap of not less than 1 inch (25 mm) and shall be mechanically fastened by means of not less than three sheet metal screws or rivets equally spaced around the joint.~~

~~Closure systems used to seal all ductwork shall be installed in accordance with the manufacturers' instructions.}~~

Exceptions:

1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. **Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressure less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.** ~~[For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking type joints and seams of other than the snap-lock and button lock types.]~~

M1602.2 Return air openings. Return air openings for heating, ventilation and air conditioning systems shall comply with all of the following:

1. Openings shall not be located less than 10 feet (3048 mm) measured in any direction from an open combustion chamber or draft hood of another appliance located in the same room or space.
2. The amount of return air taken from any room or space shall be not greater than the flow rate of supply air delivered to such room or space.
3. Return and transfer openings shall be sized in accordance with the appliance or equipment manufacturers' installation instructions, Manual D or the design of the registered design professional.
4. Return air shall not be taken from a closet, bathroom, toilet room, kitchen, garage, mechanical room, boiler room, furnace room or unconditioned attic.

Exceptions:

1. Taking return air from a kitchen is not prohibited where such return air openings serve the kitchen only, and are located not less than 10 feet (3048 mm) from the cooking appliances.
2. Dedicated forced-air systems serving only the garage shall not be prohibited from obtaining return air from the garage.
3. Taking return air from an unconditioned crawl space shall not be accomplished through a direct connection to the return side of a forced-air furnace. Transfer openings in the crawl space enclosure shall not be prohibited.

4. Return air from one dwelling unit shall not be discharged into another dwelling unit.
5. **Return air may be taken from a bedroom closet over 64 square feet in area.**

(CHAPTER 21 HYDRONIC PIPING)
(SECTION G2105 GROUND-SOURCE HEAT-PUMP
SYSTEM LOOP PIPING)

M2105.19 Pipe penetrations. Openings for pipe penetrations in walls, floors and ceilings shall be larger than the penetrating pipe. Openings through concrete or masonry building elements shall be sleeved, **except where a drilled hole provides a natural and sufficient relieving arch as determined by the code official.** The annular space surrounding pipe penetrations shall be protected in accordance with Section VP2606.1.

(CHAPTER 24 FUEL GAS)
(SECTION G2408 INSTALLATION)

G2408.4 (305.7) Clearances from grade. Equipment and appliances installed at grade level shall be supported on a level concrete slab or other approved material extending not less than **2 inches (50.8 mm)** [~~3 inches (76 mm)~~] above adjoining grade or shall be suspended not less than 6 inches (152 mm) above adjoining grade. Such supports shall be installed in accordance with the manufacturer's instructions.

G2409.1 (308.1) Scope. This section shall govern the reduction in required clearances to combustible materials, including gypsum board, and combustible

assemblies for chimneys, vents, appliances, devices and equipment. Clearance requirements for air-conditioning equipment and central heating boilers and furnaces shall comply with Sections G2409.3 and G2409.4.

Exception:

Where allowed by the Manufacturer's Installation Instructions and approved by the Building Official.

(SECTION G2412 GENERAL)

G2412.9 (401.9) Identification. Each length of pipe and tubing, **as produced by the manufacturer and prior to use in the field**, and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.

(SECTION G2439 CLOTHES DRYER EXHAUST)

G2439.7.4.1 (614.8.4.1) Specified length. The maximum length of the exhaust duct shall be 35 feet (10 668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table G2439.7.4.1. **The maximum length of the exhaust duct does not include the transition duct.**

(SECTION G2442 FORCED-AIR WARM-AIR FURNACES)

G2442.4 (618.4) Prohibited sources. Outdoor or return air for forced-air heating and cooling systems shall not be taken from the following locations:

1. Closer than 10 feet (3048 mm) from an appliance vent outlet, a vent opening from a plumbing drainage system or the discharge outlet of an exhaust fan, unless the outlet is 3 feet (914 mm) above the outside air inlet.
2. Where there is the presence of objectionable odors, fumes or flammable vapors; or where located less than 10 feet (3048 mm) above the surface of any abutting public way or driveway; or where located at grade level by a sidewalk, street, alley or driveway.
3. A hazardous or insanitary location or a refrigeration machinery room as defined in the International Mechanical Code.
4. A room or space, the volume of which is less than 25 percent of the entire volume served by such system. Where connected by a permanent opening having an area sized in accordance with Section 2442.2, adjoining rooms or spaces shall be considered as a single room or space for the purpose of determining the volume of such rooms or spaces.

Exception: The minimum volume requirement shall not apply where the amount of return air taken from a room or space is less than or equal to the amount of supply air delivered to such room or space.

5. A room or space containing an appliance where such a room or space serves as the sole source of return air.

Exception: This shall not apply where:

1. The appliance is a direct-vent appliance or an appliance not requiring a vent in accordance with Section G2425.8.
2. The room or space complies with the following requirements:
 - 1.1. The return air shall be taken from a room or space having a volume exceeding 1 cubic foot for each 10 Btu/h (9.6L/W) of combined input rating of all fuel-burning appliances therein.
 - 1.2. The volume of supply air discharged back into the same space shall be approximately equal to the volume of return air taken from the space.
 - 1.3. Return-air inlets shall not be located within 10 feet (3048 mm) of a draft hood in the same room or space or the combustion chamber of any atmospheric burner appliance in the same room or space.
2. Rooms or spaces containing solid fuel-burning appliances, provided that return-air inlets are located not less than 10 feet (3048 mm) from the firebox of such appliances.
6. A closet, bathroom, toilet room, kitchen, garage, boiler room, furnace room or unconditioned attic.

Exceptions:

1. Where return air intakes are located not less than 10 feet (3048 mm) from cooking appliances and serve only the kitchen area, taking return air from a kitchen area shall not be prohibited.

2. Dedicated forced air systems serving only a garage shall not be prohibited from obtaining return air from the garage.
- 3. Return air may be taken from a bedroom closet over 64 square feet in area.**
7. A crawl space by means of direct connection to the return side of a forced-air system. Transfer openings in the crawl space enclosure shall not be prohibited.

(CHAPTER 25 PLUMBING ADMINISTRATION)
(SECTION P2503 INSPECTION AND TESTS)

P2503.5.1 Rough plumbing. DWV systems shall be tested on completion of the rough piping installation by water or [~~for piping systems other than plastic,~~] by air, without evidence of leakage. Either test shall be applied to the drainage system in its entirety or in sections after rough-in piping has been installed, as follows:

1. Water test. Each section shall be filled with water to a point not less than 5 feet (1524 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 15 minutes. The system shall prove leak free by visual inspection.
2. Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34 kPa) or 10 inches of mercury column (34 kPa). This pressure shall be held without introduction of additional air for a period of 15 minutes.

P2503.6 Shower liner test. *Delete in its entirety.*

(CHAPTER 26 GENERAL PLUMBING
REQUIREMENTS)
(SECTION P2602 INDIVIDUAL WATER SUPPLY
AND SEWAGE DISPOSAL)

P2602.1 General. The water-distribution and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public water supply or sewer system, respectively, **when these public utilities are within 200 feet of the nearest property line** [~~if available~~]. Where either a public water-supply or sewer system, or both, are not available **within 200 feet**, or connection to them is not feasible-**as determined by the Building Official**, an individual water supply or individual (private) sewage-disposal system, or both, shall be provided.

(SECTION P2603 STRUCTURAL AND PIPING
PROTECTION)

P2603.5 Freezing. **Water, soil and waste pipes shall not be installed in exterior walls, crawl spaces or attics, unless approved by the Building Official upon a showing that such pipes installed in such locations are not at risk of freezing. Water service pipes shall be installed not less than 36 inches (915 mm) below grade.** [~~In localities having a winter design temperature of 32°F (0°C) or lower as shown in Table R301.2(1) of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in attics or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both.~~]

~~Water service pipe shall be installed not less than 12 inches (305 mm) deep and not less than 6 inches (152 mm) below the frost line.]~~

P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a not less than **18 inches (453 mm)** [~~[NUMBER] inches (mm)~~] below finished grade at the point of septic tank connection. Building sewers shall be not less than **30 inches (762 mm)** [~~[NUMBER] inches (mm)~~] below grade.

(SECTION P2609 MATERIALS EVALUATION AND LISTING)

P2609.1 Identification. Each length of pipe **and tubing, as produced by the manufacturer and prior to use in the field**, and each pipe fitting, trap, fixture, material and device utilized in a plumbing system shall bear the identification of the manufacturer and any markings required by the applicable referenced standards. Nipples created from the cutting and threading of approved pipe shall not be required to be identified.

Exception: Where the manufacturer identification cannot be marked on pipe fittings and pipe nipples because of the small size of such fittings, the identification shall be printed on the item packaging or on documentation provided with the item.

(CHAPTER 28 WATER HEATERS)
(SECTION P2801 GENERAL)

P2801.8 Water heater seismic bracing. In Seismic Design Categories D0, D1 and D2 [~~and townhouses in Seismic Design Category C~~], water heaters shall be anchored or strapped in the upper one-third and in the lower one-third of the appliance to resist a horizontal force equal to one-third of the operating weight of the water heater, acting in any horizontal direction, or in accordance with the appliance manufacturer's recommendations.

**(CHAPTER 29 WATER SUPPLY AND
DISTRIBUTION)
(SECTION P2903 WATER SUPPLY SYSTEM)**

P2903.5 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. Water-hammer arrestors shall be installed in accordance with the manufacturer's instructions. Water-hammer arrestors shall conform to ASSE 1010. **A water-hammer arrestor shall be installed where quick-closing valves are utilized.**

**(SECTION P2904 DWELLING UNIT FIRE
SPRINKLER SYSTEMS)**

P2904.1 General. **These regulations are subject to Section R313 of this Code as amended by St. Charles County.** The design and installation of residential fire sprinkler systems shall be in accordance with NFPA 13D or Section P2904, which shall be considered equivalent to NFPA 13D. Partial residential sprinkler systems shall be permitted to be installed only in buildings not required to be equipped with a residential sprinkler system. Section P2904 shall apply to stand-alone and multipurpose wet-pipe sprinkler

systems that do not include the use of antifreeze. A multipurpose fire sprinkler system shall provide domestic water to both fire sprinklers and plumbing fixtures. A stand-alone sprinkler system shall be separate and independent from the water distribution system. A backflow preventer shall not be required to separate a stand-alone sprinkler system from the water distribution system.

P2904.1.1 Required sprinkler locations. **If installed as allowed by Section R313 of this Code as amended by St. Charles County**, sprinklers shall be installed to protect all areas of a dwelling unit.

