Carroll County, MD Code of Ordinances

CHAPTER 170: CONSTRUCTION CODES

Section

Title; Adoption of Codes

- 170.01 Adoption of standards by reference
- 170.02 Title
- 170.03 Construction of words; administrative provisions

Amendments to Codes

- 170.15 Building Code amendments
- 170.16 Residential Code amendments
- 170.17 Mechanical Code amendments
- 170.18 Electrical Code amendments
- 170.19 Plumbing Code amendments
- 170.20 Existing Building Code
- 170.21 NFPA 13D & NFPA 13R

Miscellaneous Provisions

- 170.30 Conflicts among codes
- 170.31 Official texts

Violations and Enforcement

- 170.45 Unlawful continuance
- 170.46 Citations and enforcement

170.99 Penalty

Appendix A: Plumbing Code Amendments, Table 7.21.1, Minimum Number of Required Plumbing Fixtures

Appendix B: Solar Panels

TITLE; ADOPTION OF CODES

§ 170.01 ADOPTION OF STANDARDS BY REFERENCE.

The following documents and codes are hereby adopted by reference; the COMAR standardslisted are state-adopted:

(A) The International Building Code 2015 2018 Edition, as published by the International Code Council, Inc. (ICC), as amended by the Maryland Building Performance Standards, COMAR-05.02.07

(B) National Fire Protection Association (NFPA) Fire Prevention Code, as adopted by the Maryland State Fire Code,

(C) International Mechanical Code, 2015 2018 Edition, COMAR 09.15.01.00;

(D) International Energy Conservation Code, 2015 2018Edition, COMAR 05.02.07

(E) International Residential Code, One and Two Family Dwelling Code, 2015 2018 Edition, COMAR 05.02.07

(F) NFPA 101 Life Safety Code, as adopted by the Maryland State Fire Code, COMAR-29.06.01;

(G) National Standard Plumbing Code Illustrated 2012, International Plumbing Code, 2018 Edition, COMAR 09.20.01.00;

(H) NFPA 70 National Electrical Code, 2017 Edition, COMAR 05.02.07 (replaces ICC, International Electrical Code);

(I) International Existing Building Code, 2015 2018 Edition, COMAR 05.16.01;

(J) COMAR 09.20.01.00 International Fuel Gas Code 2018);

(K) Maryland Accessibility Code, COMAR 05.02.02 09.12.53); and

(L) Liquefied Petroleum Gas Code, NFPA 58, 2011 Edition, COMAR 09.20.01.00.

		nd Design	Seismic	Subject t	to dama	ge from	Winte	lce barrier			Mean
Gro nd Snov Loao	Spe ed (mp	hic	Desian		. iine		r Desig n Temp	Underlaym ent Required	Flood hazar ds	Air Freezin g Index	Annu al Temp
40 ps	f 115	B or C	A	Severe	30 inche s	M-H	13 -12	Yes	Yes	1500	52.8

*See all relevant footnotes in table 301.2(1) of the code.

(2004 Code, § 97-1) (Ord. 52-D, passed 11-10-1998; Ord. 02-01, passed 1-3-2002; Ord. 04-25, passed 12-22-2004; Ord. 07-06, passed 4-19-2007; Ord. 2010-01, passed 2-25-2010; Ord. 2012-03, passed 5-10-2012; Ord. 2015-05, passed 6-25-2015; Ord. 2017-06, passed 9-7-2017) § 170.02 TITLE.

The short title of this chapter shall be "Carroll County Construction Codes". (2004 Code, § 97-2) (Ord. 52-D, passed 11-10-1998; Ord. 2015-05, passed 6-25-2015)

§ 170.03 CONSTRUCTION OF WORDS; ADMINISTRATIVE PROVISIONS.

Wherever the words "Name of Municipality" or "Name of Jurisdiction" appear in the Codes adopted pursuant to § 170.01, substitute the words "Carroll County." The enforcement, and administration provisions of the codes adopted pursuant to § 170.01 shall be the same as the International Building Code 2015 2018 Edition, as amended herein.

(2004 Code, § 97-3) (Ord. 52-D, passed 11-10-1998; Ord. 02-01, passed 1-3-2002; Ord. 2010-01, passed 2-25-2010; Ord. 2015-05, passed 6-25-2015)

AMENDMENTS TO CODES

§ 170.15 BUILDING CODE AMENDMENTS.

The International Building Code 2015 2018 Edition is amended as follows:

(1) Amend Chapter 1, Section 103.1 to read:

"The Bureau of Permits and Inspections of Carroll County is hereby created, and the executive official in charge shall be known as the Code Official or the Chief of the Bureau of Permits and Inspections, or its successor agency."

(2) Amend Chapter 1, Section 103.2 to read:

"The Code Official shall be a full-time employee who shall enjoy all the privileges afforded all such employees by Chapter 36, Personnel Policies of the County Code."

(3) Amend Chapter 1, Section 104.4 Inspections, to read:

"The Code Official shall make all the required inspections, or the Code Official shall accept reports of inspection by approved agencies or individuals in the Code Official's discretion, and all reports of such inspections shall be in writing and certified by a responsible officer of such approved agency or by the responsible individual. The Code Official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise subject to the approval of the appointing authority. The Code Official shall resolve any ambiguity which may arise regarding any issue dealing with inspections, and said shall be final."

- (4) Amend IBC Chapter 1, Section 105.2 Work exempt from permit as follows:
- (a) Delete subparagraph one, and amend to read as follows:

Amend Chapter 1 Section 105.2, Building (1) to read:

"One story detached accessory structures constructed on skids and movable, used as tool and storage sheds, playhouses and other similar uses, provided the floor area is not greater than 150 square feet. Sheds must not be in drainage or utility easements or within five feet of a side or rear property line and must meet all applicable zoning, health and building code regulations."

"Membrane covered cable structures and membrane covered frame structures, however these

structures shall comply with the setbacks required by Chapter 158 of the County Code, when they are an accessory to an R-3 use."

(b) Amend No. 9 to read: "Storable swimming or wading pool - those that are constructed on or above ground and are capable of holding water to a maximum depth of 42 inches, with non-metallic, molded polymer walls of inflatable fabric, regardless of dimension."

(c) Amend No. 12 to read: "Window awnings, retractable awnings that project from the exterior wall and do not require additional support of R-3 and U occupancies."

(d) Add No. 14 to read: "Replacement of existing light fixtures, switches and receptaclesand switches."

(e) Add No. 15 to read: "The installation of a single maximum 120 volt – 20 amp or less circuit in an existing structure that contains a single device provided no other electrical work is being installed for which a permit would be required."

(f) Add No. 16 to read: "Installation of low voltage wiring of 50 volts or less."

(g) Add No. 17 to read: "Replacement of individual residential plumbing fixtures" (excluding kitchen and bathroom remodeling, water treatment devices, solar and heat pump water heaters).

(h) Add No. 18 to read: "Replacement of individual residential LP or Natural gas fixtures" (excluding furnaces and hot water heaters).

(5) Chapter 1, Section 105.3 - APPLICATION FOR PERMITS, to add four new subsections: Amend R105.3 Application for permit

Add: 8. All applicant's listed as the contractor of record shall be licensed.

Exception: Individual homeowner's may be listed as the contractor provided the property is listed in public record as their primary residence. (Homeowner's shall submit a signed affidavit prior to issuing the permit that the property is the owner's primary residence.)

105.3.1.1 Prerequisites to issuance of permit. No permit shall be issued under this code until all PWAs required for the site have been executed by the County Commissioners.

105.3.1.2 Prior to issuance of a building permit, a copy of all applications for building permits shall be furnished to any agency deemed necessary by the Code Official, the Zoning Administrator, the Carroll County Health Department, and the Supervisor of Assessments and any other agency deemed necessary by the Code Official.

105.3.1.3 All approvals by the offices or agencies specified in Section 105.3.1.2 above must be made prior to the general approval of a building permit by the Code Official.

105.3.1.4 Well requirements. No permit for any structure for which plumbing is intended to be installed may be issued unless served by a public water system, or the property has located and installed upon it a lawfully constructed well.

(6) Amend Chapter 1, Section 105.3.2 to read:

105.3.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned six months after the date of filing, unless such application has been diligently prosecuted or a permit shall have been issued. The Code Official may extend the time limit noted herein for good cause."

(7) Amend Chapter 1, Section 105.5 to read:

"Cancellation of permit. Any permit issued shall become invalid and void if the period for which it was issued expires; or if the authorized work is not commenced within one year after issuance of the permit; or if the work has not been completed within two years of the date of issuance; or if there have been no inspections made of the authorized work within any six month period after the commencement of the work. The Code Official may extend the time limit noted herein for good cause."

(8) Amend Chapter 1, to add new subsection 105.6.1 to read as follows:

"The Code Official shall revoke a permit or approval issued under the provisions of this code in case of any false statement or misrepresentation of fact in the application or on the plans on which the permit or approval was based or in case of a revocation of an approval by any agency or office whose approval is required pursuant to Section 105.3.1.2."

(9) Amend Chapter 1, Section 105 - PERMITS, to add two new subsections to read:

105.6.1 Withholding permits. Whenever the Code Official shall find that any person,

corporation, LLC, partnership, contractor or owner is in violation of the provisions of this code or of the rules and regulations of any other department or agency of the County in connection with the erection, maintenance or repair of buildings, structures, lands or equipment thereon or therein, or has failed to perform any PWA between himself or herself and the County, the Code Official may refuse to grant any further permits to such person, corporation, LLC, partnership, contractor, or owner or the principals in the corporate entity in violation or any other person whose name is required on an application, until all violations have been corrected, or until satisfactory bond has been given to the County Commissioners.

105.6.2 Withholding inspections. Whenever the Code Official shall find that any person, corporation, LLC, partnership, contractor or owner is in violation of the provisions of this code or of the rules and regulations of any other department or agency of the County in connection with erection, maintenance or repair of buildings, structures, lands or equipment thereon or therein, or has failed to perform any PWA between himself or herself and the County, the Code Official upon 15 days' notice may stop work on all active permits that the person, corporation, LLC, partnership, contractor, owner, or the principals of the corporate entity in violation or any other person whose name is required on an application, has outstanding until all violations have been corrected, or until satisfactory bond has been given to the Board of County Commissioners.

(10) Amend Chapter 1, to add new subsection 107.2.5.2, Grading, to read:

"Grading shall be done in accordance with Chapter 152 of the County Code."

(11) Amend Chapter 1, to add Section 107.6 to read:

107.6 Private sewage disposal system. The site plan shall indicate the location of the private sewage disposal system where a public sewer is not available.

(12) Amend Chapter 1, Section 107 to add a new subsection to read:

107.7 Private water systems. If no public water supply is available and to be used, the site plan shall indicate tire proposed location of a private well or wells which are to be installed to serve the property.

(13) Amend Chapter 1, Section 109.2, Fee schedule, to read:

"The Commissioners shall adopt a schedule for the determination of permit fees which shall be a part of the official minutes of the Board of County Commissioners, and such schedule shall be posted in the office of the Code Official at all times."

(14) Amend Chapter 1, Section 109.2 to add two new subsections:

109.2.1 A building owned by the state or federal government is not subject to this code; however, any such government may apply without charge for inspection and approval of work on an informal basis.

(15) Amend Chapter 1, Section 109 - FEES to add new subsections to read:

109.4.1 Fees where construction started without a permit. If a person applies for a permit after having performed work without a permit, the permit fee may include the amount assessed as a fine, if not previously paid, and an additional \$100.00 for the issuance of the permit and an additional \$100.00 for each inspection which would have been required to have been made had the permit been issued before work began.

109.4.2 Fees where required inspections have been missed. If the person to whom the permit is issued fails to contact the Code Official for a required inspection, in addition to all other requirements of this code, a fine of an additional \$100.00 may be assessed and required to be paid for each missed inspection before the issuance of a use and occupancy permit.

109.4.3 In addition to all other fees incurred, at the discretion of the Code Official, additional fees may be assessed for services outside the scope of the adopted fee schedule for things such as the extension of a permit application, an extension of a permit, the issuance of a temporary use and occupancy permit or when additional inspections are requested.

(16) Amend Chapter 1, Section 109.6, Refunds, to read:

"In the case of a revocation of a permit or cancellation of permit pursuant to Section 105 or abandonment or discontinuance of a building project, the portion of the work actually completed shall be computed, and any excess fee for the incomplete work shall be returned to the permit holder, within 30 days from the date of cancellation. All plan examination, inspections, permit process fees, and penalties that have been imposed on the permit holder under the requirements of this code, and the applicable administrative fee shall first be collected."

(17) Amend Chapter 1, Section 110.3, Required inspections, to read:

"The Code Official shall conduct such inspections as deemed necessary by the Code Official during and upon completion of the work for which the Code Official has issued a permit. The Code Official shall maintain a record of all examinations and inspections and of all violations of this ordinance. The Code Official shall determine whether the owner shall provide for special inspections in accordance with Section 1704."

. (18) Amend Chapter 1, Section 110.5.1 110.3 to add a new subsection:

All Commercial buildings (Use Groups A, B, E, F, H, I, M, R-1, R-2, S, U), subject to Section 110.3, the following are required inspections:

1. Footing trench/site inspection (in advance of pouring with steel in place).

- 2. Walls.
 - a. Block after erected.
 - b. Concrete in advance of pouring with steel and form in place.
 - c. Waterproofing and draintile.
- 3. Plumbing and Electrical ground work.
- 4. Slabs: in advance of pouring.
- 5. Steel connections (certified by structural engineer when required by Code Official).

Framing, rough plumbing, rough electrical wiring, sprinkler, and insulation prior to close-in.
Finals.

110.5.2 Residential Buildings in Use Groups R-3 and R-4. Subject to Section 110.3, the following are required inspections:

- 1. Footing trench/site inspection (in advance of pouring).
- 2. Walls, including parging on block and waterproofing.
- 3. Drain tile installed.

4. Basement and habitable area on slab including any plumbing groundwork (in advance of pouring).

- 5. Framing, rough plumbing, rough electrical wiring, sprinkler, and insulation prior to close-in.
- 6. Fireplace throat and wood stove thimble.
- 7. Finals.