(CHAPTER 31 VENTS)
(SECTION P3103 VENT TERMINALS)

P3103.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than **12 inches (304 mm)** [~~6 inches (152 mm)~~] above the roof or **4 inches (102 mm)** [~~6 inches (152 mm)~~] above the anticipated snow accumulation, whichever is greater. Where a roof is to be used for assembly, as a promenade, observation deck or sunbathing deck or for similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

(CHAPTER 32 TRAPS)
(SECTION P3201 FIXTURE TRAPS)

P3201.2.1 Trap seal protection. Traps seals of emergency floor drain traps and traps subject to evaporation shall be protected by one of the methods in Sections P3201.2.1.1 through P3201.2.1.4.

Exception: Basement floor drains with a deep trap seal used as a condensate drain.

(CHAPTER 39 POWER AND LIGHT
DISTRIBUTION)
(SECTION E902 GROUND-FAULT AND ARC-
FAULT CIRCUIT-INTERRUPTER PROTECTION)

E3902.2 Garage and accessory building receptacles. 125-volt, single-phase, 15- or 20-ampere receptacles installed in garages and grade-level portions of unfinished accessory buildings used for storage or work areas shall have ground-fault circuit-interrupter protection for personnel. [210.8(A)(2)]

Exception: Fastened in place garage door openers.

E3902.5 Unfinished basement receptacles. 125-volt, single-phase, 15- and 20-ampere receptacles installed in unfinished basements shall have ground-fault circuit-interrupter protection for personnel. For purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and similar areas. [210.8(A)(5)]

Exceptions:

1. A receptacle supplying only a permanently installed fire alarm or burglar alarm system. Receptacles installed in accordance with this exception shall not be considered as meeting the requirement of Section E3901.9.
[210.8(A)(5) Exception]

2. Where a simplex receptacle is installed to serve an installed sump pump.

E3902.16 Arc-fault circuit-interrupter protection. Branch circuits that supply 120-volt, single-phase, 15- and 20-ampere outlets installed in [~~kitchens, family rooms, dining rooms, living rooms, parlors, libraries, dens,~~] bedrooms[~~;~~ ~~sun rooms, recreations rooms, closets, hallways, laundry areas and similar rooms or~~] **and sleeping** areas shall be protected by any of the following: [210.12(A)]

1. A listed combination-type arc-fault circuit interrupter, installed to provide protection of the entire branch circuit. [210.12(A)(1)]
2. A listed Branch/feeder-type AFCI installed at the origin of the branch-circuit in combination with a listed outlet branch-circuit shall be marked to indicate that it is the first outlet of the circuit. [210.12(A)(2)]
3. A listed supplemental arc protection circuit breaker installed at the origin of the branch circuit in combination with a listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet box on the branch circuit where all of the following conditions are met:
 - 3.1 The branch-circuit wiring shall be continuous from the branch-circuit overcurrent device to the outlet branch-circuit arc-fault circuit interrupter.
 - 3.2 The maximum length of the branch-circuit wiring from the branch-circuit overcurrent device to the first outlet shall not exceed 50

feet (15.2 m) for 14 AWG conductors and 70 feet (21.3 m) for 12 AWG conductors.

- 3.3 The first outlet box on the branch circuit shall be marked to indicate that it is the first outlet on the circuit. [210.12(A)(3)]
4. A listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet on the branch circuit in combination with a listed branch-circuit overcurrent protective device where all of the following conditions are met:
 - 4.1 The branch-circuit wiring shall be continuous from the branch-circuit overcurrent device to the outlet branch-circuit arc-fault circuit interrupter.
 - 4.2 The maximum length of the branch-circuit wiring from the branch-circuit overcurrent device to the first outlet shall not exceed 50 feet (15.2 m) for 14 AWG conductors and 70 feet (21.3 m) for 12 AWG conductors.
 - 4.3 The first outlet box on the branch circuit shall be marked to indicate that it is the first outlet on the circuit.
 - 4.4 The combination of the branch-circuit overcurrent device and outlet branch-circuit AFCI shall be identified as meeting the requirements for a system combination-type AFCI and shall be listed as such.
[210.12(A)(4)]

5. Where metal outlet boxes and junction boxes and RMC, IMC, EMT, Type MC or steel-armored Type AC cables meeting the requirements of Section E3908.8, metal wireways or metal auxiliary gutters are installed for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, a listed outlet branch-circuit type AFCI installed at the first outlet shall be considered as providing protection for the remaining portion of the branch circuit. [210.12(A)(5)]

6. Where a listed metal or nonmetallic conduit or tubing or Type MC cable is encased in not less than 2 inches (50.8 mm) of concrete for the portion of the branch circuit between the branch-circuit overcurrent device and the first outlet, a listed outlet branch-circuit type AFCI installed at the first outlet shall be considered as providing protection for the remaining portion of the branch circuit. [210.12(A)(6)]

Exception: AFCI protection is not required for an individual branch circuit supplying only a fire alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, IMC, EMT or steel-sheathed armored cable Type AC or Type MC meeting the requirements of Section E3908.8.

E3902.17 Arc-fault circuit interrupter protection for branch circuit extensions or modifications. Where branch-circuit wiring is modified, replaced, or extended in any of the areas specified in Section E3902.16, the branch circuit shall be protected by one of the following:

1. A combination-type AFCI located at the origin of the branch circuit

2. An outlet branch-circuit type AFCI located at the first receptacle outlet of the existing branch circuit.
[210.12(B)]

Exception: AFCI protection shall not be required where the extension of the existing conductors is not more than [~~6 feet (1.8 m)~~] **30 feet (9 m)** in length and does not include any additional outlets or devices.

[210.12(B) Exception]

(CHAPTER 40 DEVICES AND LUMINAIRES)
(SECTION E4002 RECEPTACLES)

E4002.14 Tamper-resistant receptacles. *Delete in its entirety.*

(APPENDIX E MANUFACTURED HOUSING USED
AS DWELLINGS)
(SECTION AE101 SCOPE)

AE101.1 General. These provisions shall be applicable only to a manufactured home used as a single dwelling unit installed **on any lot** [~~on privately owned (nonrental) lots~~] and shall apply to the following:

1. Construction, alteration and repair of any foundation system that is necessary to provide for the installation of a manufactured home unit.
2. Construction, installation, addition, alteration, repair or maintenance of the building service equipment that is necessary for connecting manufactured homes to water, fuel, or power supplies and sewage systems.

3. Alterations, additions or repairs to existing manufactured homes. The Construction, alteration, moving, demolition, repair and use of accessory buildings and structures, and their building service equipment, shall comply with the requirements of the codes adopted by this jurisdiction.

These provisions shall not be applicable to the design and construction of manufactured homes and shall not be deemed to authorize either modifications or additions to manufactured homes where otherwise prohibited.

Exception: In addition to these provisions, new and replacement manufactured homes to be located in flood hazard areas as established in Table R301.2(1) of the International Residential Code shall meet the applicable requirements of Section R322 of the International Residential Code.

(SECTION AE304 FEES)

AE304.1 Permit fees. Fees shall be in accordance with Section R108 of the International Residential Code as adopted by St. Charles County, Missouri.
~~[The fee for each manufactured home installation permit shall be established by the building official.]~~

~~When permit fees are to be based on the value or valuation of the work to be performed, the determination of value or valuation under these provisions shall be made by the building official. The value to be used shall be the total value of all work required for the manufactured home installation plus the total value of all work required for the construction~~

~~of accessory buildings and structures for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment which is a part of the accessory building or structure. The value of the manufactured home itself shall not be included.]~~

AE304.2 Plan review fees. Delete in its entirety.

AE304.3 Other provisions. Delete in its entirety.

AE304.3.1 Expiration of plan review. Delete in its entirety.

AE304.3.2 Investigation fees-work without a permit. Delete in its entirety.

AE304.3.2.1 Investigation. Delete in its entirety.

AE304.3.2.2 Fee. Delete in its entirety.

AE304.3.3 Fee refunds. Delete in its entirety.

AE304.3.3.1 Permit fee erroneously paid or collected. Delete in its entirety.

AE304.3.3.2 Permit fee paid when no work done. Delete in its entirety.

AE304.3.3.3 Plan review fee. Delete in its entirety.

(APPENDIX J EXISTING BUILDINGS AND
STRUCTURES)
(SECTION AJ102 COMPLIANCE)

AJ102.3 Smoke detectors. Regardless of the category of work, smoke detectors shall be provided where required by Section **R314.2.2** [~~R314.3.1~~].

(SECTION AJ501 ALTERATIONS)

AJ501.1 Newly constructed elements. Newly constructed elements, components and systems shall comply with the requirements of this code.

Exceptions:

1. Openable windows may be added without requiring compliance with the light and ventilation requirements of Section R303.
2. Newly installed electrical equipment shall comply with the requirements of Section AJ501.5.
3. **An existing stairway being rebuilt shall not be required to comply with the requirements of Section R311.7.5 if the existing space and construction does not allow for a reduction in pitch or slope.**

AJ501.8 Stairs.

AJ501.8.1 Stair width. Existing [~~basement~~] stairs and handrails not otherwise being altered or modified shall be permitted to maintain their current clear width at, above and below existing handrails.

AJ501.8.2 Stair headroom. Headroom height on existing [~~basement~~] stairs being altered or modified shall not be reduced below the existing stairway

finished headroom. Existing [~~basement~~] stairs not otherwise being altered shall be permitted to maintain the current finished headroom.

AJ501.8.3 Stair landing. Landings serving existing [~~basement~~] stairs being altered or modified shall not be reduced below the existing stairway landing depth and width. Existing [~~basement~~] stairs not otherwise being altered shall be permitted to maintain the current landing depth and width.

(APPENDIX M HOME DAY CARE - R-3
OCCUPANCY)
(SECTION AM101 GENERAL)

AM101.90 Sprinklers in Existing Buildings. Existing buildings used as a day care in accordance with this Appendix shall not be required to provide sprinkler systems.

Section 4. Article IV, Plumbing Code , OSCCMo Section 500.050, is hereby repealed and a new Article IV, Existing Building Code, Section 500.200 is adopted to read as follows.

ARTICLE IV: EXISTING BUILDING CODE

Section 500.200. Adoption of Existing Building Code of St. Charles County.

C. St. Charles County hereby adopts the 2015 International Existing Building Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by

additions, insertions, deletions and changes to read as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION)

(SECTION 101 GENERAL)

101.1 Title. These regulations shall be known as the Existing Building Code of **St. Charles County, Missouri** [~~NAME OF JURISDICTION~~], hereinafter referred to as “this code.”

101.2 Scope. The provisions of the International Existing Building Code shall apply to the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

Exception:

Residential buildings and their accessory structures within the scope of the International Residential Code shall utilize the existing building provisions provided in appendix J of that code.