110.5.3 Inspection requests. Requests for inspections must be made at least one business day prior to the day on which the inspection requested is to be conducted. A request for inspection shall be made to tire Bureau of Permits and Inspections. The contractor whose name appears as such on the permit must notify the Bureau of Permits and Inspections and request an inspection following each of the phases of construction. The contractor shall not proceed with the construction of the next phase unless the inspection for the prior phase has been completed and approved.

110.5.4 Re-inspections. A re-inspection fee may be charged for each failed inspection.

(19) Amend Chapter 1 to add new Section 110.7, Farm buildings:

110.7 Farm buildings. Farm buildings for agricultural use shall require a building permit. "Farm building" shall include buildings whose primary use is to house farm animals, to house farm equipment or for farm storage. "Farm building" shall not include buildings whose primary purpose is the processing or marketing of farm goods for sale or distribution to the general public where such use requires the services of five or more persons inside the building for more than 90 days per year. Farm buildings shall be inspected for compliance with building, plumbing and electrical codes.

(20) Amend Chapter 1, Section 111 by adding a new Subsection 111.1.1 to read:

111.1.1 In the event final grading of the site has not been completed, or is not in accordance with Chapter 152, Grading and Sediment Control, of the County Code, the approved site plan and the Land Grading Specifications of the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control, no certificate of use and occupancy shall be issued. A temporary certificate of use and occupancy may be issued to the owner of the property upon presentation of suitable guaranties, as determined by the Code Official, guaranteeing the completion of the grading within a time specified by the Code Official.

(21) Amend Chapter 1, Section 111 - CERTIFICATE OF OCCUPANCY, to add a new sentence at the end to read: Prior to issuance of a use and occupancy permit all approvals by

municipalities or other County or state agencies, where required, must be received by the Code Official.

(22) Amend Chapter 1, Section 113.1, Board of Appeals, to read:

113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the applications or interpretations of this Code, there shall be and is hereby created a Board of Appeals. The Board of Appeals shall be the County Commissioners or not less than three persons whom the County Commissioners may designate.

(23) Amend Chapter 1, Section 113, to add a new subsection to read:

113.4 Filing fees. Any person filing an appeal shall include a nonrefundable filing fee of \$ 150.00.

(24) Amend Chapter 1, Section 113, Board of Appeals, to add a new subsection 113.5 to read:

113.5 Time for filing appeal. An appeal shall be filed within 30 days of the date of the written notice provided by the Code Official of the decision.

(25) Amend Chapter 1, Section 113, Board of Appeals, to add a new subsection 113.6 to read:

113.6 Notice of meeting. The Board, if the County Commissioners, shall meet at its regular meeting day upon notice of the President promptly after the filing of an appeal. If the Board is not the County Commissioners, it shall meet within a reasonable time of the filing of an appeal or at stated periodic meetings if warranted by the volume of work.

(26) Amend Chapter 1, Section 113, Board of Appeals, to add new subsection 113.7 to read: **113.7 Postponed hearing.** When all three members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to a postponement of the hearing until all members can be present.

(27) Amend Chapter 1, Section 113, Board of Appeals, to add a new subsection 113.8 to read:

113.8 Board decision. The Board shall affirm, modify or reverse the decision of the Code Official by concurring vote of a majority of the Board. Failure to secure a majority vote of the Board in support of the appellant shall be a confirmation of the Code Official's decision. The Board may assess the costs of the appeal against any party to the appeal.

(28) Amend Chapter 1, Section 113, Board of Appeals, to add a new subsection 113.9 112.10 to read:

113.9 Court review. Any aggrieved person, whether a previous party to the appeal, shall have the right of an appeal to a court of competent jurisdiction for judicial review of the decision of the Board. The decision shall be on the record. The appeal to the court shall be filed within 30 days of the decision of the Board and shall be governed by Chapter 200 of Title 7 of the Maryland Rules entitled Judicial Review of Administrative Agency Decisions.

(29) Amend Chapter 1, Section 116.1.1, Costs of emergency repairs, to read:

"Costs incurred in the performance of the emergency work shall be paid by and be the responsibility of the property owner. If the property owner is unwilling or unable to make such payment, then the payment may be made on behalf of the property owner from the treasury of the jurisdiction. All charges paid by the local jurisdiction shall be due when incurred and after 30 days from the date due shall bear interests at the rate of 1% per month until paid. All payments and costs incurred by the jurisdiction shall be liens upon the real property. In addition to being enforced by actions at law, the Tax Collector may sell the real property of the delinquent property owner in the same manner as other properties sold at tax sale."

(30) Amend Code by adding to Chapter 1 a new Section 117 captioned "Demolition" as follows:

Section 117 DEMOLITION

117.1 General. The Code Official shall order the owner of any premises upon which is located any structure, which in the Code Official's judgment is so old, dilapidated, or has become so out of repair as to be dangerous, unsafe, unsanitary, or otherwise unfit for human habitation or occupancy, and such that it is unreasonable to repair the structure:

a. To demolish and remove such structure;

b. If such structure is capable of being made safe by repairs, to repair and make safe and sanitary or to demolish and remove at the owner's option; or

c. Where there has been a cessation of normal construction of any structure for a period of more than two years, to demolish and remove such structure.

117.2 Notices and orders. All notices and orders shall comply with Chapter 1.

117.3 Failure to comply. If the owner of a premises fails to comply with a demolition order within the time prescribed, the Code Official shall cause the structure to be demolished and removed, either through an available public agency or by contract or arrangement with private persons, and the cost of such demolition and removal shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate in accordance with § 3-108 of the Code of Public Local Laws.

117.4 Salvage materials. When any structure has been ordered demolished and removed, the Code Official under the contract or arrangement specified in subsection 117.3 shall have the right to sell the salvage and valuable materials at the highest price obtained. The net proceeds of such sale, after deducting the expenses of the demolition and removal, shall be promptly remitted with a report of such sale or transaction, including the items of expense and the amounts deducted, for the person who is entitled thereto, subject to any order of a court. If such surplus does not remain to be turned over, the report shall so state.

(31) Amend Chapter 5, Table 508.4, to add a new footnote \neq G to read:

"Tenant Separation - All tenant spaces in a non-sprinklered commercial building shall be separated by one hour fire resistance rated assemblies."

(32) Amend Chapter 9, Section 903.3.5, by deleting the second sentence and replacing with: "The potable water supply shall be protected against backflow in accordance with the requirements of the National Standard Plumbing Code Illustrated 2012." International Plumbing Code 2018 Edition

(33) Amend Chapter 11, Section 1101.1 to read:

"Scope: The provisions of this chapter shall control the design and construction of facilities for accessibility to physically disabled persons. Facilities that comply with the Maryland Accessibility Law, COMAR 05.02.02 09.12.53 will be considered accessible and any reference to ANSI A117.1 shall mean COMAR 05.02.02 09.12.53."

(34)Amend Chapter 10, Section 1015 and add 1015.2.2 Retaining Walls. "Retaining walls that are more than 30 inches (762mm) measured vertically from finish grade to the top of the wall at any point within 36 inches horizontally to the edge of the wall shall comply with the provisions of Sections 1015.2 through 1015.4".

(34 35) Amend Chapter 16, Section 1608, Snow Loads, to read:

"All roofs shall be designed for a minimum snow load of 40 PSF ground snow load and for unbalanced snow loads."

(35 36) Amend Chapter 18 to add new Section 1804.4.1 to read:

"Safety features: In the event that extreme grade conditions exist, the Code Official may require that appropriate safety devices (e.g., fences, guardrails, retaining walls, etc.) be installed." Guards when required shall be installed per Section 1015.2 and 1015.4 of the International Building Code 2018 Edition unless otherwise approved by the code official

(36-37) Amend Chapter 18, Section 1809.5 to read:

"Frost protection: Except where exempted by the Code Official or erected upon solid rock or otherwise protected from frost, foundation walls, piers, and other permanent supports of all buildings and structures shall extend to the frost line, which is 30 inches below grade and spread footings of adequate size shall be provided where necessary to distribute properly the load within the allowable load bearing value of the soil. Alternatively, such structures shall be supported on piles where earth or rock is not available. Footings shall not bear on frozen soils."

(37 38) Amend Chapter 18, Section 1809.8 to read:

"Plain concrete: In plain concrete footings, the edge thickness shall not be less than eight inches (203 mm) for footings on soil." Delete Exception in Section 1809.8

(38) Amend Chapter 29, Plumbing Systems, by deleting Table 2902.1 and replacing with § 170.19 Plumbing Code Amendments.

(39) Amend Chapter 31; Section 3103.1 3102.1 General, to read:

"The provisions of this section shall apply to tents, membrane structures, and other structures erected or intended to be erected for more than seven consecutive days and less than 180 days. Such structures shall be governed by the Maryland State Fire Codes. Those structures erected for a longer period of time shall comply with Section 3102.

(40) Amend Chapter 33, Section 3303, DEMOLITION, to add two new subsections to read:

3303.8 Condition of property upon completion. In addition to any other reasonable conditions which the Code Official may impose upon a permit issued to demolish a structure, the permit shall be conditioned upon the complete disposal of all debris resulting from the demolition and a restoration of the site appropriate to grade with stabilized soil.

3303.9 Final inspection. Upon completed demolition of the structure, removal of debris and complete stabilization of the ground, the permit holder shall request a final inspection. If all work is satisfactorily completed, a certificate of completion shall be issued; if not, the permit holder shall satisfactorily complete the work within the time limit of the permit. If a certificate of completion is not issued in accordance herewith during the time authorized under the permit, the property owner and permit holder (if other than the property owner) shall be deemed in violation of the permit.

(41) Add new Chapter 36, UNDERGROUND FUEL STORAGE TANK PERMIT REQUIREMENTS, to read:

CHAPTER 36

Section 3600.0 UNDERGROUND FUEL STORAGE TANK PERMIT REQUIREMENTS

1. Any person who installs, removes or abandons a commercial underground gasoline or fuel storage tank for petroleum products of any size or a residential tank greater than 1,100 gallons shall obtain a permit from the Bureau of Permits and Inspections before installing, removing or abandoning said tank.

2. The requirements of the current Maryland Fire Prevention Code and Maryland Department of the Environment regulations shall apply.

(42) Add new Chapter 38 to read as follows and add the following text to that chapter with the sections indicated:

CHAPTER 38

Floodplain Construction

3800.1 Definitions.

In this chapter the following terms have the meanings indicated. Any term not defined in this chapter shall have the meaning as defined in Chapter 153 of the Code.

CERTIFICATE OF OCCUPANCY OR USE - A permit to legally occupy or use a building for the intended purpose.

ELEVATION CERTIFICATE - Form supplied by FEMA to certify as-built elevations of buildings above mean sea level, North American Vertical Datum (NAVD).

FLOOD OPENING - A flood opening (non-engineered) is an opening that is used to meet the prescriptive requirement of 1 square inch of net open area for every square foot of enclosed area. An engineered flood opening is an opening that is designed and certified by a licensed professional engineer or licensed architect as meeting certain performance characteristics, including providing automatic entry and exit of floodwaters; this certification requirement may be satisfied by an individual certification for a specific structure or issuance of an Evaluation Report by the ICC Evaluation Service. Inc. [Note: See NFIP Technical Bulletin #1, "Openings in Foundation Walls and Walls of Enclosures."]

FLOOD PROOFING - Any combination of structural or nonstructural changes which reduces or eliminates flood damage to improved property.

FLOOD PROOFING CERTIFICATE - Form supplied by FEMA to certify that a building has been designed and constructed to be structurally dry flood proofed to the flood protection elevation.

FPE - Flood protection elevation.

HISTORIC STRUCTURE - Any structure that is:

(1) Individually listed in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listings on the National Register;

(2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; or

(3) Individually listed on the Maryland Register of Historic Places.

MANUFACTURED HOME - A transportable building which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities.

NAVD - North American Vertical Datum of 1988 elevation datum set by the National Geodetic Survey.

NEW CONSTRUCTION - Structures, including additions and improvements, and the placement of manufactured homes, for which the start of construction commenced on or after August 1, 1978, the initial effective date of the Carroll County, Maryland Flood Insurance Rate Map, including any subsequent improvements, alterations, modifications, and additions to such structures.

PERMANENT STRUCTURE - Any structure occupying a site for more than 180 days per year.

RECREATIONAL VEHICLE - A vehicle built on a single chassis which is 400 square feet or less at the longest horizontal projection, self-propelled or towable, and designed primarily for temporary living while traveling or camping.

REPETITIVE LOSS - Flood-related damage sustained by a building on two separate occasions during a ten year period for which the cost of repairs at the time of each event, on the average, equals or exceeds 25% of the market value of the building before the damage occurred.

START OF CONSTRUCTION - The date of issue of the building permit for any development, including new construction (A building for which the start of construction commenced on or after August 1, 1978, and includes any subsequent additions or improvements) and substantial improvements, provided that the actual start of the construction or improvement was within 180 days of permit issuance. The actual start of construction is the placement of slab or footings, piles, columns, or actual placement of a manufactured home. For substantial improvement, the start of construction is the first alteration of any structural part of the building.

SUBSTANTIAL DAMAGE - Damage of any origin sustained by a building or structure whereby the cost of restoring the building or structure to its before damaged condition would equal or exceed 50 percent of the market value of the building or structure before the damage occurred. Also used as "substantially damaged" structures. [Note: See "Substantial Improvement/Substantial Damage Desk Reference" (FEMA P-758).]

SUBSTANTIAL IMPROVEMENT - Any reconstruction, rehabilitation, addition, or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure before the start of construction of the improvement. The term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

(1) Any project for improvement of a building or structure to correct existing violations of State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official prior to submission of an application for a permit and which are the minimum necessary to assure safe living conditions; or

(2) Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

TEMPORARY STRUCTURE - Any structure completely removed within 180 days from issuance of the permit.

FLOODPLAIN AND STORM DRAINAGE AREAS SUBJECT TO FLOODING BY SURFACE WATERS OR RUNNING STREAMS.

Section 3800.2. Delineation of the floodplain. For the purposes of these regulations, the minimum basis for establishing special flood hazard areas and base flood elevations is the Flood Insurance Study (FIS) for Carroll County, Maryland And Incorporated Areas dated October 2, 2015, or the most recent revision thereof, and the accompanying Flood Insurance Rate Maps (FIRMs) and all subsequent amendments and revisions to the FIRMs. The FIS, FIRM, and FBFM shall be used to guide the County or any other Authority Having Jurisdiction in determining the relative location of the proposed building or development with respect to FEMA mapped streams, floodplains, or

floodways. If building or development is proposed in a contested FEMA or unmapped floodplain, the floodplain shall be delineated in accordance with Chapter 153. The FIS and FIRMs are retained on file and available to the public at the Department of Land and Resource Management, or its successor agency.

Section 3800.3. Construction of buildings or other structures in floodplains when a permit is required. Construction of buildings or other structures in the floodplain is prohibited unless a variance is granted by the County pursuant to Chapter 153.081 or any other Authority Having Jurisdiction. Any person granted a variance for a building or any other structure in the floodplain shall obtain a permit and be in full conformance with all provisions of Chapter 170, Construction Codes. All necessary state and federal permits shall be obtained before any construction may proceed. Recreational vehicles may not occupy a site for more than 180 days out of the year and shall be fully licensed and ready for highway use to be allowed seasonally in the FEMA floodplain. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect type utilities and security devices, and has no permanently attached additions. Use flood damage-resistant materials below the elevation of the lowest floor required in 153.007.

Section 3800.4. Filling. Filling within the floodplain will not be permitted, unless compelling reasons are submitted to the County and approved through the variance process in accordance with Chapter 153. Only the minimum amount of fill necessary to support the buildings will be allowed. Detailed plans will be necessary to evaluate the effect of any filling. Landfills, rubble fills, dumps, and sanitary Fills are not permitted in the floodplain. The use of fill may not increase flooding or cause drainage problems on neighboring properties. A variance shall not be granted for any building or fill which will result in any increase in water surface elevations during the base flood unless the applicant acquires floodplain easements on areas outside the property limits that are affected by any water surface rise resulting from the development. Any land disturbance shall be graded and planted with adequate vegetative cover to prevent erosion immediately after disturbance.

Section 3800.5. Existing buildings, manufactured homes, or other structures in the FEMA floodplain. Existing buildings, manufactured homes, or other structures in the floodplain are nonconforming with respect to this chapter only and shall be substantially improved only if they can be brought into conformance with Chapter 38 without increasing the footprint. Minor additions (less than substantial improvement) shall be elevated at least two feet above the elevation of the base flood on pilings or columns. In the event of substantial damage or repetitive loss, the applicant shall submit an alternative analysis to demonstrate that the building cannot be moved out of the floodplain. If a building is replaced in the floodplain, it shall be limited to the footprint of the previous building. Use flood damage-resistant materials below the elevation of the lowest floor required in 153.007.

Section 3800.6. Construction requirements in the floodplain. All buildings shall be oriented so as to offer the least resistance to the flow of flood waters. Materials which are buoyant, flammable, explosive, hazardous to health, or which at times of flooding may be injurious to human, animal, or plant life, shall not be stored less than two feet above the elevation of the base flood. All buildings shall be firmly anchored in accordance with acceptable engineering practices to prevent flotation, collapse, and lateral movement during flooding. All air ducts, large pipes, and storage tanks located below two feet above the elevation of the base flood to resist flotation.

Section 3800.7. Flood protection setback requirement. Any new or replacement buildings shall be located no less than 100 feet from the top of bank of all FEMA mapped streams and 50 feet plus two feet for each percent of land slope measured perpendicular to the stream from the edge of the bank to 100 feet from edge of bank on all unmapped streams. Natural vegetation shall be maintained in the setback zone, and where natural vegetation does not exist along the banks, high priority shall be given to planting trees in the setback area to prevent erosion and enhance aquatic resources.

Additional Construction Requirements

Section 3800.8. Elevation requirement. All new or substantially improved buildings or repair or

reconstruction of repetitive loss shall have the lowest floor elevated two feet above the elevation of the base flood. Basements are not permitted. Less than substantial horizontal additions shall be elevated two feet above the elevation of the base flood. The elevation of the lowest floor shall be certified by a registered professional engineer or surveyor on the elevation certificate form and provided to the Code Official. Enclosures below two feet above the elevation of the base flood shall be constructed with water equalizing vents to meet the specifications of Section 3800.8.

Section 3800.9. Flood opening requirement. Buildings which have been elevated but have fully enclosed foundation areas below two feet above the elevation of the base flood shall be constructed with flood openings. This also includes attached garages and accessory buildings which are not fully elevated. These areas below flood level shall be used solely for parking of vehicles, storage, or access to the building. A non-conversion agreement shall be completed in these cases. The flood openings shall meet or exceed the following standards:

a. A minimum of two flood openings on different sides of each enclosed area; if a building has more than one enclosure below the lowest floor, each enclosure shall have flood openings on exterior walls;

b. The total net area of all flood openings shall be at least one square inch for every square foot of enclosed area (non-engineered flood openings), or the flood openings shall be engineered flood openings that are designed and certified by a licensed professional engineer to automatically allow entry and exit of floodwaters; the certification requirement may be satisfied by an individual certification or an Evaluation Report issued by the ICC Evaluation Service, Inc.;

c. The bottoms of all openings shall be no more than one foot above grade; and

d. Openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of flood waters to equalize hydrostatic forces on the walls.

e. If installed in doors, flood openings that meet requirements of paragraphs (a) through (d), are acceptable; however, doors without installed flood openings do not meet the requirements of this section.

Section 3800.10. Utilities.

a. Electric. All electric utilities to the building side of the meter are regulated by this Chapter 170, Construction Codes, and shall be elevated a minimum of three feet above the base flood elevation. Distribution panel boxes shall be a minimum of three feet above the lowest floor. All outlets and electric installations, such as heat pumps, air conditioners, water heaters, furnaces, generators, and distribution systems including duct work, shall be installed a minimum of 2 feet above the elevation of the base flood.

b. Plumbing. Toilets, sinks, showers, water heaters, pressure tanks, furnaces, and other permanent plumbing installations shall be installed two feet above the elevation of the base flood.

c. Gas. Meters, distribution lines, and gas appliances shall be installed two feet above the elevation of the base flood.

d. Fuel tanks. All propane tanks installed in the floodplain are required to be anchored to prevent flotation in accordance with the NFPA 58, 6.6.1.6 which states: "Where necessary to prevent flotation due to possible high flood waters around aboveground or mounded containers, or high water table for those underground and partially underground, containers shall be securely anchored." This chapter also requires that all tanks installed in floodplain areas be either elevated or adequately anchored to prevent flotation up to the FPE. All fuel oil storage tanks installed in the floodplain shall be either elevated or securely anchored to prevent flotation up to the FPE. Vent pipes shall extend to or above the FPE and fill caps below the FPE shall be screw type with a tight fitting gasket to prevent mixing of water with oil.

e. Water supply and waste disposal facilities. Distribution and disposal collection facilities shall be designed to minimize or eliminate the infiltration of flood waters into the systems or discharges from the systems into flood waters.

Section 3800.11. Sewers and wells. New individual sewage systems, whether public or private, shall be prohibited from being located within the floodplain. Replacement of individual sewage systems, whether public or private, may be located within the floodplain subject to state rules and regulations and any state or county regulations which prohibit location, or otherwise regulate

location in floodplain soils, including horizontal separation distance. New or replacement individual wells may be located within the floodplain, subject to state rules and regulations and the Plumbing Code.

Section 3800.12. Variances to additional construction requirements outlined in Sections 3800.8 through 3800.12. Any variance shall be the minimum necessary, considering the flood hazard, to afford relief. Variances shall only be issued upon:

a. A showing of good and sufficient cause;

b. A determination that failure to grant a variance would result in exceptional hardship, other than economic, to the applicant;

c. A determination that the granting of a variance will not result in increased flood heights, additional threats to the public safety, create nuisances, cause fraud, or conflict with local or state laws or ordinances;

d. A letter shall be sent by the Code Official to the applicant indicating the terms of the variance, identify any increased risk to property in granting the variance, and that increased premium rates for flood insurance coverage may apply.

e. The Code Official shall maintain a record of all building variances, with a justification for their issuance.

(2004 Code, § 97-4) (Ord. 52-D, passed 11-10-1998; Ord. 02-01, passed 1-3-2002; Ord. 02-19, passed 11-21-2002; Ord. 04-09, passed 4-1-2004; Ord. 04-25, passed 12-22-2004; Ord. 05-06, passed 6-21-2005; Ord. 07-06, passed 4-19- 2007; Ord. 2010-01, passed 2-25-2010; Ord. 2010-09, passed 6-10-2010; Ord. 2011-04, passed 5-17-2011; Ord. 2012-03, passed 5-10-2012; Ord. 2014-09, passed 10-30-2014; Ord. 2015-05, passed 6-25-2015; Ord. 2015-06, passed 9-3-2015; Ord. 2015-10, passed 12-8-2015; Ord. 2018-01, passed 3-1-2018)

§ 170.16 RESIDENTIAL CODE AMENDMENTS.

Specific changes to International Residential Code 2015-2018Edition shall be as follows:

- (1)Delete Chapter 1 in its entirety and substitute the language of Chapter 1 "Administration" from the International Building Code 2015 2018 as amended by this chapter and as may be hereafter amended from time to time.
- (2) Amend Section R301.6 to read:

"All roofs shall be designed for a minimum snow load of 40 PSF ground snow load and for unbalanced snow loads."

(2a) Amend Section 302.13 Exception 3-3.1 by deleting "80" and replacing it with "150".

(3) Delete International Residential Code Chapter 3, Section R307 in its entirety

(4) Amend Section 310.6 by adding the language "finished basements completed with permits" between the words "existing" and undergo".

(5) Amend Chapter 3 Means of Egress, R311 by adding:

"The means of egress path shall continue to the driveway or public way by the installation of a sidewalk, stepping stones or other similar approved method."

(6) Amend R311.7.8.2 Exception 1 by deleting the words "at the turn ".

(7) Amend R311.7.8.3 Grip Size, 1. Type I the maximum cross section of dimension by deleting 2-1/4 and replacing with 3-1/4 inches.

(8) Amend Chapter 3, Building Planning, to read:

"R313.2 An automatic residential fire sprinkler system shall be installed in new and rebuilt one and two family dwellings."

"R313.3 In existing dwellings where the accumulated refurbishment, renovation, or alteration affects the majority of either the structure's total square footage or existing finished space, then the entire structure and any additions shall be protected throughout with a sprinkler system installed in accordance with NFPA 13D." An exception may be granted by the Code Official provided emergency escape and rescue openings are installed throughout in accordance with the currently adopted code and provided the structure and emergency egress windows do not exceed one story above grade.

"R313.4 Additions, without renovation to the existing structure which are intended to include a majority of elements of a dwelling unit (i.e., bedrooms, bathrooms, kitchens, laundry rooms, HVAC

configuration, water/sewer configuration, and separation of areas) or exceeds 50% of the structure's total square footage, shall require a sprinkler system to be installed, within the addition only, in accordance with NFPA 13D." An exception may be granted by the Code Official provided emergency escape and rescue openings are installed throughout in accordance with the currently adopted code and provided the structure and emergency egress windows do not exceed one story above grade. Projects exceeding the 50% limit may be approved to be constructed without sprinklers upon an evaluation by the Code Official based on the proposed scope of work and level of hazard present.

(9) Amend section R324.7.1 by adding a sentence at the end to read "Emergency egresswindow roof access points and pathways shall not be obstructed by panels."

(10) Amend section R324.7.2.3 by adding a second, third, and fourth exception to read:

(2) "Where a single 3 foot wide access pathway is installed in the center third of the roofslength";

(3) "Where panels are installed in accordance with Appendix B"; or

(4) "Other layout approved by the jurisdiction".

(11) Amend section R324.7.2.5 by deleting the words "less than 3 feet below" and replacewith "within 18 inches of."

(12) Amend section R326 by deleting "International Swimming Pool and Spa Code" and replacing with:

"Carroll County Bureau of Permits and Inspections Residential Code Compliance Guidelines for Swimming Pools, Spas and Hot Tubs."

(13) Amend Chapter 3, by adding a new section R327 R328 to read:

— R327.1 R328 Private road construction.

A. All residential dwelling single use driveways shall be 10 feet wide with a minimum surface type of Crusher Run-6, six inches in depth, and shall not exceed a maximum driveway grade of 17%. New driveway aprons shall be installed in accordance with currently adopted County specifications. Existing driveway aprons being repaved, reinstalled or reconfigured should also be installed in accordance with currently adopted County specifications where technically feasible and without undue burden.

(14) Amend subsection R401.3 Drainage to add a sentence at the end to read:

"Surface drainage shall comply with Chapter 152 of the Code and shall be mitigated to limit discharge to an adjoining property or public way."

(15) Amend Chapter 4, Section R403.1.1 to add the following text:

"Notwithstanding any other provisions of this section, concrete footings shall not be less than eight inches in edge thickness and shall extend a minimum of four inches on each side of the supported wall. Concrete footings shall not be poured through water or on frozen soils. Concrete footings shall be protected from freezing during construction and for a period of not less than five days thereafter. Bottom of footing shall not be less than 30 inches below grade and shall rest on virgin or compacted soil."

(16) Amend Chapter 4, Section R404.1.7 by adding the following language after the text: "Excavated areas to receive backfill shall be clear of all- debris, building materials, tree stumps, etc. Backfilled areas to receive concrete porches, steps, patios, walks, etc., shall be adequately compacted to minimize potential settlement."

(17) Amend Section R405.1, Concrete or masonry foundations, to add a sentence at the end to read:

"Drains shall be provided on the exterior of all concrete and masonry foundations in accordance with the adopted Plumbing Code."