(SECTION 103 DEPARTMENT OF BUILDING SAFETY)

103.1 Creation of enforcement agency. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division’s director shall be the building official or code official referred to in this code.** [~~The Department of Building~~

~~Safety is hereby created, and the official in charge thereof shall be known as the code official.]~~

103.2 Appointment. The code official shall be appointed **as provided by ordinance** ~~[by the chief appointing authority of the jurisdiction].~~

(SECTION 105 PERMITS)

105.1 Required. **Required permits shall comply with Section 105.1 of the Building Code of St. Charles County, Missouri.** ~~[Any owner or owner's authorized agent who intends to repair, add to, alter, relocate, demolish, or change the occupancy of a building or to repair, install, add, alter, remove, convert, or replace any electrical, gas, mechanical, or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the code official and obtain the required permit.]~~

105.2 Work exempt from permits. **Work exempt from permits shall comply with Section 105.2 of the Building Code of St. Charles County, Missouri.** ~~[Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:~~

Building:

- ~~1. Sidewalks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below and that are not part of an accessible route.~~
- ~~2. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.~~
- ~~3. Temporary motion picture, television, and theater stage sets and scenery.~~
- ~~4. Shade cloth structures constructed for nursery or agricultural purposes, and not including service systems.~~
- ~~5. Window awnings supported by an exterior wall of Group R-3 or Group U occupancies.~~
- ~~6. Movable cases, counters, and partitions not over 69 inches (1753 mm) in height.~~

~~Electrical:~~

~~Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.~~

~~Radio and television transmitting stations: The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for power supply, the installations of towers, and antennas.~~

~~Temporary testing systems: A permit shall not be required for the installation of any temporary system~~

~~required for the testing or servicing of electrical equipment or apparatus.~~

~~Gas:~~

- ~~1. Portable heating appliance.~~
- ~~2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.~~

~~Mechanical:~~

- ~~1. Portable heating appliance.~~
- ~~2. Portable ventilation equipment.~~
- ~~3. Portable cooling unit.~~
- ~~4. Steam, hot, or chilled water piping within any heating or cooling equipment regulated by this code.~~
- ~~5. Replacement of any part that does not alter its approval or make it unsafe.~~
- ~~6. Portable evaporative cooler.~~
- ~~7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.~~

~~Plumbing:~~

- ~~1. The stopping of leaks in drains, water, soil, waste, or vent pipe; provided, however, that if any concealed~~

~~trap, drainpipe, water, soil, waste, or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work, and a permit shall be obtained and inspection made as provided in this code.~~

~~2. The clearing of stoppages or the repairing of leaks in pipes, valves, or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes, or fixtures.~~

105.5 Expiration. Every permit issued shall become invalid **and expired** unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The code official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and **shall be granted only upon a showing of justifiable cause and substantial progress. If a permit expires pursuant to this provision, the building official may issue a new permit upon advance payment of an administrative penalty of the original permit fee or one hundred dollars (\$100.00), whichever is less. The reissued permit must be picked-up within seven (7) days of the issued date.** [~~justifiable cause demonstrated.~~]

(SECTION 106 CONSTRUCTION DOCUMENTS)

107.1 General. Submittal documents consisting of construction documents, statement of special

inspections, geotechnical report and other data shall be submitted **as required by the building official** [~~in two or more sets~~] with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

107.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION 109 INSPECTIONS)

109.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION 112 MEANS OF APPEAL)

112.1 General. For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 113 of 500.010. ~~In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The building official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render decisions and findings in~~

~~writing to the appellant with a duplicate copy to the building official.]~~

112.2 Limitations on authority. **Delete in its entirety.**

112.3 Qualifications. **Delete in its entirety.**

(SECTION 113 VIOLATIONS)

113.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, **shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense.** ~~[of not more than one thousand dollars (\$1,000.00) or by a term not exceeding one (1) year, or by both such fine and imprisonment, and each day's continuance of a violation shall be deemed a separate offense.]~~

(SECTION 114 STOP WORK ORDER)

114.2 Issuance. The stop work order shall be in writing and shall be given to the owner of the property involved, the owner's authorized agent or the person performing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work will be permitted to resume. ***Any person served with a stop work order***

shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).

(CHAPTER 14 PERFORMANCE COMPLIANCE METHODS)

(SECTION 1401 GENERAL)

1401.2 Applicability. Structures existing prior to April 8, 1968, in which there is work involving additions, alterations or changes of occupancy shall be made to conform to the requirements of this chapter or the provisions of Chapters 5 through 13. The provisions of Sections 1401.2.1 through 1401.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R and S. These provisions shall not apply to buildings with occupancies in Group H or I-1, I-3 or I-4.

Section 5. Article V, Fire Prevention Code, OSCCMo Section 500.050, is hereby repealed and a new Article V, Mechanical Code, Section 500.220 is adopted to read as follows.

ARTICLE V: MECHANICAL CODE

Section 500.220. Adoption of Mechanical Code of St. Charles County.

D. St. Charles County hereby adopts the 2015 International Mechanical Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by additions, insertions, deletions and changes to read as follows:

(CHAPTER 1 ADMINISTRATION)
(SECTION 101 GENERAL)

101.1 Title. These regulations shall be known as the Mechanical Code of **St. Charles County** [~~NAME OF JURISDICTION~~], hereinafter referred to as “this code.”

(SECTION 103 DEPARTMENT OF MECHANICAL INSPECTION)

103.1 General. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division's director shall be the building official or code official referred to in this Code.** [~~The department of mechanical inspection is hereby created and the executive official in charge thereof shall be known as the code official.~~]

103.2 Appointment. The code official shall be appointed **as provided by ordinance** [~~by the chief appointing authority of the jurisdiction~~].

(SECTION 106 PERMITS)

106.3.1 Construction documents. Construction documents, engineering calculations, diagrams and other data shall be submitted **as required by the code official** [~~in two or more sets~~] with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional where required by state law. Where special conditions exist, the code official is authorized to

require additional construction documents to be prepared by a registered design professional. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two stories in height shall indicate where penetrations will be made for mechanical systems, and the materials and methods for maintaining required structural safety, fire resistance rating and fireblocking.

Exception:

The code official shall have the authority to waive the submission of construction documents, calculations or other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to determine compliance with this code. **Standard cooling systems of five (5) tons or less and heating systems of one hundred fifty thousand (150,000) BTUs or less shall not require the design of registered design professional.**

106.4.3 Expiration. All permits for work under the scope of this code shall comply with Section 105.5 Expiration of the Building Code of St. Charles County. ~~[Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work recommences, a new~~

~~permit shall be first obtained and the fee therefor shall be one-half the amount required for a new permit for such work, provided that changes have not been made and will not be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year.]~~

106.5.2 Fee schedule. The fees for mechanical work shall be **as setforth by the Ordinances of St. Charles County, Missouri.** ~~[as indicated in the following schedule.~~

~~[JURISDICTION TO INSERT APPROPRIATE SCHEDULE]]~~

106.5.3 Fee refunds. **The code official is authorized to establish a refund policy.** ~~[The code official shall authorize the refunding of fees as follows.~~

- ~~1. The full amount of any fee paid hereunder which was erroneously paid or collected.~~
- ~~2. Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid where work has not been done under a permit issued in accordance with this code.~~
- ~~3. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.~~

~~The code official shall not authorize the refunding of any fee paid, except upon written application filed by~~

~~the original permittee not later than 180 days after the date of fee payment.]~~

106.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION 107 INSPECTIONS AND TESTING)

107.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards,

and in accordance with the manufacturer's installation instructions.

(SECTION 108 VIOLATIONS)

108.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, **shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense** [~~shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.~~]

108.5 Stop work orders. Upon notice from the code official that mechanical work is being performed contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's authorized agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop

work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of **up to two hundred fifty dollars (\$250.00)**. ~~[not less than [AMOUNT] dollars or more than [AMOUNT] dollars.]~~

(SECTION 109 BOARD OF APPEALS)

109.1 Application for appeal. **For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 113 of 500.010.** ~~[Any person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.]~~

109.1.1 Limitation of authority. *Delete in its entirety.*

109.2 Membership of board. *Delete in its entirety.*

109.2.1 Qualifications. *Delete in its entirety.*

109.2.2 Alternate members. *Delete in its entirety.*

109.2.3 Chairman. *Delete in its entirety.*

109.2.4 Disqualification of member. *Delete in its entirety.*

109.2.5 Secretary. *Delete in its entirety.*

109.2.6 Compensation of members. *Delete in its entirety.*

109.3 Notice of meeting. *Delete in its entirety.*

109.4 Open hearing. *Delete in its entirety.*

109.4.1 Procedure. *Delete in its entirety.*

109.5 Postponed hearing. *Delete in its entirety.*

109.6 Board decision. *Delete in its entirety.*

109.6.1 Resolution. *Delete in its entirety.*

109.6.2 Administration. *Delete in its entirety.*

109.7 Court review. *Delete in its entirety.*

(CHAPTER 9 SPECIFIC APPLIANCES,
FIREPLACES AND SOLID FUEL-BURNING
EQUIPMENT)
(SECTION 903 FACTORY-BUILT FIREPLACES)

R1004.90 [R1004.5] Required fire separation enclosure. All prefabricated metal chimneys shall be enclosed in a fire-resistant shaft with one (1) layer of five-eighths (5/8) inch type "X" gypsum board from the fireplace connector to the underside of the roof sheathing, securely attached with framing material. When the chimney chase is located on an exterior wall of the structure, it need only be separated by lining the wall between the chimney chase and the exterior wall

with five-eighths (5/8) type "X" inch gypsum board. All joints are to be tight within one-eighth (1/8) of an inch or tape with joint compound. Required clearances shall be maintained between the chimney and the gypsum board per chimney manufacturer's specifications.

(CHAPTER 11 REFRIGERATION)
(SECTION 1101 GENERAL)

1101.10 Locking access port caps. *Delete in its entirety.*

Section 6. Article VI, Residential Code for One and Two-Family Dwellings , OSCCMo Section 500.070, is hereby repealed and a new Article VI Fuel Gas Code, Section 500.240 is adopted to read as follows.

ARTICLE VI: FUEL GAS CODE

Section 500.240. Adoption of Fuel Gas Code of St. Charles County.

E. St. Charles County hereby adopts the 2015 International Fuel Gas Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by additions, insertions, deletions and changes so that such section and subsections read as follows:

(CHAPTER 1 ADMINISTRATION)
(SECTION 101 GENERAL)

101.1 Title. These regulations shall be known as the Fuel Gas Code of **St. Charles County** [~~NAME OF~~

~~JURISDICTION~~], hereinafter referred to as “this code.”

(SECTION 103 (IFGC) DEPARTMENT OF INSPECTION)

103.1 General. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division's director shall be the building official or code official referred to in this Code.** [~~The department of inspection is hereby created and the executive official in charge thereof shall be known as the code official.~~]

103.2 Appointment. The code official shall be appointed **as provided by ordinance** [~~by the chief appointing authority of the jurisdiction~~].

(SECTION 106 PERMITS)

106.3.1 Construction documents. Construction documents, engineering calculations, diagrams and other data shall be submitted **as required by the code official** [~~in two or more sets~~] with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional where required by state law. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two

stories in height shall indicate where penetrations will be made for installations and shall indicate the materials and methods for maintaining required structural safety, fire-resistance rating and fireblocking.