(18) Add new Subsection 405.1.2 to read:

405.1.2 Areaways drains. All open subsurface space adjacent to a building serving as an entrance to the basement or cellar of a building must be provided with a drain or drains. Such areaway drains shall be a minimum of two inches in diameter of either cast iron, PVC (polyvinyl chloride), or ABS (Acroynlonitrilebutiadene-styrene) 40-weight plastic pipe glued joints for areaway not to exceed 100 square feet in area, and shall be discharged as provided for in this regulation pertaining to subsoil drains not serving continuous flowing springs or groundwater. Areaway drains

shall be piped directly to a sump pump pit. When subsoil drains drain to open grade, the areaway drain may be connected to a fitting or the subsoil drain outside the areaway. Areaway drains for areas exceeding 100 square feet shall be sized according to the Plumbing Code.

(19) Delete Section R406.1 in its entirety.

(20) Amend Section R406.2 by adding text to the first sentence to read:

"All dwelling units that have a foundation shall be waterproofed in accordance with R406.2 or a system approved by the Code Official."

(21) Amend section R507 Exterior Decks by deleting the entire section and replacing with the Carroll County Bureau of Permits and Inspections Residential Code Compliance Guidelines for Decks.

(21a) Amend Section R602.10 Wall Bracing by adding an exception to read: "Additions extending less than 12 feet perpendicular from the main house exterior braced wall line".
(22) Amend Chapter 25, Section P2501.1 Scope, to read:

(23) All electrical work shall be subject to the NFPA 70 National Electrical Code as amended hereby notwithstanding anything to the contrary herein.

(24) Delete International Residential Code Chapters 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41 in their entirety and replace with the adopted plumbing, gas, and electrical codes.

(25) Adopt International Residential Code 2015 Appendices F, J, K, and M.

(26) Amend AF103.3, Radon, by adding tills sentence at the end of the exception: "Additionson crawl spaces with an additional 50% of vents installed than required."

(27) Amend appendix F of the International Residential Code Section AF103.9 by adding the following sentence: "The pipe shall be labeled with a continuous orange paint line throughout the structure."

(2004 Code, § 97-5) (Ord. 52-D, passed 11-10-1998; Ord. 02-01, passed 1-3-2002; Ord. 02-19, passed 11-21-2002; Ord. 04-25, passed 12-22-2004; Ord. 07-06, passed 4-19-2007; Ord. 2010-01, passed 2-25-2010; Ord. 2012-03, passed 5-10-2012; Ord. 2015-05, passed 6-25-2015; Ord. 2015-10, passed 12-8-2015; Ord. 2017-06, passed 9-7-2017)

§ 170.17 MECHANICAL CODE AMENDMENTS.

Specific changes to the International Mechanical Code 2015 2018 shall be as follows:

(1) Amend Chapter 1, Section 106.5 to read:

"Fees and all mechanical work and inspections conducted hereunder or required hereby shall be in accordance with the schedule required by the currently adopted International Building Code, § 108.2 as amended by § 170.15(14) of the County Code."

- (2) Delete Sections 106.5.1, 106.5.2, and 106.5.3.
- (3) Delete Chapter 1, Section 108, Violations.
- (4) Delete Chapter 1, Section 109, Means of Appeals.

(2004 Code, § 97-6) (Ord. 52-D, passed 11-10-1998; Ord. 02-01, passed 1-3-2002; Ord. 04-25, passed 12-22-2004; Ord. 05-06, passed 6-21-2005; Ord. 07-06, passed 4-19-2007; Ord. 2010-01, passed 2-25-2010; Ord. 2011-04, passed 5-17-2011; Ord. 2012-03, passed 5-10-2012; Ord. 2015-05, passed 6-25-2015)

§ 170.18 ELECTRICAL CODE AMENDMENTS.

The National Electrical Code 2017 is amended as follows:

(1) Amend National Electrical Code 2017, to add new Chapter 95 to read:

95-1 LICENSING REQUIREMENTS

No person may install, repair, maintain or erect any kind of electrical wiring, conduits, or wiring to or repair of electrical elements or circuits of machinery and fixed or stationery appliances, motors, fixtures, signs, electrically operated heating equipment, elevators, or any other electrically operated apparatus or device in, on, or about any premises in the county without having obtained a license and permit as required by the county or the state, or having otherwise complied with these

regulations except:

A. Utility company regulated by the Public Service Commission of Maryland when working on its own property or on the line side of a meter or the outside of buildings when using donut type meters.

B. Radio and television transmitting stations licensed and commissioned by the Federal Communications Commission regulations.

95-1.1 EMPLOYMENT OF LICENSED ELECTRICIANS

Unless otherwise permitted by this chapter, no person, firm or corporation engaged in the manufacture, assembly or repair of electrical equipment manufactured by such person, firm or corporation or manufactured for such person, firm or corporation by a parent or subsidiary shall be required to hold or to employ the holder of any of the licenses provided for by these requirements solely by reason of such manufacture, assembly or repair. However, all electrical installations for machinery and equipment within such factories shall be performed by either a holder of a master electrician or limited license or under their direct supervision.

95-2 CLASSES OF LICENSES

The following classes of licenses are hereby established:

A. Master electrician. A master electrician license shall authorize the licensee to perform or have performed under the licensee's direction and supervision all types of electrical work in accordance with the applicable code as adopted by the County Commissioners. Such license may only be issued to an individual and may not be issued to a firm or corporation. A four-year accredited apprenticeship program or degree from a college may be substituted for six months of the required seven years of field experience required to obtain a master electrician license.

B. Limited electrician. Limited electrician license shall authorize the licensee employed by a firm or corporation to perform or have performed under the licensee's direction or an alternate representative's supervision any electrical work solely on the premises occupied by the employer of such licensee. Such license may only be issued to an individual and may not be issued to a firm or corporation. In the event the licensee leaves the employ of the employer, the license shall become void. Firms or corporations operating under limited licenses are required to have an annual inspection of all work performed by their licensee. A record of such work should be maintained by the licensee.

C. Restricted electrician. A restricted electrician license shall authorize the licensee to install, maintain and repair the particular type or types of electrical equipment specified in the license, including:

- a. Electrically operated air-conditioning and refrigeration and heating equipment.
- b. Electrically operated elevators and dumbwaiters.
- c. Electrical display signs.
- d. Oil burners.

Restricted electrician license shall authorize the licensee to maintain, repair and install electrical household fixed and stationary appliances, and permit the licensee to install electrical wiring from the existing distribution panels to the equipment being installed. This license does not permit installation of service or change of distribution of service. A restricted electrician license may only be issued to an individual and may not be issued to any firm or corporation.

D. Homeowner's License. A homeowner license shall authorize an individual homeowner to submit a permit application to perform minor electrical wiring (excluding service and solar connections) in his or her own home (excluding rental units), provided the individual homeowner applies for the required permit and signs an affidavit that acknowledges (1) the individual homeowner owns and resides in the property to be subject to minor electrical wiring by the individual homeowner; (2) that the property is not used for any commercial or public purpose; and (3) if the work is deemed to be substantially non-compliant, the County reserves the right to require a licensed electrical contractor to complete the installation.

Add: Definition of "Minor" in Homeowners License:

Not more than twenty (20) devices (lights, receptacles, switches, and appliance's) and a maximum of 20 amps for circuit's of 120 volts or a maximum of 30 amps for circuit's of 240 volts.

95-3 EXAMINATIONS

A. General. To be eligible for an electrical license any applicant for a master electrician, limited electrician or restricted electrician shall be required to satisfactorily pass an examination, except as hereinafter provided. Such examination shall be standard for each category and qualification for passage shall be determined by three qualified persons designated by the

county. Examination and grading procedures shall be established, publicized and made available to interested parties prior to each examination date. Examination results shall be made available at the earliest possible date following the date of the examination but not later than 45 days thereafter. Notice of the decision to grant or refuse a license shall be sent by certified mail to the person for whom the application was filed.

95-4 REQUISITE QUALIFICATIONS FOR TAKING LICENSING EXAMINATIONS

In order to assure that those persons desiring to take the examinations for electrical licenses are qualified through experience in the electrical business, the following eligibility requirements are established:

A. Master electrician. To qualify for the examination for master electrician license, the applicant must satisfactorily establish that he or she has been actively in charge of electrical installation work under the supervision of a master electrician for a period of at least seven years prior to the application for license. Further, the principal source of the applicant's livelihood must have been from the above employment. A four-year accredited apprenticeship school or degree from a college may be substituted for six months of the required seven years of field experience required to obtain a master electrician license.

B. Limited electrician. To qualify for the examination for limited electrician license, the applicant must be an employee of a firm or corporation for whom the work is to be done and must have worked under the direction or supervision of a qualified master electrician, or limited electrician for at least two years.

C. Restricted electrician. To qualify for the examination for the restricted electrician, the applicant shall satisfactorily establish that he or she has been actively in charge of electrical installation work under the supervision of a master electrician or restricted electrician for the period of at least two years with respect to tire particular branch or branches to be covered by the license. Further, the applicant must have received his or her principal source of livelihood from such type or types of work.

95-5 INACTIVE LICENSE

The applicant shall comply with all requirements for the type of license for which he or she is applying as listed in Subsection A, B, or C in Section 95-4. The applicant shall not be required to secure general liability insurance during that time the license is inactive.

95-6 REGULATIONS FOR THE ISSUANCE OF LICENSES

A. Application. Each applicant must submit an application on a form supplied by the Code Official. In the event the person is self-employed or employed in an unlicensed jurisdiction, the applicant must show proof of earning a livelihood as an electrician for the requisite number of years of the respective license. Proof may consist of inspection certificates, letters from inspectors, documents and receipts from electrical supply houses, etc. The application shall be accompanied by one or more letters from employers certifying to the character and qualifications of the applicant and the fitness of the applicant for the type of work for which the license is applied. The application for a limited licensee shall be signed by the applicant and by an executive officer of the employee and shall set forth the name and qualifications of the employee or employees whose employment and qualifications entitles the applicant to receive the type of license applied for and under whose supervision all electrical work to be done by the applicant will be performed. The applicant shall be required to certify that he or she will maintain general liability or property damage insurance as required by § 6-604(b) of the Business Occupations and Professions Article of the Annotated Code of Maryland as amended.

B. Examination dates. Examinations shall be given during the months of April and October of each year, and special examinations may be provided at such other dates of which due notice is given.

C. Registration fee. A registration fee in accordance with Chapter 1, Sec. 108.2, shall be submitted prior to examination date payable to the County Commissioners. Registration fee will be forfeited if two consecutive examination dates are missed.

D. Renewal. Continuing Education as required by the State Electrical Board regulation for a Statewide License.

95-7 APPEALS FROM REFUSAL OF LICENSE

Any person may appeal a decision of the Code Official in the refusal of a license; such appeal shall be filed in writing to the County Commissioners, within 30 days of the date of refusal stating the grounds thereof. The appeal will be considered by a Board of Arbitration consisting of one person selected by the person appealing, one person selected by the County Commissioners knowledgeable in the electrical business, and one person from a list of qualified arbitrators recommended by the Carroll County Electrical Board. The appeal will be studied and the arbitrators may make such additional investigation as deemed necessary, and thereafter a majority vote will determine whether to grant or refuse the request for an electrical license. The decision of the arbitrators shall be final. A fee of \$75.00 shall be filed with each appeal which shall be nonrefundable.

95-8 FEES

A. Fees shall be determined in accordance with Chapter 1, § 108.2.

B. Inactive licenses. Any of the licensees desiring to be placed on the inactive classification specified in Section 95-5 shall be required to pay 50% the current license fees in order to retain such classification.

C. Licenses must be renewed every two years prior to July 1, and are effective until June 30 of the second year thereafter.

95-9 EXPIRATION, SUSPENSION, OR REVOCATION OF LICENSES

The Code Official may suspend or revoke any licensee's privileges for good cause after a public hearing, provided that at least 15 day notice is given to the licensee by first class mail. The Code Official shall refer the matter to the Electrical or Plumbing Board for the applicable Board to conduct the hearing and provide a recommendation for the proper resolution of the matter. The applicable Board may recommend a suspension or revocation of the license. Such suspension or revocation may be for the following causes:

A. Permitting any unlicensed person, firm or corporation to perform electrical/plumbing work under the authority of a license.

B. Performing or permitting the performance of defective or dangerous work.

C. Performing any work for which an application for electrical/plumbing work has not been secured from the county.

D. Violations of any of the provisions of this chapter.

In lieu of suspension or revocation the Code Official may fine the license holder up to \$100 for each separate violation of items A-D.

Any county electrical license which has been allowed to expire for a period of one year or more shall not be reissued until an examination has been successfully taken and approval given for the reissuance of the said license, unless the applicant holds an active statewide master electrical license.

95-10 ELECTRICAL WORK COVERED BY LICENSE

Any holder of a license issued by the county shall be subject to strict compliance with standards and regulations and any amendments or additions thereto of the Carroll County Construction Codes which pertain to electrical wiring and equipment. Where any conflict shall exist, the latest edition of the National Electrical Code shall prevail. The Carroll County Bureau of Permits and Inspections is the agency designated to determine such compliance with the standards prescribed within the County Code.

95-11 ELECTRICAL BOARD

The County Commissioners shall, in accordance with § 3-701 of the Code of Public Local Laws, appoint an Electrical Board, and shall in accordance with this chapter create such Board, consisting of three persons knowledgeable and experienced in the electrical business and two persons unrelated to any person in the electrical business. Such persons shall serve for a term of five years,

except that initially the first member so selected shall serve for one year, the second two years, the third three years, the fourth four years, and the fifth five years.

The Board shall continue to serve at the pleasure of the County Commissioners and shall be designated the following duties and powers:

A. To recommend changes in the chapter setting up licensing regulations.

B. To prepare and administer electrical license examinations.

C. To make recommendations for the changes in codes pertaining to electrical work in Carroll County.

D. To provide up-to-date lists of persons from which arbitrators, when needed, can be so selected.

E. To aid in the conducting of any hearings as determined necessary by the Board of County Commissioners on electrical regulations.

F. To recommend enforcement procedures as may be desirable in the Bureau of Permits and Inspections from time to time as it pertains to the electrical inspection program.

G. To advise the County Commissioners on other functions considered helpful in the control and conduct of electrical business in Carroll County from time to time.

(2) Amend the NFPA 70 National Electrical Code to add Article 210-5(C)(2) to read:

Identification for branch circuits

a. Circuits of 250 volts or less shall be colors black, red, blue for ungrounded conductors and white for grounded conductor.

b. Circuits of more than 250 volts shall be colors brown, orange and yellow for ungrounded conductors and gray for grounded conductor.

(2.1) Amend NFPA 70 National Electrical Code Chapter 210.8(A)(5) exception to (5) to read: "A receptacle supplying only a permanently installed fire alarm or burglar alarm system and a dedicated outlet for sump pumps and ejector pumps shall not be required to have ground fault circuit interrupter protection."

(3) Amend NFPA 70 National Electrical Code Chapter 210.52(B)(3) to read:

"Receptacles installed in the kitchen to serve counter top surfaces shall be supplied by not less than two small appliance branch circuits, which shall alternate between outlets (either or both of which shall also be permitted to supply receptacle outlets to the kitchen and other rooms specified in (b)(1) above). Additional small appliance branch circuits shall be permitted to supply receptacle outlets in the kitchen and the rooms specified in (b)(1) above."

(3.1) Amend Article 250.52(A)(3) Concrete Encased Electrode to read:

"An electrode encased by at least two inches (50.8 mm) of concrete, located within and near the bottom of a concrete foundation or footing that is in direct contact with the earth, consisting of at least 20 feet (6.1 m) of one or more bare or zinc galvanized or other electrically conductive coated steel reinforcing bars or rods of not less than ½ inch (12.7 mm) diameter or consisting of at least 20 feet (6.1 m) of bare copper conductor not smaller than No. 4, shall be mandatory in all new buildings in Carroll County required when continuous concrete footers are installed. Reinforcing

bars shall be permitted to be bonded together by the usual steel tie wires or other effective means."
(4) Amend NFPA 70 National Electrical Code Section 250.62 by deleting any and all references to aluminum or copper clad aluminum.

(5) Amend NFPA 70 National Electrical Code Section 310.106(B) to read:

"Conductors in this article shall be of aluminum, copper clad aluminum, or copper unless otherwise specified. The use of aluminum conductors size AWG 12, 10, 8 and 6 will not be permitted in Carroll County."

(6) Amend NFPA 70 National Electrical Code Article 404 by deleting Section 404.2(C)(2).

(7) Amend NFPA 70 National Electrical Code Section 410.36(B) by adding: Tie wires shall be accepted for support of light fixtures."

(8) Amend NFPA 70 National Electrical Code Chapter 680.26(B)(2)(b) Alternate Means to read:

"In unpaved areas where structural reinforcing steel is not available or is encapsulated in a nonconductive compound, a copper conductor shall be utilized where the following requirements are met."

(2004 Code, § 97-7) (Ord. 52-D, passed 11-10-1998; Ord. 02-01, passed 1-3-2002; Ord. 04-25, passed 12-22-2004; Ord. 07-06, passed 4-17-2007; Ord. 2010-01, passed 2-25-2010; Ord. 2012-03, passed 5-10-2012; Ord. 2015-05, passed 6-25-2015; Ord. 2017-06, passed 9-7-2017; Ord. 2018-01, passed 3-1-2018)

§ 170.19 PLUMBING CODE AMENDMENTS.

(A) Delete the Administration Chapter from the National Standard Plumbing Code, and replacewith the following:

PURPOSE AND SCOPE OF PLUMBING REGULATIONS

SCOPE. The provisions of the Plumbing Code (hereinafter Code), shall apply to and govern plumbing as defined herein, including the practice, materials and fixtures used in the installation, maintenance, extension and alteration of all piping fixtures, appliances and appurtenances in connection with any of the following: sanitary drainage or storm water facilities, venting systems and the public or private water supply systems, within or adjacent to any building or other structure, or conveyance; also, the practice and materials used in the installation, maintenance, extension, or alteration of the storm water or sanitary sewerage system of any premises to its connection with any public disposal or other terminal.

PURPOSE. The purpose of this Code is to provide practical plumbing regulations for the safeguarding of persons and property from hazards arising from unsanitary and unhealthy plumbing conditions.

LICENSES. No individual shall provide plumbing services or assist in providing plumbing services in Carroll County unless licensed to do so as provided for in the Business Occupations and Professions Article, Annotated Code of Maryland, §§ 12-101 et seq. as amended, and § 3-108(b) of the Code of Public Local Laws of Carroll County.

LICENSES—HOMEOWNER. A homeowner license shall authorize an individual homeowner to submit a permit application to install plumbing (excluding water service and sewer main installations or alterations that extend more than 3 feet from the exterior wall of buildings) in his or her own home (excluding rental units), provided the individual homeowner applies for the required permit and signs an affidavit that acknowledges (1) the individual homeowner owns and resides in the property to be subject to the plumbing work by the individual homeowner; (2) that the property is not used for any commercial or public purpose; and (3) if the work is deemed to be substantially non-compliant the County reserves the right to require a licensed master plumbing contractor to complete the installation.

RULES, REGULATIONS AND INTERPRETATION. The County Commissioners shall from time to time, make such rules and regulations, and such interpretations as are required to implement the enforcement and operation of this Code.

APPLICATION FOR SERVICE CONNECTIONS. Before any plumbing, drainage, or gas fitting is undertaken, the plumber shall make application at the Bureau of Utilities or jurisdiction of appropriate authority for this installation or extension of the service connections, and to the gas company for the necessary gas service connection.

CHARGE FOR SERVICE CONNECTION. The County may require for a charge for service connections.

COMMITTEE TO ASSIST CODE OFFICIAL. The County Commissioners may appoint a Plumbing Advisory Board to aid in making amendments to these regulations or interpretations thereof. The Board shall consist of four licensed plumbers, one utility contractor, one builder, one person representing the public, a plumbing inspector employed by the county, and an employee of the Carroll County Health Department. Any county or state employee shall be non-voting members.

EMERGENCY WORK. When work of an emergency nature must be performed to rectify a possible health or hazardous condition, the plumber may undertake such work prior to the issuance of a permit, but it will be the responsibility of the plumber to obtain a permit for the work within a reasonable time thereafter.

EXPIRATION, SUSPENSION, OR REVOCATION OF LICENSES (see § 170.18(1)(95-9) of this chapter).

INDIVIDUAL SERVICES. These regulations apply to the introduction, maintenance, and/or extension of the public water supply or sewage service or any appurtenance thereof, in or upon any

building, lot, premises, or establishment, provided, however, that it shall not be unlawful where a public water supply is not reasonably available, for any person or persons to install or cause to be installed or operate a water supply for sanitary or other purposes; but no such installations shall be connected to any public water supply unless it shall first be disconnected from its original source of supply and the connection from its original source of supply and the connection shall be made to any private water main or pipe that in turn is connected to any public owned water main or pipe.

INSPECTION. The County Commissioners, as of the effective date of these regulations, may designate the Carroll County Health Department as the Plumbing Inspector for individual sewage disposal systems as well as other phases or portions of these regulations. Such designation may change as the County Commissioners so determines in the best interests of Carroll County. The Code Official may waive the inspection of the plumbing system of any building if a qualified engineer certifies that all work was done in accordance with this Code. In such case, however, the engineer shall have personally supervised the plumbing installations.

Advance Notice. It shall be the responsibility of the plumber to give 24 hours advance notice to the Code Official when the work authorized by the permit is ready for inspection.

Plumber's Responsibility. It shall be the duty of the plumber to insure that the work performed will pass inspection and any required tests before seeking the inspection.

Retesting. If the work performed fails inspection or a test, the plumber shall be required to make necessary corrections to the work and to resubmit the work for inspection and testing. **Testing.** Tests shall be conducted in the presence of tire Code Official or his or her duly appointed representative.

INSPECTION OF EXISTING SYSTEMS WHEN UNSANITARY CONDITIONS OR AN ILLEGAL DISCHARGE IS PRESENT. The plumbing system of any building in Carroll County may be inspected by the Code Official, or his or her designee, at any reasonable time and upon notification to the owner. If any defects are found therein, the Code Official shall have the authority to order the repair or reconstruction of such plumbing system in accordance with the provisions of this Code.

PERMIT FEES. The County Commissioners shall adopt a schedule of fees for the issuance of permits for plumbing work.

PERMIT REQUIRED FOR TAPPING SEWERS. A permit is required to tap into sewers or drains in public or private streets, alleys, or private ways, but such permit will not be issued except in emergency cases. When issued, the recipient assumes all risks, damage, injury, or loss resulting therefrom. All work outside of private property or reservations (streets, alleys, avenues, or other thoroughfares) when permitted, shall be installed under the supervision and to the satisfaction of the local jurisdiction.

PIPING THROUGH ADJACENT PROPERTY. Plumbing, piping, or sewer and water piping, shall not be connected up or laid through property other than the property to be served. Plumbing or water supply connections which cannot be made across some border of the property served directly into some adjacent lane, road, alley, street, or thoroughfare, or oilier land under public jurisdiction, may with the permission of the Code Official be carried through a right-of-way or easement across adjoining property provided that (1) all privileges of such right-of-way or easement are obtained by the property owner, desiring service, without any cost, liability, or damage to Carroll County; (2) that such easement or right-of-way shall meet all requirements and approval of the Code Official; and (3) such easement or right-of-way shall be granted and conveyed by formal deed recorded in the Land Records of Carroll County. This regulation, however, shall not prevent a dwelling and a stable or garage upon the same lot being supplied by the same service pipe.

PLANS AND SPECIFICATIONS. The designer of the plans and specifications shall be a master plumber licensed in the State of Maryland, a registered professional engineer licensed to do business in the State of Maryland, or any other person as may be approved by the Code Official. The Code Official may provide for an affidavit of an engineer or architect, certifying that he or she has supervised formulation of the plans and specifications and that such, to the best of his or her knowledge, conformed to all of the provisions of the Code. In such case the Code Official may waive the examination of such plans and specifications.

PROTECTION OF WATER SUPPLY. The County Commissioners shall make such rules and

regulations in furtherance of the purposes and not inconsistent with the specific provisions of this Code, for the connections of water supply to, of the discharges of water or waste from water operated or water using equipment, fixtures or devices, as may be deemed necessary to properly protect the public water supply system.

REGISTRATION AND USE OF LICENSE. Prior to doing business in Carroll County, every licensed plumber and utility contractor must register with the Code Official by his or her name, address of business, and name under which such business is conducted, and shall give immediate notice to Code Official of any change in either. A plumber and utility contractor shall not allow his or her name to be used by another person, firm, or corporation for the purpose of obtaining permits, or for doing plumbing business or plumbing work under his or her license. When an application is made to the Carroll County Health Department for septic systems or to the Bureau of Permits and Inspections for sewer and water connections, the applicant must be a licensed plumber or an approved utility contractor. A utility contractor may be approved (1) by satisfactorily passing an examination administered by the Code Official or his or her designee or (2) by showing proof of good standing under a valid license issued by another jurisdiction in Maryland or the Washington Suburban Sanitary Commission. A utility contractor shall sign an affidavit certifying that he or she has adequate liability insurance to cover any business conducted in Carroll County.

REMOVAL OF ORIGINAL PLUMBER. In any case where the plumber who originally signed the permit application and to whom the permit was issued is removed by the owner, the owner must notify the Bureau of Permits and Inspections in writing of the change. If work under the permit has been started, the first plumber will be notified by the Bureau of Permits and Inspections of the proposed change. No transfer of the permit will be made in less than 3 days provided that a transfer may be made in a shorter time pursuant to a written agreement between the first and second plumber. If work under the permit has not been started, the first plumber will be notified by the Bureau of Permits and Inspections of the change and tire transfer shall be made immediately. The second plumber must file an application for the permit required and pay a fee as set by the County Commissioners. The new plumber will assume responsibility for the job including the work performed by the original plumber.

REVOCATION OF PERMITS. The Code Official may, at any time, revoke, for good cause, any permit previously issued. The owner of a property may, at any time, in writing, request the revocation of a permit previously issued to a plumber for work to be performed on the owner's property which may be revoked at the discretion of the Code Official. (See paragraph entitled "Removal of Original Plumber" for process.).

RIGHT OF ENTRY. The Code Official shall, after proper identification, have the right to enter any premises in Carroll County for the purpose of inspecting any plumbing system and at such times as may be reasonably necessary to protect the public health.

SEWER NOT ACCESSIBLE. When no public sewer or drain is accessible and the applicant proposes to tap a private sewer or drain, the written permission of the owner of the private sewer or drain shall accompany the application and shall be retained for the office files.

SPECIAL PERMIT FOR "INSIDE PLUMBING ONLY." A special permit for "Inside Plumbing Only" may be issued to any plumber upon proper application for installation of plumbing inside a building and to a point five feet outside the foundation wall for properties abutting upon a street in which a sanitary sewer is being constructed but not available, such as an extension under a PWA.

TRANSFER OF PERMITS. When the plumber wishes to be removed as die plumber of record, the plumber must notify the Code Official in writing, requesting that the plumber be released from responsibility for the part of the work that has not been completed. The plumber will be responsible for the work that has been completed. The Plumbing Inspector's record will indicate the extent of such completed work and such responsibility.

WATER SUPPLY SYSTEMS. When the water supply system is intended to serve more than one building owned by or intended for sale to different individuals or groups of individuals, then the plans for such water supply system or systems shall be submitted to the County Commissioners for approval and the entire work must conform in its entirety with these regulations. Application for a permit shall be made in writing to the County Commissioners prior to the commencement of any work on such system or systems.

WHEN PERMIT IS REQUIRED. It shall be unlawful to construct, enlarge, alter or demolish a structure; or change the occupancy of a building or structure requiring greater strength, exit or sanitary provisions; or to change to another use; or to install or alter any equipment for which provision is made or the installation of which is regulated by this Code, without first obtaining the required permit, except that repairs which do not involve any violation of this Code, shall be exempted from this provision.