Exception: The code official shall have the authority to waive the submission of construction documents, calculations or other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to determine compliance with this code. **Standard heating systems of one hundred fifty thousand (150,000) BTUs or less shall not require the design of registered design professional.**

106.5.3 Expiration. All permits for work under the scope of this code shall comply with Section 105.5 Expiration of the Building Code of St. Charles County. ~~[Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work recommences, a new permit shall be first obtained and the fee therefor shall be one half the amount required for a new permit for such work, provided that changes have not been made and will not be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year.]~~

106.6.2 Fee schedule. The fees for work shall be **as setforth by the Ordinances of St. Charles County, Missouri.** [~~as indicated in the following schedule.~~

~~[JURISDICTION TO INSERT APPROPRIATE SCHEDULE]~~

106.6.3 Fee refunds. **The code official is authorized to establish a refund policy.** [~~The code official shall authorize the refunding of fees as follows.~~

- ~~4. The full amount of any fee paid hereunder which was erroneously paid or collected.~~
- ~~5. Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid where work has not been done under a permit issued in accordance with this code.~~
- ~~6. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.~~

~~The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.]~~

106.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or

similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION 107 INSPECTIONS AND TESTING)

107.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION 108 VIOLATIONS)

108.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install,

alter or repair mechanical work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, **shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense** [~~shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.~~]

108.5 Stop work orders. Upon notice from the code official that mechanical work is being performed contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's authorized agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of **up to two hundred fifty dollars (\$250.00)**. [~~not less than [AMOUNT] dollars or more than [AMOUNT] dollars.~~]

(SECTION 109 MEANS OF APPEALS)

109.1 Application for appeal. **For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 113 of 500.010.**

~~[A person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.]~~

109.2 Membership of board. *Delete in its entirety.*

109.2.1 Qualifications. *Delete in its entirety.*

109.2.2 Alternate members. *Delete in its entirety.*

109.2.3 Chairman. *Delete in its entirety.*

109.2.4 Disqualification of member. *Delete in its entirety.*

109.2.5 Secretary. *Delete in its entirety.*

109.2.6 Compensation of members. *Delete in its entirety.*

109.3 Notice of meeting. *Delete in its entirety.*

109.4 Open hearing. *Delete in its entirety.*

109.4.1 Procedure. *Delete in its entirety.*

109.5 Postponed hearing. *Delete in its entirety.*

109.6 Board decision. *Delete in its entirety.*

109.6.1 Resolution. *Delete in its entirety.*

109.6.2 Administration. *Delete in its entirety.*

109.7 Court review. *Delete in its entirety.*

(CHAPTER 6 SPECIFIC APPLIANCES)
(SECTION 903 FACTORY-BUILT FIREPLACES)

903.9 Required fire separation enclosure. All prefabricated metal chimneys shall be enclosed in a fire-resistant shaft with one (1) layer of five-eighths (5/8) inch gypsum board from the fireplace connection to the underside of the roof sheathing, securely attached with framing material. When the chimney chase is located on an exterior wall of the structure, it need only be separated by lining the wall between the chimney chase and the exterior wall with five-eighths (5/8) inch gypsum board.

(CHAPTER 11 REFRIGERATION)
(SECTION 1101 GENERAL)

1101.10 Locking access port caps. *Delete in its entirety.*

Section 7. Article VII, Private Sewage Disposal Code , OSCCMo Section 500.080, is hereby repealed and a new Article VII Electric Code, Section 500.260 is adopted to read as follows.

ARTICLE VII: ELECTRIC CODE

Section 500.260 Adoption of Electric Code of St. Charles County.

- F. St. Charles County hereby adopts the 2014 National Fire Protection Association 70 – National Electric Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by additions, insertions, deletions and changes to read ad as follows:

(ARTICLE 90 INTRODUCTION)

90.1 (D) Administration of this code. The administration of this code shall be in accordance with Appendix K “Administrative Provisions” of the Building Code adopted in Section 500.010.

90.1 (E) Workmanship. Repairs, maintenance work, alterations or installations which are caused directly or indirectly by the enforcement of this Code shall be executed and installed in a workmanlike manner in compliance with this Code, in accordance with industry standards, and in accordance with the manufacturer's installation instructions.

~~1. [Section 210.8 Ground Fault Circuit Interrupter Protection for Personnel:~~

- ~~a. In Subsection (A), insert after both numbers (2) and (5):~~

~~"Exception No. 1: Receptacles that are not readily accessible."~~

~~"Exception No. 2: A single receptacle or duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord and plug connected in accordance with 400.7(A)(6), (A)(7) or (A)(8)."~~

~~b. In Subsection (A), Exception to (5): Delete "to (5)" and insert "No. 3"~~

~~2. Section 250.94 Bonding for Other Systems. Delete in its entirety.~~

~~3. NEC800.156 Dwelling Unit Communications Outlet. Delete in its entirety.]~~

Section 8. Article VIII, Plumbing Code , OSCCMo Section 500.280, is adopted to read as follows.

ARTICLE VIII: PLUMBING CODE

Section 500.280. Adoption of Plumbing Code of St. Charles County.

G. St. Charles County hereby adopts the 2015 International Plumbing Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by additions, insertions, deletions and changes to read as follows:

(CHAPTER 1 ADMINISTRATION)

(SECTION 101 GENERAL)

101.1 Title. These regulations shall be known as the Plumbing Code of **St. Charles County** [~~NAME OF JURISDICTION~~], hereinafter referred to as “this code.”

(SECTION 103 DEPARTMENT OF PLUMBING INSPECTION)

103.1 General. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division's director shall be the building official or code official referred to in this Code.** [~~The department of plumbing inspection is hereby created and the executive official in charge thereof shall be known as the code official.~~]

103.2 Appointment. The code official shall be appointed **as provided by ordinance** [~~by the chief appointing authority of the jurisdiction~~].

(SECTION 106 PERMITS)

106.3.1 Construction documents. Construction documents, engineering calculations, diagrams and other data shall be submitted **as required by the code official** [~~in two or more sets~~] with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional where required by state law. Where special conditions exist, the code official is authorized to require additional construction documents to be

prepared by a registered design professional. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code. Construction documents for buildings more than two stories in height shall indicate where penetrations will be made for mechanical systems, and the materials and methods for maintaining required structural safety, fire resistance rating and fireblocking.

Exception:

The code official shall have the authority to waive the submission of construction documents, calculations or other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to determine compliance with this code.

106.5.3 Expiration. **All permits for work under the scope of this code shall comply with Section 105.5 Expiration of the Building Code of St. Charles County.** ~~[Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work recommences, a new permit shall be first obtained and the fee therefor shall be one half the amount required for a new permit for such work, provided that changes have not been made and will not be made in the original construction documents for such work, and provided further that~~

~~such suspension or abandonment has not exceeded one year.]~~

106.6.1 Work commencing before permit issuance. Any person who commences any work on a plumbing system before obtaining the necessary permits shall be subject to **an additional fee of two hundred fifty dollars (\$250.00)** ~~[100 percent of the usual permit fee]~~ in addition to the required permit fees.

106.6.2 Fee schedule. The fees for plumbing work shall be as **setforth by the Ordinances of St. Charles County, Missouri.** ~~[as indicated in the following schedule.]~~

~~[JURISDICTION TO INSERT APPROPRIATE SCHEDULE]]~~

106.6.3 Fee refunds. **The code official is authorized to establish a refund policy.** ~~[The code official shall authorize the refunding of fees as follows.]~~

- ~~7. The full amount of any fee paid hereunder which was erroneously paid or collected.~~
- ~~8. Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid where work has not been done under a permit issued in accordance with this code.~~
- ~~9. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.~~

~~The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.]~~

106.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION 107 INSPECTIONS AND TESTING)

107.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building

materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION 108 VIOLATIONS)

108.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair mechanical work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, **shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense** ~~[shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.]~~

108.5 Stop work orders. Upon notice from the code official that mechanical work is being performed contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's authorized agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official

shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of **up to two hundred fifty dollars (\$250.00)**. ~~[not less than [AMOUNT] dollars or more than [AMOUNT] dollars.]~~

(SECTION 109 MEANS OF APPEALS)

109.1 Application for appeal. **For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 113 of 500.010.** ~~[Any person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.]~~

109.2 Membership of board. *Delete in its entirety.*

109.2.1 Qualifications. *Delete in its entirety.*

109.2.2 Alternate members. *Delete in its entirety.*

109.2.3 Chairman. *Delete in its entirety.*

109.2.4 Disqualification of member. *Delete in its entirety.*

109.2.5 Secretary. *Delete in its entirety.*

109.2.6 Compensation of members. *Delete in its entirety.*

109.3 Notice of meeting. *Delete in its entirety.*

109.4 Open hearing. *Delete in its entirety.*

109.4.1 Procedure. *Delete in its entirety.*

109.5 Postponed hearing. *Delete in its entirety.*

109.6 Board decision. *Delete in its entirety.*

109.6.1 Resolution. *Delete in its entirety.*

109.6.2 Administration. *Delete in its entirety.*

109.7 Court review. *Delete in its entirety.*

(CHAPTER 3 GENERAL REQUIREMENTS)
(SECTION 305 PROTECTION OF PIPES AND
PLUMBING SYSTEM COMPONENTS)

305.4.1 Sewer Depth. Building sewers that connect to private sewage disposal systems shall be a minimum of **18 inches (457 mm)** ~~[[NUMBER] inches (mm)]~~ below finished grade at the point of septic tank connection. Building sewers shall be a minimum of **30 inches (762 mm)** ~~[36 inches (915 mm)]~~ ~~[[NUMBER] inches (mm)]~~ below grade.

(CHAPTER 4 FIXTURES, FAUCETS, AND
FIXTURE FITTINGS)
(SECTION 403 MINIMUM PLUMBING
FACILITIES)

403.3 Required public toilet facilities. Customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public utilization.

The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with Section 403 for all users. Employees shall be provided with toilet facilities in all occupancies. Employee toilet facilities shall be either separate or combined employee and public toilet facilities.

Exception:

Public toilet facilities shall not be required in:

1. Open or enclosed parking garages where there are no parking attendants.
2. Structures and tenant spaces intended for quick transactions, including takeout, pickup and dropoff, having a public access area less than or equal to 300 square feet (28 m²).
3. **Customer facilities, other than gas or filling stations, with a customer occupancy load of fifteen (15) or less and which do not serve food or beverages.**

(CHAPTER 6 WATER SUPPLY AND
DISTRIBUTION)
(SECTION 602 WATER REQUIRED)

602.2 Potable water required. Only potable water shall be supplied to plumbing fixtures that provide water for drinking, bathing or culinary purposes, or for the processing of food, medical or pharmaceutical products. Unless otherwise provided in this code, potable water shall be supplied to all plumbing fixtures. **The water distribution system of any building in which plumbing fixtures are installed shall connect to a potable public water supply, if available. A potable public water supply shall be considered available when the nearest property line is located within two hundred (200) feet of a potable public water main. When a potable public water supply is not available, an individual water supply shall be provided.**

(SECTION 604 DESIGN OF BUILDING WATER DISTRIBUTION SYSTEM)

604.9 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized. **Water-hammer arresters shall be required for dishwashers, clothes washers and for each bathroom group, unless otherwise approved.** Water-hammer arrestors shall be installed in accordance with the manufacturer's instructions. Water-hammer arrestors shall conform to ASSE 1010.