WORK DONE BY INSTALLER OF WATER CONDITIONERS, APPLIANCES,

APPURTENANCES, AND TREATMENT DEVICES. Any firm, person, or corporation licensed by the Maryland Board of Well Drillers for the installation of water conditioners, appliances, appurtenances, and treatment devices or any other person, firm, or corporation that installs said equipment shall file an application for permit with the Bureau of Permits and Inspections prior to beginning installation and shall have the conditioners, appliances, appurtenances and treatment devices inspected as provided in 2800.11, provided that, whenever said work involves connecting to a sanitary sewer line, the provision of 2800.2 and 2800.3 shall apply. Fees shall be regulated by the County Commissioners. Penalties shall be the same as set forth in the Carroll County Constructions Codes.

(B) Specific changes to the National Standard Plumbing Code 2012 shall be as follows:

(2) Delete Table 2902.1 of the International Building Code (see (19) of this section).

(3) Amend Chapter 1, Definitions, by adding: Hot Water - water at a temperature greater than or equal to 110 degrees (43 degrees Celsius).

(4) Amend Section 2.16.A-1 by inserting 36 inches in blank.

(5) Amend Section 2.16.A-2 by inserting 36 inches in first blank and 18 inches in second blank.

(6) Amend Section 2.16A-5 by adding at the end of sentence in number five: "Water lines may be installed in outside walls when the walls are 2x6 and water pipe held to heated side of wall."

(7) Amend Section 2.19.1 to read: Shall comply with the Bureau of Utilities guidelines.

(8) Amend Section 3.3.11 by deleting the reference to 16.6.5.

(9) Amend Table 3.4, Materials for Potable Water by deleting copper water tube Type M foruse on water service piping".

(10) Amend Sections 3.5.4(a) and 3.6.3(a) by deleting "SDR26" and replacing with "Schedule-40".

(11) Amend Sections 3.5.4(b) and 3.6.3(b) by deleting "PS-100" and replacing with "Schedule 40".

(12) Amend Section 5.4.6(a) by deleting "Either inside or outside the building wall" and adding a second sentence to read "This cleanout shall be located on the outside of the building within five feet of the exterior wall and extend above finished grade."

(13) Amend Section 5.4.6(b) by adding a new sentence "A cast iron cleanout is required, all cleanout installed in a vehicular travel surface shall have a cast iron cleanout and lamp hole cover."
(14) Amend 6.1.4.1 by adding a second sentence to read "All interceptors shall have an

engineered certified drawing with a current engineer's stamp submitted to the Authority Having-Jurisdiction." Design shall comply with Chapter 6.

(15) Amend 6.2.1 by adding "(g). All grease lines shall be painted black on the top third of the pipe."

(16) Amend Section 6.2.5 by deleting A and B and replacing with "No food waste grinder shall discharge into a grease interceptor."

(17) Amend Section 6.3.1 by adding a new subsection "(g)" to read:

- "With the approval of the Authority Having Jurisdiction, private garages housing no more than four motor vehicles are not required to have garage drains or oil interceptor."

(18) Add new sentence to 7.5.4, "Waterless Urinals shall be approved by the Authority Having Jurisdiction and the Carroll County Health Department."

(19) Amend Section 7.9.4 by adding at the end of the sentence "and by the Authority Having-Jurisdiction."

(20) Delete Table 7.21.1, Minimum Number of Required Plumbing Fixtures and replace with

Revised Table 7.21.1, set forth in Appendix A of Chapter 170, Construction Codes.

(21) Amend Section 10.6.4(b) by deleting "Where the water service pipe is plastic".

(22) Amend Figure 10.6.4 by removing "plastic" from Note #3.

(23) Amend Section 10.6.5 by deleting 3/4 inch and replace with 1 inch.

(24) Amend Section 10.8.1. and 10.14.4 by removing the word "insufficient" and replacing itwith "35 PSI or less".

(25) Amend Section 10.12.2 by adding at the end of the sentence: "A pressure gauge with a working pressure range of 25 PSI over the street pressure shall be required. This gauge shall be located after the building service valve and before any other valve(s) or device(s)."

(26) Amend Figure 10.12.8(b) by removing Notes 1, 2, and 3 and replacing with "The optional bypass arrangement shown shall not be allowed unless approved by the Authority Having Jurisdiction." If approved, the bypass valve shall be locked closed in a manner approved by the Authority Having Jurisdiction.

(27) Amend 10.15.2(a) Replace 100 with "80 pipe feet" and 25 with "10 pipe feet".

(28) Amend Figure 10.15.2. Replace 100 with "80 pipe feet" and 25 with "10 pipe feet".

(29) Amend Section 10.15.9.3(a) by deleting the remainder of the sentence after floor drain.
(30) Amend Section 10.15.9.3(b) delete "the same diameter or greater than the P&T

discharge pipe" and replace with "is sized in accordance with table 10.16.6".

(31) Amend 10.15.11 by deleting "sized" in the first sentence and adding a sentence at the end to read "The device shall be sized in accordance with table B.5.2 in Appendix B".

(32) Amend Section 11.7.2 by adding: "(e) the maximum size of an exterior sewage ejector tank is 500 gallons."

(33) Amend section 11.7.10 by deleting "for other than single dwelling units".

(34) Amend the definition of a Private Sewage Disposal System in 1.2 by deleting in its entirety and replacing with "A system for disposal of sewage by means of a septic tank or other approved treatment unit, designed for use apart from a public sewer to serve a single establishment or multiple buildings on a single lot."

(35) Amend Section 16.1.5 by deleting the words "sedimentation" and "or into a sand filter" from the first sentence and by deleting the words "or sand filtration" from the second sentence.

(36) Amend Section 16.1.6 by deleting the first sentence and replacing with "The installing contractor, owner, or any subcontractors will be responsible for compliance with these regulations."

(37) Amend Section 16.1.7 by deleting the first sentence and replacing with "Abandoned disposal systems shall be disconnected from the buildings and left in such a way that they cannot be used as sewage disposal systems nor become injurious to health or safety as determined by the Authority Having Jurisdiction."

(38) Amend Section 16.1.9 by adding the following language:

"When there is insufficient lot area or improper soil conditions for adequate sewage disposal for the building or land use proposed, the Authority Having Jurisdiction so finds, no building permitshall be issued and no private sewage disposal shall be permitted. Where space or soil conditions are critical, no building permit shall be issued until engineering data and test reports satisfactory tothe Authority Having Jurisdiction have been submitted and approved for a private sewage disposalsystem complying with the provisions of the Code has first been installed."

(39) Amend Section 16.2 to be captioned "Permits Required" and by adding language to read: **16.2.2** Where sewage disposal systems are not available and construction is contemplated for a building of human occupancy or use or addition to or alteration of any existing sewage disposalsystem, prior to beginning any construction, application shall be made to the Authority Having-Jurisdiction for a written permit to make the desired installation(s). An application for a permit shallbe in a form required by the Authority Having Jurisdiction and shall include complete plan.

16.2.3 When, upon review of the application, the Authority Having Jurisdiction is satisfied that the proposed design is adequate, a written permit to proceed with construction shall be issued.

16.2.4 When, upon review of the application, tire Authority Having Jurisdiction is convinced that the proposed design is inadequate, or soil and geological conditions are such as to preclude safe and proper operation of the desired installation(s), a permit to proceed with construction shall be denied.

16.2.5 No installation shall be made without a written permit from the Authority Having-Jurisdiction.

16.2.6 The Authority Having Jurisdiction shall make inspections during construction to determine compliance with the Code. No part of any installation shall be covered until inspected and given final written approval by the Authority Having Jurisdiction. Any part of an installation, which has been covered prior to final approval, shall be uncovered upon order of the Authority Having Jurisdiction. Final written approval shall not be given until all pertinent data required has been submitted."

(40) Amend Section 16.3.1 by adding "or other approved treatment unit" after "septic tank" in Comment No. 1.

(41) Amend Section 16.3.3 by adding, "Backwash from water treatment devices shall be disposed of in an approved manner separate from other sewage flows. Subsurface disposal requires a permit from the Carroll County Health Department".

(42) Amend Section 16.3.4 by revising text to read, "The system shall consist of a septic tank or other approved treatment unit discharging into a subsurface disposal field, sand mound system, or seepage pits or into any combination of these, if found adequate as such and approved by the Authority Having Jurisdiction."

(43) Amend Section 16.3.6 to be captioned "Alternate Design" and by adding language to read:

(44) Amend Section 16.3.7 by deleting the first sentence and the reference to Table 16.3.7 and replacing with "Design Criteria for sewage flow shall be according to the current requirements of the Authority Having Jurisdiction in accordance with COMAR 26.04.02.051 and J."

(45) Delete Table 16.3.7 in its entirety.

(46) Delete Sections 16.4.4.2, 16.4.4.3, 16.4.4.4, and 16.4.4.5 in their entirety.

(47) Amend Section 16.5 by deleting the first sentence and replacing with "Percolation and other types of test required by the Authority Having Jurisdiction to determine the soil capacity of soil for septic effluent shall be conducted in accordance with COMAR 26.02.04.02 -see COMAR 26.04.02.02J (further guidance available from the Carroll County Health Department)."

(48) Delete Sections 16.5.1, 16.5.2, and 16.5.3. See COMAR 26.04.02.02K.

(49) Amend Section 16.5.4 by deleting in its entirety and replacing with the caption-"Absorption Area Requirements".

(50) Add Section 16.5.4.1 with the caption "Residential" and the statement, "Absorption area required for an individual dwelling unit will be determined by dividing the proposed design flow (number of bedrooms multiplied by 150 gallons per bedroom) by the application rates specified in COMAR 26.04.02.05K (further guidance on multi-dwelling units available from Carroll County Health Department)."

(51) Add Section 16.5.4.2 with the caption "Commercial/Institutional" and the statement, "Absorption area required for a commercial or institutional facility will be determined by dividing the proposed design flow by the application rates specified in COMAR 26.04.02.05K."

(52) Amend Section 16.5.5 by deleting in its entirety.

(53) Delete Sections 16.5.6 and 16.5.7 in their entirety.

(54) Amend Section 16.6.1 by revising text to read, "The liquid capacity of all septic tanks shall conform to the requirements of COMAR 26.04.02.05".

(55) Delete Table 16.6.1 in its entirety.

(56) Amend Section 16.6.3 by revising the text to read, "In a tank of more than one compartment or when multiple tanks are used in series, the inlet compartment shall have a capacity of not less than two-thirds of the total tank capacity unless otherwise approved by the Authority Having Jurisdiction."

 (57) Amend Section 16.6.4 by deleting the caption and replacing with "Septic Tank-Construction", and removing "16.6.5" from the references, and adding language to read:
"Plans for all septic tanks shall be submitted to the Authority Having Jurisdiction for approval. Such plans shall show all dimensions, reinforcing, structural calculations and such other pertinent data as may be required. Septic tanks shall be constructed of sound durable materials, not subject to excessive corrosion or decay and shall be watertight. Testing for water tightness may be required by the Authority Having Jurisdiction. Each such tank shall be structurally designed to withstand all anticipated earth or other loads and shall be installed level and on a solid bed."

(58) Delete Section 16.6.5 Steel Tanks.

(59) Amend Section 16.6.7 by revising the text to read:

(60) Amend Section 16.6.6.1 Baffles by deleting the first sentence and replacing with "The inlet and outlet baffles shall be at least four inches in diameter at the point opposite the opening of the tank."

(61) Amend Section 16.6.9 by revising text to read, "The effluent from all septic tanks shall be disposed of in accordance with COMAR 26.04.02."

(62) Amend Section 16.7.1 by adding "unless otherwise approved by the Authority Having-Jurisdiction."

(63) Amend Section 16.7.5 to read:

(64) Delete Sections 16.8.2, 16.8.3, 16.8.4, 16.8.5, 16.8.6, 16.8.7, and 16.8.8. See COMAR 26.04.02.04C, 26.04.02.05I and J, and 26.04.02.02L.

(65) Amend Section 16.8.9 by deleting in its entirety and replacing with "Approved pre-cast, reinforced concrete slab of 2,500 PSI minimum compressive strength, not less than five inches thick and designed to support an earth load of not less than 400 pounds per square foot. Each such cover shall extend not less than three inches beyond the sidewalls of the pit, shall be provided with a minimum six inch inspection hole with pipe extended to the surface, and provided with a six inch cast iron or schedule 40 plastic stand pipe with cleanout to grade."

(66) Amend Section 16.9.2 by deleting in its entirety and replacing with "The filter material shall cover the tile and extend the full width of the trench and shall not be less than six inches deep beneath the bottom of the tile, and two inches above the top of the tile. The filter material may be washed gravel, crushed stone or clean bank run gravel ranging in size from ½ to 2-1/2 inches. The filter material shall be covered by untreated paper, filter cloth or equivalent material prior to-backfilling the excavation. Stone used in absorption fields utilizing sand (such as sand mounds) may not be limestone unless otherwise approved by the Authority Having Jurisdiction."

(67) Delete Section 16.9.3 in its entirety. See COMAR 26.04.02.051.

(68) Amend Section 16.9.4 by adding a second sentence to read "The trench bottom shall be uniformly graded to slope from a minimum of two inches to a maximum of four inches per 100 feet."
(69) Delete Section 16.9.5 in its entirety. See COMAR 26.04.02.05L.

(70) Amend Section 16.11 by adding a new subsection 16.11.1 to read "All piping frombuilding drain to sewage disposal system shall be four-inch or larger uncoated service or heavierweight bell and spigot cast iron, or' schedule 40 plastic, exclusive of lines after a distribution boxand absorption lines. The Authority Having Jurisdiction shall determine the acceptability of theselines."

(71) Delete Section 16.12 Sand Filters in its entirety.

(72) Amend Chapter 16 by adding a hew section 16.13 captioned "Chemical Toilets" as follows:

-16.13 CHEMICAL TOILETS - see COMAR 26.04.02.08

(73) Amend Section 17.1.1 by deleting in its entirety and replacing with "The Carroll County Health Department delegated authority by the Maryland Department of the Environment to enforce COMAR 26.04.04 which governs the installation, use and maintenance of private water systems and shall be considered the Authority Having Jurisdiction for this chapter."

(74) Amend Section 17.2.3 by deleting the first sentence and replacing with "Total water available during any 24-hour period shall not be less than the design capacity of the sewage

disposal system."

(75) Amend Section 17.8 by adding a new item as follows: "5. Provide a faucet between the main shut off valve and storage or pressure tank, to provide an area where a water sample may be taken. The faucet shall be installed at a minimum height of eight inches off the floor and no higher than 60 inches off the floor."

(76) Amend Section 17.9.1 by adding "or unit" to the end of the sentence.

— (77) Amend Chapter 17 by adding a new section 17.16 captioned "Water Disinfecting Devices" to read:

(BA) Specific changes to the National Standard Plumbing Code 2012 International Residential Plumbing Code 2018 shall be as follows:

- (1) Add new sentence at end of Section P2501.1 "All testing requirements in sections P2503.4 through sections P2503.6 shall be at the discretion of the Building Code Official".
- (2) Amend Section P2503.7 Delete language after than and replace with; "an 80 psi hydrostatic pressure test on a 100 psi gauge".
- (3) Amend and add sentence at end of Section P2603.5 change 12" deep" to "30 inches deep" and add sentence to the end "Water lines may be installed within 2x6 exterior walls or larger and must be held to the heated side of the wall".
- (4) Fill in blanks of Section P2603.5.1 "18 inches for first blank and 36 inches for second Blank"
- (5) Add new paragraph to Section 2801.6 "Pans shall be required on any floor including basements that has finished walls installed".
- (10)Amend Section P2804.6.1 by deleting Number 5 and 10
- (11)Amend Section P2804.6.1 by adding Number 15 "Must discharge into a minimum two (2) inch trapped floor drain finishing at floor level or a hub drain finishing two (2) inches above the finished floor. Drains shall be constructed of material set fourth in Table P3002.1(2)".
- (12)Add new Section P2902.1.2 "Provide a faucet located between the main water line shut of valve and the water storage or pressure tank, to provide access where a water sample may be taken. The faucet shall be installed at a minimum height of eight (8) inches from finish floor and no higher than sixty (60) inches from finish floor".
- (13)Amend and add sentence at end of Section P2903.3 "Delete the wording "insufficient to provide for the minimum pressures and quantities" and replace with "35 psi or less" and add new sentence " A pressure gauge shall be added after the house valve and before the next device. The gauge shall be rated at a minimum of 20 psi above the working pressure if the water main".
- (14)Amend Section P2903.7 by deleting "3/4 inch diameter" and replacing with "1 inch diameter".
- (15)Amend Section P2903.10 by deleting the "Exception".
- (16) Amend Section P2904 by deleting the entire section and refer to "NPDA 13D"
- (17)Add new Section P2905.3 Hot Water Temperature Maintenance-Heated water distribution systems where developed length of heated water piping from the source of the heated water to furthest fixture exceeds eighty (80) feet shall be recirculated to within ten (10) pipe feet of any heated water outlet.
- (18)Amend Section P3005.2.6 by adding sentence: "A cast iron clean out shall be required at the property line. Any clean out located in a vehicular travel surface shall be of cast iron and have a lamp hole cover installed".
- (19) Amend Section P3005.4 by adding new line: "6. Piping installed below slabs shall be minimum of two (2) inch pipe.
- (20) Amend Section P3007.4 by adding sentence: "Audible alarms shall be installed".
- (21)Amend Section P3104.6 by deleting text in its entirety and replacing with: "All new construction shall have a two (2) inch minimum vent installed between the basement and the attic or tied into an existing properly sized vent and capped for future use. The cap must be water tight and identified as a future vent.
- (22)Amend Section P3114.1 by adding sentence at end: "Air admittance valves shall be allowed only with prior approval of the Building Code Official".

- (23)Amend Section P3303.1.3 Electrical. "Change wording from Chapters 34 through 43 to NFPA 70 National Electrical Code, 2017 Edition".
- (24)Add new Section P3303.1.5 "Drainage from a foundation shall be discharged to a storm drain, street, alley, approved water course or at grade. When discharged at grade, the discharge shall be at least ten (10) feet from any property line and shall not create a nuisance on neighboring properties".
- (25)Add new Section P3304 "With prior approval from the Building Code Official, private garages housing no more than four motor vehicles are not required to have an oil interceptor if drains are installed. Drains must discharge to grade.
- (B) Specific Changes to the International Commercial Plumbing Code 2018 shall be as follows:

(1)Amend Section 305.4.1 "Delete six (6) inches and replace with to eighteen (18) inches and delete twelve (12) inches and replace with thirty (30) inches"

(2)Add new sentence at end of Section 312.1 "All testing requirements in sections 312.2 through sections 312.9 shall be at the discretion of the Building Code Official".

(3)Amend Section 312.5 "Delete fifty (50) psi and replace with eighty (80) psi on a one hundred (100) psi gauge

(4)Add new sentence at end of Section 312.10.2 "Testing shall be the responsibility of the building owner or contractor".

(5)Add new sentence at end of Section 419.5 "On building use group classifications-Assembly, Business, Educational, Factory, Industrial, Institutional, Mercantile and Storage, self-closing and metered faucets are required".

(6)Add new Section 423.4 Waterless Urinals. Waterless urinal shall not be installed unless approved by the Building Code Official and the Carroll County Health Department.

(7)Amend Section 603.1 "Delete ¾ inch and replace with one (1) inch".

(8)Amend Section 708.1.10 by adding sentence: "A cast iron clean out shall be required at the property line. Any clean out located in a vehicular travel surface shall be of cast iron and have a lamp hole cover installed".

(9)Amend Section 712.3.4 by adding sentence: "Audible alarms shall be installed".

(10)Amend Section 903.1 by filling in blank space with: six (6) inches

(11)Amend Section 918.1 by adding: "Exception: Requires Building Code Official's approval prior to installing".

(12)Add new sentence at end of Section 1003.2 "All interceptors shall have an engineered certified drawing with a current engineer's stamp submitted to the Building Code Official. The design shall comply with Section 1003".

(13)Add new sentence at end of Section 1004.1 "All grease lines shall be painted black on the top half of the pipe".

(14)Add new sentence at end of Section 1112.1 "Drainage from a foundation shall be

discharged to a storm drain, street, alley, approved water course or at grade. When discharged at grade, the end of the discharge pipe shall be at least ten (10) feet from any property line and shall not create a nuisance on neighboring properties".

17.16 WATER DISINFECTING DEVICES

17.16.1 The use of an ultraviolet or a chlorine injection disinfection system requires written approval from the Authority Having Jurisdiction prior to installation.

17.16.2 Requirements for Ultraviolet Disinfection Units on Water Supplies.

a. The unit shall be designed to permit the user to clean the water contact surface of the jacket.

b. An automatic flow control valve, accurate within the expected pressure range, shall be installed to restrict flow to the maximum design flow of the treatment unit.

c. Ultraviolet radiation at a level of 2,537 Angstrom units must be applied at a minimum dosage of 16,000 microwatt-seconds per square centimeter at all points throughout the water disinfection chamber.

d. Maximum water depth in the chamber, measured from the tube surface to the chamber, shall not exceed three inches.

e. An accurately calibrated ultraviolet intensity meter, properly filtered to restrict its sensitivity to the disinfection spectrum, shall be installed in the wall of the disinfection chamber at the point of greatest water depth from the tube or tubes. Countdown timers alone do not meet this requirement.

f. A flow diversion valve or automatic shut-off valve shall be installed which will permit flow into the potable water system only when at least the minimum ultraviolet dosage is applied. When power is not being supplied to the unit, the valve should be in a closed (fail-safe) position which prevents the flow of water to the potable water system. THERE CAN BE NO BYPASS OF THIS VALVE. This includes any bypass switch built into the valve.

g. A valve to allow sampling of the water supply prior to treatment must be installed if it is not already present.

17.16.3 Requirements for Chlorine Injection Systems on Water Supplies.

a. A retention (blending) tank must be included in the installation that will allow the water to have a minimum of twenty minutes contact time with the chlorine.

b. A valve to allow sampling of the water supply prior to treatment must be installed if it is not already present.

c. The residual chlorine level must be maintained between 0.5 and 1.0 ppm.

(78) Amend Chapter 17 by adding a new section 17.17 captioned "Multiple Well Systems" to read:

17.17 MULTIPLE WELL SYSTEMS

17.17.1 Well lines from multiple well systems shall be brought into the building independently and may not be interconnected outside the building.

a. The well lines shall be permanently labeled or tagged with the well tag number to readily identify from which well they emanate.

b. A check valve or other approved backflow prevention device shall be installed in each well line prior to the place where the well lines interconnect to prevent combined water from the plumbing system to flow back into the well lines.

17.17.2 Each well shall be able to be independently sampled.

a. A sampling faucet shall be installed in each well line prior to the point where well lines are joined together to allow for independent sampling of each well.

b. Sampling faucets shall be installed at least eight inches above the floor level.

c. Electrical controls shall allow for each well pump to be operated independently.

(79) Amend Code by adding a new Chapter 19 captioned "General Gas Regulations" to read: CHAPTER 19. GENERAL GAS REGULATIONS

19.1 Requirements for the installation of gas appliance and gas piping shall be in compliance with the International Fuel Gas Code 2012-2018Edition, adopted in its entirety by this section.

19.2 Amend the International Fuel Gas Code to read: "The test pressure to be used shall be no less than 20 PSI using a 30 PSI gauge.

19.3 Amend Section 12.7.6 Marking by adding a sentence at the end to read; All plastic PVC vent flues and make up air piping shall be color coded yellow. The marking shall start at the appliance and continue to a point in which it exits the structure.

19.4 The International Fuel Gas Code as adopted shall not be construed so as to prevent Licensed Liquefied Gas Companies and their employees from making minor installation connections of gas appliances for domestic use. Liquefied Propane Gas installers shall have an issued propane gas certificate referred to in §§ 12-101(e), 12-101(i)(1)(iii), 12-101(i)(2)(v), 12-301(a)(3) of the Business Occupations and Professions Article of the Annotated Code of Maryland.

19.5 Propane installations shall comply with NFPA 58 Liquefied Petroleum Gas Code, 2011-

2017 Edition.

(2004 Code, § 97-7.2) (Ord. 02-01, passed 1-3-2002; Ord. 02-19, passed 11-21-2002; Ord. 04-25, passed 12-22-2004; Ord. 07-06, passed 4-19-2007; Ord. 2010-01, passed 2-25-2010; Ord. 2011-04-A, passed 7-21-2011; Ord. 2011-09, passed 11-10-2011; Ord. 2012-03, passed 5-10-2012; Ord. 2015-05, passed 6-25-2015; Ord. 2015-10, passed 12-8-2015; Ord. 2018-01, passed 3-1-2018)

170.20 Existing Building Code

(1) Amend Exception in Section 101.2 Scope: Remove the words "this code" between the words shall comply with and the International Residential Code".

170.21 NFPA 13D & NFPA 13R Amendments

(1)Add new line to Section 6.2.2 " (4) A pump by-pass with double check valve shall be installed when booster pumps are installed".

(2)Delete Section 6.11 Fire Department Connection "Exception: FDC connection is not required on single family dwelling's four (4) stories or less".

(3)Add line in Section 10.1 "Residential sprinkler systems shall be designed with a five (5) percent safety factor on all systems".

MISCELLANEOUS PROVISIONS

§ 170.30 CONFLICTS AMONG CODES.

For the purpose of governing conflicts in this chapter as a result of differences between the various codes, the provision which gives the greatest protection to the public and the users of buildings, structures, or facilities and equipment shall prevail and govern. The International Residential Code shall prevail and govern Use Group R-4 on items addressed by the International Residential Code.

(2004 Code, § 97-11) (Ord. 52-D, passed 11-10-1998; Ord. 02-01, passed 1-3-2002; Ord. 2015-05, passed 6-25-2015)

§ 170.31 OFFICIAL TEXTS.

The official texts of all codes and texts adopted hereby shall be maintained by the Code Official. The Code Official may provide copies of all such texts for a charge which may be established from time to time.

(2004 Code, § 97-12) (Ord. 52-D, passed 11-10-1998; Ord. 02-19, passed 11-21-2002; Ord. 2015-05, passed 6-25-2015)

VIOLATIONS AND ENFORCEMENT

§ 170.45 UNLAWFUL CONTINUANCE.

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 guilty of a misdemeanor and liable for a fine of not more than \$1,000 or by imprisonment not exceeding 30 days or both such fine and imprisonment. Each day that work continues in violation of the stop-work order shall be deemed a separate offense. A violation of this section shall be in addition to a violation of § 170.99.

(2004 Code, § 97-9) (Ord. 52-D, passed 11-10-1998; Ord. 2015-05, passed 6-25-2015) Penalty, see § 170.99

§ 170.46 CITATIONS AND ENFORCEMENT.

At the discretion of the Code Official, a notice of violation may be issued to any person in violation of this chapter. Such notice shall impose upon the person in violation a penalty as indicated by the Code Official, which may, at the discretion of the person receiving such notice, be paid to any agency designated by the Code Official within 72 hours in full satisfaction of the

violation. In the event that such penalty is not paid within the time prescribed, a criminal charging document shall be initiated before a District Court Commissioner setting forth the nature of the violation.

(2004 Code, § 97-10) (Ord. 52-D, passed 11-10-1998; Ord. 02-19, passed 11-21-2002; Ord. 2015-05, passed 6-25-2015) Penalty, see § 170.99

§ 170.99 PENALTY.

Any person who shall violate a provision of this chapter or shall fail to comply with any of the requirements of this chapter or who shall erect, construct, alter, or repair a building or structure in violation of an approved plan or directive of the Code Official or of a permit or certificate issued under the provisions of this chapter, shall be guilty of a misdemeanor, punishable by a fine of not more than \$500 or by imprisonment not exceeding 30 days, or both such fine and imprisonment. Each day that a violation continues shall be deemed a separate offense.

(2004 Code, § 97-8) (Ord. 52-D, passed 11-10-1998; Ord. 2015-05, passed 6-25-2015)

APPENDIX A: PLUMBING CODE AMENDMENTS, TABLE 7.21.1, MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES

For a printable PDF version of Table 7.21.1, click here.