(SECTION 608 PROTECTION OF POTABLE WATER SUPPLY)

608.16.6 Connections subject to backpressure. Where a potable water connection is made to a nonpotable line, fixture, tank, vat, pump or other equipment subject to

high hazard backpressure, the potable water connection shall be protected by a reduced pressure principle backflow prevention assembly. **All reduced pressure backflow devices and check assemblies shall be registered and tested annually by a certified individual as authorized by the State of Missouri.**

(CHAPTER 7 SANITARY DRAINAGE)
(SECTION 701 GENERAL)

701.2 Sewer required. **The sanitary drainage system of any building in which plumbing fixtures are installed shall connect to a public sewer, if available. A public sewer shall be considered available when the nearest property line is located within two hundred (200) feet of a public sewer. When a public sewer is not available, the sanitary drainage shall be connected to an approved private sewage disposal system. All private sewage disposal systems shall be maintained and function without any ground surface discharge.** [~~Buildings in which plumbing fixtures are installed and premises having drainage piping shall be connected to a public sewer, where available, or an approved private sewage disposal system in accordance with the International Private Sewage Disposal Code.~~]

(SECTION 706 CONNECTIONS BETWEEN
DRAINAGE PIPING AND FITTINGS)

706.3 Installation of fittings. Fittings shall be installed to guide sewage and waste in the direction of flow. Change in direction shall be made by fittings installed in accordance

with Table 706.3. Change in direction by combination fittings, side inlets or increasers shall be installed in accordance with Table 706.3 based on the pattern of flow created by the fitting. Double sanitary tee patterns shall not receive the discharge of back-to-back water closets and fixtures or appliances with pumping action discharge.

Exception: Back-to-back water closet connections to double sanitary tees shall be permitted where **discharge is received by gravity flow.** [~~the horizontal developed length between the outlet of the water closet and the connection to the double sanitary tee pattern is 18 inches (457 mm) or greater.~~]

(SECTION 708 CLEANOUTS)

~~[708.1.3 Building drain and building sewer junction. The junction of the building drain and the building sewer shall be served by a cleanout that is located at the junction or within 10 feet (3048 mm) of the developed length of piping upstream of the junction. For the requirements of this section, the removal of the water closet shall not be required to provide cleanout access.]~~

(CHAPTER 9 VENTS)

(SECTION 903 VENT TERMINALS)

903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than **12 inches (305 mm)** ~~[[NUMBER] inches (mm)]~~ a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

(SECTION 905 VENT CONNECTIONS AND GRADES)

905.1 Connection. Individual, branch and circuit vents shall connect to a vent stack, stack vent, air admittance valve or extend to the open air. **All vents one and one-half (1½) inches in diameter shall be increased to two (2) inches in diameter, a distance of two (2) feet prior to the roof penetration.**

Section 9. Article IX, Private Sewage Disposal Code, OSCCMo Section 500.300, is adopted to read as follows.

ARTICLE IX: PRIVATE SEWAGE DISPOSAL CODE

Section 500.300. Adoption of Private Sewage Disposal Code of St. Charles County.

H. St. Charles County hereby adopts the 2015 International Private Sewage Disposal Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by additions, insertions, deletions and changes so that such section and subsections to read as follows:

(CHAPTER 1 ADMINISTRATION)
(SECTION 101 GENERAL)

101.1 Title. These regulations shall be known as the Private Sewage Disposal Code of **St. Charles County** [~~NAME OF JURISDICTION~~], hereinafter referred to as “this code.”

(SECTION 103 DEPARTMENT OF PRIVATE
SEWAGE DISPOSAL INSPECTION)

103.1 General. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division's director shall be the building official or code official referred to in this Code.** [~~The department of private sewage disposal inspection is hereby created and the executive official in charge thereof shall be known as the code official.~~]

103.2 Appointment. The code official shall be appointed **as provided by ordinance** [~~by the chief appointing authority of the jurisdiction~~].

(SECTION 106 PERMITS)

106.2.1 Construction documents. An application for a permit shall be accompanied by [~~not less than two copies of~~] construction documents, **as required by the code official**, drawn to scale, with sufficient clarity and detail dimensions showing the nature and character of the work to be performed. Specifications shall include pumps and controls, dose volume, elevation differences(vertical lift), pipe friction loss, pump performance curve, pump model and pump manufacturer. The code official is permitted to waive the requirements for filing construction documents where the work involved is of a minor nature. Where the quality of the materials is essential for conformity to this code, specific information shall be given to establish such quality, and this code shall not be cited, or the term “legal” or its equivalent used as a substitute for specific information.

106.2.3 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned **90** [~~180~~] days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the code official shall have the authority to grant one or more extensions of time for additional periods not exceeding **90** [~~180~~] days each. The extension shall be requested in writing and justifiable cause demonstrated.

106.2.4 Previous approvals. This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within **90** [~~180~~] days after the effective date of this code and has not been abandoned.

106.2.5 Soil data. Soil test reports shall be submitted indicating soil boring [~~and percolation test~~] data related to the undisturbed and finished grade elevations, vertical elevation reference point and horizontal reference point. Surface elevations shall be given for all soil borings. Soil reports shall bear the signature of a soil tester.

106.3.4 Extensions. Any permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit when work cannot be commenced within the time required by this section for good and satisfactory reasons. The code official shall extend the time for action by the permittee for a period not exceeding **90** [~~180~~] days if there is

reasonable cause. No permit shall be extended more than once. [~~The fee for an extension shall be one half the amount required for a new permit for such work.~~]

106.5.3 Expiration. All permits for work under the scope of this code shall comply with Section 105.5 **Expiration of the Building Code of St. Charles County.** [~~Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work recommences, a new permit shall be first obtained and the fee therefor shall be one half the amount required for a new permit for such work, provided that changes have not been made and will not be made in the original construction documents for such work, and provided further that such suspension or abandonment has not exceeded one year.~~]

106.4.2 Fee schedule. The fees for private sewage disposal work shall be **as set forth by the Ordinances of St. Charles County, Missouri.** [~~as indicated in the following schedule.~~]

~~[JURISDICTION TO INSERT APPROPRIATE SCHEDULE]~~

106.4.3 Fee refunds. The code official is authorized to **establish a refund policy.** [~~The code official shall authorize the refunding of fees as follows.~~]

~~10. The full amount of any fee paid hereunder which was erroneously paid or collected.~~

~~11. Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid where work has not been done under a permit issued in accordance with this code.~~

~~12. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.~~

~~The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.]~~

106.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION 107 INSPECTIONS AND TESTING)

107.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION 108 VIOLATIONS)

108.4 Violation penalties. Any person who shall violate a provision of this code or fail to comply with any of the requirements thereof or who shall erect, install, alter or repair private sewage disposal work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense. ~~[shall be guilty of a [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a~~

~~violation continues after due notice has been served shall be deemed a separate offense.]~~

108.5 Stop work orders. Upon notice from the code official, work on any private sewage disposal system that is being performed contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, to the owner's authorized agent or to the person performing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of **up to two hundred fifty dollars (\$250.00)**. ~~[not less than [AMOUNT] dollars or more than [AMOUNT] dollars.]~~

(SECTION 109 MEANS OF APPEALS)

109.1 Application for appeal. **For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 113 of 500.010.** ~~[Any person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The application shall~~

~~be filed on a form obtained from the code official within 20 days after the notice was served.]~~

109.2 Membership of board. Delete in its entirety.

109.2.1 Qualifications. Delete in its entirety.

109.2.2 Alternate members. Delete in its entirety.

109.2.3 Chairman. Delete in its entirety.

109.2.4 Disqualification of member. Delete in its entirety.

109.2.5 Secretary. Delete in its entirety.

109.2.6 Compensation of members. Delete in its entirety.

109.3 Notice of meeting. Delete in its entirety.

109.4 Open hearing. Delete in its entirety.

109.4.1 Procedure. Delete in its entirety.

109.5 Postponed hearing. Delete in its entirety.

109.6 Board decision. Delete in its entirety.

109.6.1 Resolution. Delete in its entirety.

109.6.2 Administration. Delete in its entirety.

109.7 Court review. Delete in its entirety.

(CHAPTER 3 GENERAL REGULATIONS)
(SECTION 302 SPECIFIC LIMITATIONS)

302.6 Water softener and iron filter backwash. **Water softener or iron filter discharge shall be diverted away from septic system, provided a nuisance is not created.** ~~[Water softener or iron filter discharge shall be indirectly connected by means of an air gap to the private sewage disposal system or discharge onto the ground surface, provided that a nuisance is not created.]~~

(CHAPTER 4 SITE EVALUATION AND
REQUIREMENTS)
(SECTION 403 SOIL BORINGS AND
EVALUATION)

403.1 Soil borings and profile descriptions. Soil borings shall be conducted on all sites, regardless of the type of private sewage system planned to serve the parcel. Borings shall extend at least 3 feet (914 mm) below the bottom of the proposed system. Borings shall be of sufficient size and extent to determine the soil characteristics important to an on-site liquid waste disposal system. Borehole data shall be used to determine the suitability of soils at the site with respect to zones of seasonal or permanent soil saturation and the depth to bedrock. ~~[Borings shall be conducted prior to percolation tests to determine whether the soils are suitable to warrant such tests and, if suitable, at what depth percolation tests shall be conducted.]~~ The use of power augers for soil borings is prohibited. Soil borings shall be conducted and reported in accordance with Sections 403.1.1 through 403.1.5. Where it is not practical to

have borings made with a backhoe, such borings shall be augered or dug by hand.

403.1.1 Number. There shall be not less than **two** [~~three~~] borings per soil absorption site. Where necessary, more soil borings shall be made for an accurate evaluation of a site. Borings shall be constructed to a depth of not less than 3 feet (914 mm) below the proposed depth of the system.

Exception: Three borings are required for repairs of existing private sewage disposal systems, along with one backhoe excavation at a 5-foot depth. [~~On new parcels, the requirement of six borings (three for initial area and three for replacement area) shall be reduced to five where the initial and replacement system areas are contiguous and one boring is made on each outer corner of the contiguous area and the fifth boring is made between the system areas (see Appendix A, Figure A-1).~~]

(SECTION 403 SOIL BORINGS AND EVALUATION)

404.1 General. The permeability of the soil in the proposed absorption system shall be determined by [~~percolation tests or~~] permeability evaluation.

404.2 Percolation tests and procedures. *Delete in its entirety.*

404.2.1 Percolation test hole. *Delete in its entirety.*

404.2.3 Test procedure, other soils. *Delete in its entirety.*

404.2.4 Mechanical test equipment. Delete in its entirety.

TABLE 406.1
MINIMUM HORIZONTAL SEPARATION DISTANCES
FOR SOIL ABSORPTION SYSTEMS

ELEMENT	DISTANCE (feet)
Cistern	50
Habitable building, below-grade foundation	25
Habitable building, slab-on-grade	15
Lake, high-water mark	50
Lot line (for new construction)	30 [5]
Lot line (for repairs)	10
Reservoir	50
Roadway ditches	10
Spring	100
Streams or watercourse ^a	50
Swimming pool	15
Uninhabited building	10
Water main	50
Water service	10
Water well	100 [50]

For SI: 1 foot = 304.8 mm.

a. All natural watercourses depicted on the most current United States Geological Survey (U.S.G.S) 7.5 Minute Series (Topographic) Maps for St. Charles County, Missouri, shall be left in their natural state.

406.3 Percolation rate, trench or bed. *Delete in its entirety.*

406.4 Percolation rate, seepage pit. *Delete in its entirety.*

(CHAPTER 5 MATERIALS)
(SECTION 501 GENERAL)

501.2 Minimum standards. Materials shall conform to the standards referenced in this code for the construction, installation, alteration or repair of private sewage disposal systems or parts thereof. **All new construction requires N.S.F. Class 1 tanks, unless otherwise determined by Code Official.**

Exception: The extension, addition to or relocation of existing pipes with materials of like grade or quality in accordance with Sections 102.6 and 105.

(SECTION 504 TANKS)

504.3 Steel tanks. *Delete in its entirety.*

504.5 Manholes. Manhole collars and extensions shall be of the same material as the tank. Manhole covers shall be of concrete [~~, steel, cast iron~~] or other approved material.

(CHAPTER 6 SOIL ABSORPTION SYSTEMS)
(SECTION 602 SIZING SOIL ABSORPTION SYSTEMS)

602.1 General. Effluent from septic tanks and other approved treatment tanks shall be disposed of by soil

absorption or an approved manner. Sizing shall be in accordance with this chapter for systems with a daily effluent application of **3,000 gallons (11,356 925 L)** [~~5,000 gallons (18,925 L)~~] or less. Two systems of equal size shall be required for systems receiving effluents exceeding **3,000 gallons (11,356 L)** [~~5,000 gallons (18,925 L)~~] per day. Each system shall have a minimum capacity of 75 percent of the area required for a single system. An approved means of alternating waste application shall be provided. A dual system shall be considered as one system.

(SECTION 603 RESIDENTIAL SIZING)

603.1 General. All absorption fields shall be designed based on soil morphology reevaluation reports prepared by a certified professional soil scientist or by a professional engineer licensed by the State of Missouri. [~~The bottom area for seepage trenches or beds or the sidewall area for seepage pits required for a soil absorption system serving residential property shall be determined from Table 603.1 using soil percolation test data and type of construction.~~]

~~**TABLE 603.1 MINIMUM ABSORPTION AREA FOR ONE AND TWO FAMILY DWELLINGS**~~

(SECTION 604 OTHER BUILDING SIZING)

604.1 General. Calculations to determine the size of absorption field shall be based upon sewage flow rates in Table 2A and soil groups in Tables 13 and 14 in 19 CSR 20-3.060 as currently promulgated or as amended hereafter and as provided in that rule.

~~[The minimum required soil absorption system area for all occupancies, except one and two family dwellings, shall be based on building usage, the percolation rate and system design in accordance with Tables 604.1(1) and 604.1(2). The minimum soil absorption area shall be calculated by the following equation:~~

$$\del A = U \times CF \times AA \text{ (Equation 6-1)}$$

where:

~~A = Minimum system absorption area.~~

~~AA = Absorption area from Table 604.1(1).~~

~~CF = Conversion factor from Table 604.1(2).~~

~~U = Number of units.]~~

~~**Delete [TABLE 604.1(1) MINIMUM ABSORPTION AREA FOR OTHER THAN ONE AND TWO-FAMILY DWELLINGS]**~~

~~**Delete [TABLE 604.1(2) CONVERSION FACTOR**~~

604.2 Drain Field Calculations, rounding.

Calculation for the length of the drain field shall be rounded up to the next 100 lineal feet.

(CHAPTER 7 PRESSURE DISTRIBUTION
SYSTEMS)
(SECTION 706 DOSING)

706.1 General. The dosing frequency shall be not greater than four times daily. A volume per dose shall be established by dividing the daily waste-water flow by the dosing frequency. The dosing volume shall be

not less than 10 times the capacity of the distribution pipe volume. Table 706.1 provides the estimated volume for various pipe diameters.

TABLE 706.1
ESTIMATED VOLUME FOR VARIOUS DIAMETER PIPES

DIAMETER (inches)	VOLUME (gallons per foot length)
1	0.041
1-1/4	0.064
1-1/2	0.092
2	0.164
3	0.368
4	0.655
5	1.47

For any septic system that requires dosing, the pump tank shall be a 1,000 gallon concrete single compartment tank equipped with effluent pump with float and high water alarm. A timer shall dose over a 24-hour period, instead of on demand.

(CHAPTER 8 TANKS)
(SECTION 802 SEPTIC TANKS AND OTHER
TREATMENT TANKS)

802.1 General. Septic tanks shall be fabricated or constructed of [~~welded steel,~~] monolithic concrete, fiberglass or an approved material. Tanks shall be water tight and fabricated to constitute an individual structure, and shall be designed and constructed to withstand anticipated loads. The design of prefabricated septic tanks shall be approved. Plans for site constructed concrete tanks shall be approved prior to construction.

802.2 Design of septic tanks. Septic tanks shall conform to the design standards set out in 19 CSR 20-3.060(4), as currently promulgated or as amended hereafter. ~~[Septic tanks shall have not less than two compartments. The inlet compartment shall be not less than two thirds of the total capacity of the tank, not less than a 500 gallon (1893 L) liquid capacity and not less than 3 feet (914 mm) wide and 5 feet (1524 mm) long. The secondary compartment of a septic tank shall have not less than a capacity of 250 gallons (946 L) and not more than one third of the total capacity. The secondary compartment of septic tanks having a capacity more than 1,500 gallons (5678 L) shall be not less than 5 feet (1524 mm) long.]~~

~~The liquid depth shall be not less than 30 inches (762 mm) and a maximum average of 6 feet (1829 mm). The total depth shall be not less than 8 inches (203 mm) greater than the liquid depth.~~

~~Rectangular tanks shall be constructed with the longest dimensions parallel to the direction of the flow.~~

~~Cylindrical tanks shall be not less than 48 inches (1219 mm) in diameter.]~~

802.7.1 Sizing of tank. The minimum liquid capacity for one- and two-family dwellings shall be in accordance with Table 802.7.1.

TABLE 802.7.1
SEPTIC TANK CAPACITY FOR ONE- AND TWO-FAMILY
DWELLINGS

NUMBER OF BEDROOMS	SEPTIC TANK (gallons)
--------------------	-----------------------

1	1,000 [750]
2	1,000 [750]
3	1,000
4	1,250 [1,200]
5	1,500 [1,425]
{6}	{1,650}
{7}	{1,875}
{8}	{2,100}

For SI: 1 gallon = 3.785 L.

Exception:

Six (6) bedrooms or more requires 1,000 gallon trash tank in front of Class 1.

802.7.2 Other buildings. For buildings, the liquid capacity shall be increased above the 750-gallon (2839 L) minimum as established in Table 802.7.1. In buildings with kitchen or laundry waste, the tank capacity shall be increased to receive the anticipated volume for a 24-hour period from the kitchen or laundry or both. The liquid capacities established in **Table 2A "Quantities of Domestic Sewage Flows" in Section B 19 CSR 20-3.060** [~~Table 802.7.2~~] do not include employees.

Exception: One- or two-family dwellings.

Table 802.7.2 Additional Capacity for Other Buildings. Delete in its entirety.

802.8 Installation. Septic and other treatment tanks shall be located with a horizontal distance not less than as specified in **Table 1 "Minimum Set-Back**

Distances" in 19 CSR 20-3.060(4), as currently promulgated or as amended hereafter, except that for new construction (a) sewage tanks shall be 100 feet from any private water supply and (b) both sewage tanks and absorption fields (disposal areas) shall be 30 feet from any property line. [~~Table 802.8 between various elements~~]. Tanks installed in ground water shall be securely anchored. A 3-inch-thick (76 mm) compacted bedding shall be provided for all septic and other treatment tank installations. The bedding material shall be sand, gravel, granite, limerock or other noncorrosive materials of such size that the material passes through a 0.5-inch (12.7 mm) screen.

Table 802.8 Minimum Horizontal Separation Distances for Treatment Tanks. Delete in its entirety.

802.11.1 Capacity sizing. The working capacity of the dosing or pumping chamber shall be sized to permit automatic discharge of the total daily sewage flow with discharge occurring not more than four times per 24 hours. Minimum capacity of a dosing chamber shall be **1,000 gallons (3790 L)** [~~500 gallons (1893 L)~~] and a space shall be provided between the bottom of the pump and floor of the dosing or pumping chamber. A dosing chamber shall have a 1-day holding capacity located above the high-water alarm for one- and two-family dwellings based on **120 gallons (455 L)** [~~100 gallons (379 L)~~] per day per bedroom, or in the case of other buildings, in accordance with Section 802.7. **For one- and two-family dwellings, pump chambers shall at a minimum be 1,000-gallon, single compartment, time-dosed tanks.** [~~Minimum pump chamber sizes are indicated for one and two family dwellings in Table~~

~~802.11.1.]~~ Where the total developed length of distribution piping exceeds 1,000 feet (305 m), the dosing or pumping chamber shall have two siphons or pumps dosing alternately and serving one-half of the soil absorption system.

Table 802.11.1 Pump Chamber Sizes. *Delete in its entirety.*

Table 903.1(3) Design criteria for a three-bedroom home for a mound on a 0- to 6- percent slope with loading rates of 450 gallons per day for slowly permeable soil. *Delete in its entirety.*

Table 903.1(4) Design criteria for a four-bedroom home for a mound on a 0- to 6- percent slope with loading rates of 600 gallons per day for slowly permeable soil. *Delete in its entirety.*

Table 903.1(5) Design criteria for a one-bedroom home for a mound on a 0- to 12- percent slope with loading rates of 150 gallons per day for shallow permeable soil over creviced bedrock. *Delete in its entirety.*

Table 903.1(6) Design criteria for a two-bedroom home for a mound on a 0- to 12- percent slope with loading rates of 300 gallons per day for shallow permeable soil over creviced bedrock. *Delete in its entirety.*

Table 903.1(7) Design criteria for a three-bedroom home for a mound on a 0- to 12- percent slope with loading rates of 450 gallons per day for shallow permeable soil over creviced bedrock. *Delete in its entirety.*

Table 903.1(8) Design criteria for a four-bedroom home for a mound on a 0- to 12- percent slope with loading rates of 600 gallons per day for shallow permeable soil over creviced bedrock. *Delete in its entirety.*

Table 903.1(9) Design criteria for a one-bedroom home for a mound on a 0- to 12- percent slope with loading rates of 150 gallons per day for permeable soil with a high water table. *Delete in its entirety.*

Table 903.1(10) Design criteria for a two-bedroom home for a mound on a 0- to 12- percent slope with loading rates of 300 gallons per day for permeable soil with a high water table. *Delete in its entirety.*

Table 903.1(11) Design criteria for a three-bedroom home for a mound on a 0- to 12- percent slope with loading rates of 450 gallons per day for permeable soil with a high water table. *Delete in its entirety.*

Table 903.1(12) Design criteria for a four-bedroom home for a mound on a 0- to 12- percent slope with loading rates of 600 gallons per day for permeable soil with a high water table. *Delete in its entirety.*

Table 903.5.5 Downslope and upslope width corrections for mounds on sloping sites. *Delete in its entirety.*

Table 903.6 Infiltrative capacity of natural soil. *Delete in its entirety.*

- I. Prior to the transfer of ownership of any property served by a private sewage disposal system and/or private well, the seller shall have the private sewage

disposal system and/or private well inspected for compliance with this Code and with the other standards enumerated in Section 626.020, Ordinances of St. Charles County, Missouri. The inspections shall be conducted by a third party inspector licensed by St. Charles County. Inspection fees shall be the responsibility of the seller. All violations found at the time of inspection shall be corrected by either the seller or the buyer. If the buyer accepts responsibility to correct the violations, the buyer must meet the following requirements:

1. The buyer must sign an affidavit accepting responsibility for correcting violations and deliver that affidavit to the St. Charles County Division of Building and Code Enforcement; and
 2. Either the buyer or seller must establish an escrow account as provided by law in which is deposited a fund sufficient to cover the costs of correcting violations, as determined by the Director of the St. Charles County Division of Building and Code Enforcement based on bids or other documentation provided by the buyer or seller. That escrow account shall be established pursuant to an escrow or lender's agreement prepared on a form to be developed and supplied by the Director of the St. Charles County Division of Building and Code Enforcement and complying substantially with forms authorized by St. Charles County Ordinance No. 93-44. The Director shall release escrow funds only when the private sewage disposal system and/or private well are brought into compliance with applicable codes.
- J. An owner of any property served by a private sewage disposal system shall obtain an operating permit and

maintain in force a service and maintenance agreement if and as provided herein.

1. Operating permit required. Except as provided below, no private sewage disposal system may be used nor may the premises served by such a system be used or occupied unless the owner of those premises has obtained an operating permit and maintains in force a service and maintenance agreement as provided in this Subsection. This requirement, however, shall apply only to private sewage disposal systems permitted after September 1, 2009, and to premises served by older systems if those premises were acquired after September 1, 2009.

1. Application. Applications for such permits shall meet the following requirements.
 1. Forms. Applications shall be on forms developed by the Division of Building and Code Enforcement that include:
 - a. A statement that the Division of Building and Code Enforcement may inspect the private sewage disposal system serving the property for compliance with this code,
 - b. A statement that the owner or owners shall maintain in force a service and maintenance agreement with an on-site sewage disposal system contractor duly licensed by St. Charles County for the purpose of maintaining that system in compliance with this code,

- c. An identification of the property served by that system (for example, by reference to Assessor's Parcel Identification Number), and
 - d. Signatures of all record owners of the property.
2. Related submittals. Applications shall be accompanied by:
 - a. An application fee authorized by ordinance;
 - b. A copy of a current service and maintenance agreement meeting the requirements of this Subsection; and
 - c. A certificate, prepared on a form developed by the Division of Building and Code Enforcement, signed by an on-site sewage disposal system contractor duly licensed by St. Charles County, and stating that the above-mentioned copy of the service and maintenance agreement is a true and accurate copy of it, stating that the agreement is in force, and identifying the agreement's term.
2. Term. Such permits shall be valid as long as service and maintenance agreements required by this Subsection are maintained without any interruption not allowed by this Subsection.
3. Expiration. Permits shall expire automatically if service and maintenance agreements required by this Subsection are terminated and not replaced with new service and maintenance agreements as required by this Subsection.

4. Permits not transferable. Any purchaser of property served by a private sewage disposal system must apply for a new operating permit as required by this Subsection.

2. Service and maintenance agreements—contractors' duties. Service and maintenance agreements for private sewage disposal systems shall require on-site sewage disposal system contractors to:
 1. Alternative systems should be inspected yearly
 2. Maintain those systems in compliance with this code,
 3. Inspect those systems not less than every two (2) years for compliance with this code, and report the results of those inspections to the Division of Building and Code Enforcement, and
 4. Report termination of those agreements to the Division of Building and Code Enforcement.

3. Service and maintenance agreements—property owners' duties upon termination or expiration. Upon expiration or termination of any service and maintenance agreement property owners shall renew that agreement or enter a new agreement with another contractor within thirty (30) days.

Section 10. Article X, Energy Conservation Code, OSCCMo Section 500.320, is adopted to read as follows.

ARTICLE X: ENERGY CONSERVATION CODE

Section 500.320. Adoption of Energy Conservation Code of St. Charles County.

K. St. Charles County hereby adopts the 2015 International Energy Conservation Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by additions, insertions, deletions and changes so that such section and subsections to read as follows:

(CHAPTER 1 [CE] SCOPE AND
ADMINISTRATION)
(SECTION C101 SCOPE AND GENERAL
REQUIREMENTS)

C101.1 Title. This code shall be known as the International Energy Conservation Code of **St. Charles County** ~~[[NAME OF JURISDICTION]]~~, and shall be cited as such. It is referred to herein as “this code.”

(SECTION C103 CONSTRUCTION DOCUMENTS)

C103.1 General. Construction documents, technical reports and other supporting data shall be submitted **as required by the Building Official** ~~[in one or more sets]~~ with each application for a permit. The construction documents and technical reports shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the code official is authorized to require necessary construction documents to be prepared by a registered design professional.

Exception:

The code official is authorized to waive the requirements for construction documents or other supporting data if the code official determines they are not necessary to confirm compliance with this code.

C103.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION C104 INSPECTIONS)

C104.90 Workmanship. Repairs, maintenance work, alterations or installations which are caused directly or indirectly by the enforcement of this Code shall be executed and installed in a workmanlike manner in compliance with this Code, in accordance with

industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION C108 STOP WORK ORDER)

C108.1 Authority. For the purposes of this code, all Stop Work Orders shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 115 of 500.010. [~~Where the code official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the code official is authorized to issue a stop work order.~~]

C108.2 Issuance. Delete in its entirety.

C108.3 Emergencies. Delete in its entirety.

C108.4 Failure to comply. Delete in its entirety.

(SECTION C109 BOARD OF APPEAL)

C109.1 General. For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County. [~~In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The code official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure~~]

~~for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.]~~

C109.2 Limitations on authority. Delete in its entirety.

C109.3 Qualifications. Delete in its entirety.

(CHAPTER 1 [RE] SCOPE AND
ADMINISTRATION)

(SECTION R101 SCOPE AND GENERAL
REQUIREMENTS)

R101.1 Title. This code shall be known as the International Energy Conservation Code of **St. Charles County** ~~[[NAME OF JURISDICTION]]~~, and shall be cited as such. It is referred to herein as “this code.”

R101.2 Scope. This code applies to residential buildings and the building sites and associated systems and equipment.

Exception:

Residential buildings and their accessory structures within the scope of the International Residential Code shall utilize the energy provisions of that code.

(SECTION R103 CONSTRUCTION DOCUMENTS)

R103.1 General. Construction documents, technical reports and other supporting data shall be submitted **as required by the Building Official** ~~[in one or more sets]~~ with each application for a permit. The

construction documents and technical reports shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the code official is authorized to require necessary construction documents to be prepared by a registered design professional.

Exception:

The code official is authorized to waive the requirements for construction documents or other supporting data if the code official determines they are not necessary to confirm compliance with this code.

R103.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION R104 INSPECTIONS)

R104.90 Workmanship. Repairs, maintenance work, alterations or installations which are caused directly or indirectly by the enforcement of this Code shall be executed and installed in a workmanlike manner in compliance with this Code, in accordance with industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION R108 STOP WORK ORDER)

R108.1 Authority. For the purposes of this code, all Stop Work Orders shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 115 of 500.010. [Where the code official finds any work regulated by this code being performed in a manner either contrary to the provisions of this code or dangerous or unsafe, the code official is authorized to issue a stop work order.

R108.2 Issuance. Delete in its entirety.

R108.3 Emergencies. Delete in its entirety.

R108.4 Failure to comply. Delete in its entirety.

(SECTION R109 BOARD OF APPEALS)

R109.1 General. For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles

~~County. [In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The code official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.]~~

R109.2 Limitations on authority. Delete in its entirety.

R109.3 Qualifications. Delete in its entirety.

Section 11. Article XI, Fire Code, OSCCMo Section 500.400, is adopted to read as follows.

ARTICLE XI: FIRE CODE

Section 500.400. Adoption of Fire Code of St. Charles County.

L. St. Charles County hereby adopts the **2015** International Fire Code, **including Appendices B and F**, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by additions, insertions, deletions and changes so that such section and subsections to read as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION)

(SECTION 101 GENERAL)

101.1 Title. These regulations shall be known as the Fire Code of **St. Charles County, Missouri** [~~NAME OF JURISDICTION~~], hereinafter referred to as “this code.”

(SECTION 102 APPLICABILITY)

102.4 Application of building code. The design and construction of new structures shall comply with the International Building Code or **International Residential Code based on the scope of the respective code.** Any alterations, additions, changes in use or changes in structures required by this code~~;~~ ~~which are within the scope of the International Building Code;~~ shall **comply with the International Existing Building Code or International Residential Code based on the scope of the respective code** [~~be made in accordance therewith~~].

(SECTION 103 DEPARTMENT OF BUILDING SAFETY)

103.1 Creation of enforcement agency. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division’s director shall be the fire code official referred to in this code.** [~~The department of fire prevention is established within the jurisdiction under the direction of the fire code official. The function of the department shall be the implementation, administration and enforcement of the provisions of this code.~~]

103.2 Appointment. The fire code official shall be appointed **as provided by ordinance** ~~[by the chief appointing authority of the jurisdiction; and the fire code official shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.]~~

(SECTION 105 PERMITS)

105.4.1 Submittals. Construction documents and supporting data shall be submitted, **as required by the fire code official**, ~~[in two or more sets]~~ with each application for a permit and in such form and detail as required by the fire code official. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.

Exception:

The fire code official is authorized to waive the submission of construction documents and supporting data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

105.7 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.18. The term “construction permit” shall mean building permit and shall follow the requirements of Section 105

of the Building Code in addition to the requirements of this code.

(SECTION 106 INSPECTIONS)

106.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION 108 MEANS OF APPEAL)

108.1 General. For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 113 of 500.010. ~~In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The fire code official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render decisions and findings in writing to the appellant with a duplicate copy to the fire code official.~~

108.2 Limitations on authority. **Delete in its entirety.**

108.3 Qualifications. **Delete in its entirety.**

(SECTION 109 VIOLATIONS)

109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a **misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense.**

~~[[SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.]~~

(SECTION 111 STOP WORK ORDER)

111.2 Issuance. A stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's authorized agent, or to the person performing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work will be permitted to resume. *Any person served with a stop*

work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).

111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of **not less than one hundred dollars (\$100.00) or more than five hundred dollars (\$500.00)** [~~not less than~~ [AMOUNT] dollars or more than [AMOUNT] dollars].

(CHAPTER 11 CONSTRUCTION REQUIREMENTS
FOR EXISTING BUILDINGS)

(SECTION 1103 FIRE SAFETY REQUIREMENTS
FOR EXISTING BUILDINGS)

1103.5.3 Group I-2 Condition 2. In addition to the requirements of Section 1103.5.2, existing buildings of Group I-2 Condition 2 occupancy shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The automatic sprinkler system shall be installed as established by the **local fire district and the State of Missouri** [~~adopting ordinance~~].

(CHAPTER 56 EXPLOSIVES AND FIREWORKS)

(SECTION 5601 GENERAL)

5601.1.3 Fireworks. **Fireworks shall comply with the Ordinances of St. Charles County, Missouri.** [~~The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.~~]

Exceptions:

- ~~1. Storage and handling of fireworks as allowed in Section 5604.~~
- ~~2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.]~~

(SECTION 5609 TEMPORARY STORAGE OF
CONSUMER FIREWORKS)

5609.1 General. Delete in its entirety.

(CHAPTER 57 FLAMMABLE AND COMBUSTIBLE
LIQUIDS)

(SECTION 5704 STORAGE)

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited **as defined by the applicable ordinance of the fire district having competent jurisdiction.** [~~within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxi).]~~

(SECTION 5706 SPECIAL OPERATIONS)

5706.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited **as defined by the applicable ordinance of the fire district having**

competent jurisdiction. [~~within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxi).~~]

(CHAPTER 58 FLAMMABLE GASES AND
FLAMMABLE CRYOGENIC FLUIDS)

(SECTION 5806 FLAMMABLE CRYOGENIC
FLUIDS)

5806.2 Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by law as the limits **as defined by the applicable ordinance of the fire district having competent jurisdiction.** [~~of districts in which such storage is prohibited (see Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxi).~~]

(CHAPTER 61 LIQUIFIED PETROLEUM GASES)

(SECTION 6104 LOCATION OF LP-GAS
CONTAINERS)

6104.2 Maximum capacity within established limits. **As defined by the applicable ordinance of the fire district having competent jurisdiction,** [~~Within the~~] limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L) [~~(see Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxi).~~].

Section 12. Article XII, Swimming Pool and Spa Code, OSCCMo Section 500.420, is adopted to read as follows.

ARTICLE XII: SWIMMING POOL AND SPA CODE

Section 500.420. Adoption of Swimming Pool and Spa Code of St. Charles County.

M. St. Charles County hereby adopts the 2015 International Swimming Pool and Spa Code, a copy of which shall be deposited in the Office of the County Registrar with this ordinance, with the following amendments by additions, insertions, deletions and changes so that such section and subsections to read as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION)

(SECTION 101 GENERAL)

101.1 Title. These regulations shall be known as the Swimming Pool and Spa Code of **St. Charles County, Missouri** [~~NAME OF JURISDICTION~~], hereinafter referred to as “this code.”

(SECTION 103 DEPARTMENT OF BUILDING SAFETY)

103.1 Creation of enforcement agency. **The Division of Building and Code Enforcement of the Department of Community Development shall be the enforcement agency for this Code and the Division’s director shall be the code official referred**

to in this code. ~~[The department of building safety is hereby created and the official in charge thereof shall be known as the code official.]~~

103.2 Appointment. The code official shall be appointed **as provided by ordinance** ~~[by the chief appointing authority of the jurisdiction].~~

(SECTION 105 PERMITS)

105.3 Construction documents. Construction documents, engineering calculations, diagrams and other such data shall be submitted **as required by the code official** ~~[in two or more sets]~~ with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code.

105.6.2 Fee schedule. The fees for work shall be **as set forth by the Ordinances of St. Charles County, Missouri.** ~~[as indicated in the following schedule: [JURISDICTION TO INSERT APPROPRIATE SCHEDULE]]~~

105.6.3 Fee refunds. **The code official is authorized to establish a refund policy.** ~~[The code official shall authorize the refunding of fees as follows:~~

- ~~1. The full amount of any fee paid hereunder that was erroneously paid or collected.~~
- ~~2. Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.~~
- ~~3. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.~~

~~The code official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee not later than 180 days after the date of fee payment.]~~

105.90 Electronic submission. Where design documents including, but not limited to, plot plans, site plans, design drawings, specifications, etc. are originally created electronically, the building official is authorized to require electronic submittal of documents in a portable document format (PDF) or similar format for review. Where design documents were originally prepared on paper and are submitted in a paper form, the building official is authorized to charge a fee for converting those drawings to PDF equal to the cost incurred by County staff recreating the document and not to exceed more than one (1) dollar per page.

Exception:

Where submittal documents were originally prepared by hand and are 11 inches by 17 inches or less, the fee for document conversion shall not be charged.

(SECTION 106 INSPECTIONS)

106.90 Workmanship. All work shall be executed in a workmanlike and skilled manner so that, for example, floors are level, walls are plumb and square, windows and doors are plumb, square and easily operable, exterior building envelopes are weather-tight and exclude the elements, building materials are undamaged, and surfaces are unmarred. All work performed shall be in compliance with this code, per industry standards, and in accordance with the manufacturer's installation instructions.

(SECTION 107 VIOLATIONS)

107.4 Violation penalties. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair a pool or spa in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a *misdemeanor and upon conviction thereof shall be punishable by a fine of not more than five hundred (\$500.00) dollars, and each day's continuance of a violation shall be deemed a separate offense.* ~~[[SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. Each day that a~~

~~violation continues after due notice has been served shall be deemed a separate offense.]~~

107.5 Stop work orders. Upon notice from the code official, work on any system that is being performed contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's authorized agent, or to the person performing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. **Any person served with a stop work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).** ~~[Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars.]~~

(SECTION 108 MEANS OF APPEAL)

108.1 Application for appeal. **For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of St. Charles County, Missouri, in Section 113 of 500.010.** ~~[Any person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this~~

~~code do not fully apply, or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.]~~

108.2 Membership of board. Delete in its entirety.

108.2.1 Qualifications. Delete in its entirety.

108.2.2 Alternate members. Delete in its entirety.

108.2.3 Chairman. Delete in its entirety.

108.2.4 Disqualification of member. Delete in its entirety.

108.2.5 Secretary. Delete in its entirety.

108.2.6 Compensation of members. Delete in its entirety.

108.3 Notice of meeting. Delete in its entirety.

108.4 Open hearing. Delete in its entirety.

108.4.1 Procedure. Delete in its entirety.

108.5 Postponed hearing. Delete in its entirety.

108.6 Board decision. Delete in its entirety.

108.6.1 Resolution. Delete in its entirety.

108.6.2 Administration. Delete in its entirety.

108.7 Court review. Delete in its entirety.

(CHAPTER 3 GENERAL COMPLIANCE)

(SECTION 305 BARRIER REQUIREMENTS)

305.2.4 Mesh fence as a barrier. Delete in its entirety.

Section 13. Article VIII, Property Maintenance Code, OSCCMo is hereby amended to read as follows (added language in **bold type**, deleted language in [~~stricken type~~]).

**ARTICLE XIII [~~VIII~~]: PROPERTY
MAINTENANCE CODE**

Section **500.500** [~~500.090~~]. **Adoption of Property
Maintenance Code of St. Charles County.**

Section **500.510** [~~500.092~~]. **Abatement of Violations.**

Section **500.520** [~~500.093~~]. **Notices of Unsafe
Structure, Declarations of Nuisance, Orders to
Repair or Demolish, Abatement, Notice, Hearing
and Appeal.**

Section **500.530** [~~500.094~~]. **Levels of Contamination
Due to Production or Use of Methamphetamine and
Protocols for Abating Such Contamination.**

Section **500.540** [~~500.095~~]. **Vehicle Removal Code.**

Section **500.550** [~~500.096~~]. **Interference with Director
of Building and Code Enforcement when Removing**

Vehicle in Accordance with Section 500.540
[500.095]

Section 14. Article IX, Mobile and Manufactured Homes, OSCCMo is hereby amended to read as follows (added language in **bold type**, deleted language in [~~stricken type~~]).

**ARTICLE XIV [~~IX~~]: MOBILE AND
MANUFACTURED HOMES**

Section **500.600** [500.100]. Mobile or Manufacturer Homes – Installation and Tie-Down – Maintenance – Alteration – Damage – Adoption By Reference of Federal and State Regulations - Violations.

Section 15. Article X, County Building Commission , OSCCMo is hereby amended to read as follows (added language in **bold type**, deleted language in [~~stricken type~~]).

**ARTICLE XV [~~X~~]: COUNTY BUILDING
COMMISSION**

Section **500.810** [500.110]. Establishment.

Section **500.820** [500.120]. Appointment.

Section **500.830** [500.130]. Terms.

Section **500.840** [500.140]. Removal.

Section **500.850** [500.150]. Oath.

Section **500.860** [500.160]. Compensation.

Section **500.870** [~~500.170~~]. Vacancies.

Section **500.880** [~~500.180~~]. Meetings.

Section **500.890** [~~500.190~~]. Procedural Requirements
At Hearings.

Section **500.900** [~~500.200~~]. Duties / Powers.

Section **500.910** [~~500.210~~]. Majority.

Section 16. Except as provided in Section 17, below, this ordinance shall be in full force and effect from and after the date of its passage and approval.

Section 17. This ordinance is subject to penalty provisions for its violation and therefore, for penal purposes, shall be effective thirty-one (31) days after its posting in six public places, its publication in full on the web site of St. Charles County, and the publication of its title and the location in St. Charles County where it may be viewed in its entirety in a legal publication or a newspaper of general circulation in St. Charles County.

June 26, 2017
DATE PASSED

July 5, 2017
DATE APPROVED BY COUNTY EXECUTIVE


CHAIR OF THE COUNCIL


COUNTY EXECUTIVE

ATTEST:


COUNTY REGISTRAR

Comm Dev.2015 Code Adoption-5-3-17.170309.4-17.A