-Plumbing	Plumbing Code Amendments, Table 7.21.1: Minimum Number of Required Plumbing Fixtures								
Classifi- cation	Occupancy Group see (14)	No. of Persons of each Sex	Water-			atories	Bath or Shower	Drinking Water Facilities	Other
	See (14)	see (4), (16)	Mal e	Femal e	Mal e	Femal e-		Facilities	
	A-1: Theaters- and other-	100 or less	2	2	4	4			
	facilities for the viewing of the performing arts	101 - 200	add 1	add 1	add 1	add 1			4
Assembly (A)	performing arts o r motion- pictures, typically- with fixed seats.	201 - 300	add 1	add 2	add 0	add 1	-	1 per 500- people	1 service sink per f loor (21)
	See Notes: (6), (9)	ea. add'l 300 over 300	add 1	add 2	add 1	add 1			
	A-2: Night clubs, bars, taverns,	25 or less	4	4	4	4	_	1 per 250- people (2)	1 service sink per floor (21)
	and similar facilities where- drink and/or food-	26 - 50	add 1	add 1	add 1	add 1			
	is consumed.	51 - 100	add 1	add 1	add 1	add 1			
	See Notes: (2), (3), (6), (9), (13)	ea. add'l 200 over 100	add 1	add 1	add 1	add 1			
	A-2: Restaurants,	50 or less	4	4	4	4			
	banquet halls, food courts,	51 - 100	add 1	add 1	add 1	add 1		1 per 250	1 service
	carry-outs with seating.	101 - 200	add 1	add 1	add Q	add 0	-	people (2)	sink per floor (21)
		201 - 300	add 1	add 1	add 1	add 1			
	See Notes: (2),	ea. add'l	add	add 1	add	add 1			

	(3), (6), (9), (13)	200 over 300	4		4				
	A -3: Museums, art galleries,	50 or less	4	4	4	4			
	exhibition halls, lecture halls,	51 - 150	add 1	add 1	add 1	add 1		1 per 500-	1 service sink per f loor (21)
	libraries.	151 - 300	add 1	add 1	add 1	add 1	-	people	
	See Notes: (6), (9)	ea. add'l 300 over 300	add 1	add 1	add 1	add 1			
	A-3: Passenger- terminals,	100 or less	4	4	4	4		4	1 service
Assembly (A) (cont'd)	t ransportation. f acilities.	101 to 250	add 2	add 2	add 1	add 1	-	1 per 500- people	sink per- floor (21)
	See Notes: (6), (9)	ea. add'l 250 over <u>250</u>	add 2	add 2	add 1	add 1		-	-
	A-3: Places of worship and	25 or less	4	4	4	4			
	other religious services.	26 - 150	add 1	add 1	add 1	add 1	-	1 per 500- people	1 service sink per f loor (21)
	See Notes: (6), (9)	ea. add'l 150 over 150	add 1	add 1	add 1	add 1			
	A-3:- Gymnasiums-	50 or less	1	4	1	4			1 service- sink per- floor (21)
	(without- spectator- seating), health-	51 - 100	add 1	add 1	add 1	add 1	-	1 per 200- people	
	spas.	101 - 200	add 1	add 1	add 1	add 1			
	See Notes: (6), (9), (20)	ea. add'l 200 over 200	add 2	add 2	add 2	add 2			
	A-4: Coliseums,	1 - 100	2	2	2	2			
	arenas, skating- r inks, pools and- tennis courts for-	101 - 200	add 2	add 2	add 2	add 2			
	indoor sporting- events and- activities.	201 - 4 00	add 2	add 2	add 2	add 2	-	1 per 500- people	1 service sink per f loor (21)
	See Notes: (6), (9), (20)	ea. add'l 4 00 up to <u>2,600</u>	add 2	add 4	add 1	add 2			
	ea. add'l 600 over 2,600	add 2	add 4	add 1	add 2				
	A-5: Stadiums,	1 - 100	2	2	2	2			
	amusement parks, bleachers- and grandstands- for outdoor- sporting events- and activities.	101 - 200	add 2	add 2	add 2	add 2			
Assembly (A) (cont'd)		201 - 4 00	add 2	add 2	add 2	add 2	-	1 per 1,000- people	1 service sink per f loor (21)
	See Notes: (6), (9), (20)	ea. add'l 4 00 up to <u>2,600</u>	add 2	add 4	add 1	add 2			

	ea. add'l 600- over 2,600	add 2	add 4	add 1	add 2				
	B: Buildings for	1 - 15	4	4	4	4			
Business (B)	the transaction of business, professional- services, office- buildings, banks, and similar uses	16–50	add 1	add 1	add Q	add 0	-	1 per 100- people	1 service sink per f loor (21)
	See Notes: (6), (9), (12), (15)	ea. add'l 50 over 50	add 1	add 1	add 1	add 1			
		15 or less	4	4	4	4			
	E-1: Day Care,	16 - 30	add 1	add 1	add 1	add 1			
	Preschool, Kindergarten.	31 - 50	add 1	add 1	add 1	add 1		1 per 100	1 service
Education (E)		51 - 75	add 1	add 1	add 1	add 1	-	people	sink per- f loor (21)
		76 - 100	add 1	add 1	add 1	add 1			
	See Notes: (6), (9)	ea. add'l 50 over 100	add 1	add 1	add 1	add 1			
	E-2: Elementary Grades 1 - 6.	25 or less	1	4	4	1	-	1 per 100- people	1 service- sink per- f loor (21)
		26 - 50	add 1	add 1	add 1	add 1			
		51 - 75	add 1	add 1	add 1	add 1			
		76 - 100	add 1	add 1	add 1	add 1			
	See Notes: (6), (9)	ea. add'l 50 over 100	add 1	add 1	add 1	add 1			
	E-3: Secondary	30 or less	4	4	4	4			
Education (E)	Grades 7 -12 and higher education- facilities.	31 - 60	add 1	add 1	add 1	add 1		1 per 100	1 service
(cont'd)		61 - 100	add 1	edd 1	add 1	add 1	-	people	sink per- floor (21)
	See Notes: (6), (9), (17)	ea. add'l 50 over 100	add 1	add 1	add 1	add 1			
	F-1 and F-2: Structures in	25 or less	4	4	4	4			
	which occupants- are engaged in- work fabricating,	26 - 50	add 1	add 1	add 1	add 1	1- emergency		
Factory (F)	work tabricating, assembling, or processing- products,- materials, food,- etc.	51 - 100	add 1	add 1	add 1	add 1	shower per 10 people- exposed to skin con- tamination	1 per 250	1 service sink per f loor (21)
	See Notes: (6),	ea. add'l 100 over	add 1	add 1	add 1	add 1			

	(9)	100							
Institutional (I)	I-1: Residential care, assisted living faculties (24-hour).	1 - 10	4	4	4	4	1 per 8- occupants	1 per 100- occupants	1 service sink per- floor (21)
	See Notes: (6), (9), (11)	ea. add'l 10 over 10	add 1	add 1	add 1	add 1			
	I-2: Patients in hospitals, nursing homes, etc.		clo	water set per ont room	per	vatory patient oom	1 per- patient- room		
	I-2: Employees in	25 or less	4	4	4	4			
	hospitals, etc.	26 - 50	4 	4	0 add	θ	-	1 per 100	1 service sink per
		51 - 100	add 1	add 1	auu 1	add 1		people	floor per- wing
	See Notes: (6), (9)	ea. add'l 100 over 100 -	add 1	add 1	add 1	add 1			
	I-2: Visitors in	50 or less	4	4	4	4		1 per 500- people	_
Institutional (I) (cont'd)	hospitals, etc.	51 - 100	add 1	add 1	add 1	add 1	l .		
	See Notes: (6), (9)	ea. add'l 100 over 100	add 1	add 1	add 1	add 1			
	I-3: Prisoners in prisons		1-р	er cell	1-р	er cell	1 per 15 prisoners	1 per 100 prisoners	
		15 or less	4	4	4	4		1 per 100- detainees	
	Detainees in	16 - 30	add 1	add 1	add 1	add 1			
	reformatories, detention-	31 - 50	add 1	add 1	add 1	add 1	1 per 15 -		-
	centers, and correctional	51 - 75	add 1	add 1	add 1	add 1	detainees		
	centers.	76 - 100	add 1	add 1	add 1	add 1			
		ea add'l 50 over 100	add 1	add 1	add 1	add 1			
	I-3: Employees in	25 or less	4	4	4	4			
	prisons, reformatories, etc.	26 - 50	add 1	add 1	add Q	add 0		1 per 100	1 service sink per-
	etc.	51 - 100	add 1	add 1	add 1	add 1	-	people	floor per- wing
	See Notes: (9)	ea. add'l 50 over 100	add 1	add 1	add 1	add 1			
	I -3: Visitors in prisons,	50 or less	4	4	4	4		1 per 500	_
	reformatories, etc.	51 - 100	add 1	add 1	add 1	add 1	-	people	

	See Notes: (9)	ea. add'l 100 over 100	add 1	add 1	add 1	add 1			
		15 or less	4	4	4	1		1 per 100-	
	I-4: Adult day-	16 - 30	add 1	add 1	add 1	add 1			
Institutional (I)	care, child day care.	31 - 50	add 1	add 1	add 1	add 1			1 service
(cont'd)		51 - 75	add 1	add 1	add 1	add 1	-	people	sink per floor (21)
		76 - 100	add 1	add 1	add 1	add 1			
	See Notes: (9)	ea. add'l 50 over 100	add 1	add 1	add 1	add 1			
	M: Stores, shops, markets,	50 or less	4	4	4	4			
Mercantile-	shopping- centers, sales- rooms, service-	51 - 150	add 1	add 1	add 0	add 0		1 per 500	1 service sink per- f loor (21)
(M)	stations, etc.	151 - 4 00	add 1	add 1	add 1	add 1	-	people	
	See Notes: (6), (7), (8), (9), (15)	ea. add'l 4 00 over 4 00	add 1	add 1	add 1	add 1			
Residential (R)	R-1: Motels, motels, boarding- houses- (transient).	-	clo	water set per st room	pe l	r guest oom	1 per guest room	-	1 service sink per- f loor (21)
	R-2: Dormitories, fraternities, sororities, boarding houses (not transient).	10 or less	2	2	2	2		1 per 100- people	1 service sink per- floor (21)
		11 - 20	add 1	add 1	add 1	add 1	1 per 8- people		
		ea. add'l 20 over 20	add 2	add 2	add 2	add 2			11001 (21)
Residential-	R-2: Apartment- houses, condominiums.	-	clo	water set per- unit		avatory sr unit	1 per unit	-	1 kitchen sink per unit
(R) (cont'd)	See Notes: (10)								provisions- for 1 clothes- washer per- 20 units
	R-2: One-and-		1	water-					1 kitchen sink per unit
	two-family- dwellings.		1 water closet per unit			avatory- er unit	1 per unit		provisions- for 1 clothes- washer per- unit
	R-3: Congregate- living facilities- with 16 or fewer- persons.	10 or less	4	4	4	4	1 per 8- persons	1 per 100- people	1 service sink per f loor (21)

	See Notes: (9)	ea. add'l 10 over 10	add 1	add 1	add 1	add 1			
Residential- (R) (cont'd)		10 or less	4	4	4	4	1 per 8- residents	1 per 100- people	1 service sink per
(R) (cont d)	See Notes: (9)	ea. add'l 10 over 10	add 1	add 1	add 1	add 1		People	floor (21)
	S-1 & S-2: Structures for the	50 or less	4	4	4	4			
	storage of goods,	51 - 100	1	1	0	0			4
Storage (S)	warehouses, storehouses, and freight depots.	ea. add'l 100	add 1	add 1	add 1	add 1		1 per 500- people	1 service sink per floor (21)
	See Notes: (6), (16), (19)	over 100							

	Plumbing Code Amendments, Table 7.21.1
Note	es (where indicated in the Table):
(1)	Plumbing fixtures shall be provided in numbers not less than those shown in this Table for the type of building occupancy (7.21.1). For accessible requirements, see local, state, and national codes. Additional fixtures may be required where environmental conditions or special activities may be encountered.
(2)	Drinking fountains are not required in restaurants or other food service establishments if drinking water service- is available (7.21.8.b). Drinking water is not required for customers where normal occupancy is short term- (7.21.7.d). Kitchen sinks and bar sinks may be used for employee drinking water. (7.21.5.b).
(3)	In food preparation areas, fixture requirements may be dictated by local Health Codes (7.21.6.b).
(4)	Wherever both sexes are present in approximately equal numbers, multiply the total census by 50% to- determine the number of persons of each sex to be provided for (7.21.2.c). This regulation applies only where- specific information that would otherwise affect the fixture count is not provided.
(5)	Not more than 50% of the required number of water closets for males may be urinals (7.21.5.a).
(6)	In buildings with multiple floors, access to fixtures shall not exceed one vertical story (7.21.3.a).
(7)	Fixtures for public use as required by this Table may be met by providing centrally located facilities accessible to several stores (7.21.7.b). The maximum distance from the entry for any store to these facilities shall not exceed 500 feet (7.21.7.b).
(8)	In stores with gross floor areas of 150 sq. ft. or less, the requirements to provide facilities for use by employees- may be met by providing central facilities located accessible to several stores (7.21.7.c). The maximum- distance from the entry for any store to these facilities shall not exceed 300 feet (7.21.7.c).
(9)	Fixtures accessible only to private offices shall not be counted to determine compliance with this Table (7.21.3.b).
(10)	Facilities without laundry rooms for their occupants shall not require provisions for clothes washers (7.21.5.c).
(11)	In residential care facilities, where water closets and lavatories are provided in individual patient rooms, the minimum number of fixtures for employees and visitors shall be as required for hospitals.
(12)	Requirements for employees and customers may be met with a single set of restrooms (7.21.7.a).
(13)	If the design number of customers in food handling establishments exceeds 100, separate facilities for employees and customers are required (7.21.8.a).
(14)	Occupancy groups shall be as described in the local building code.
(15)	See 7.21.4 and 7.21.7 for toilet facilities for occupancies with a total floor area of 1,500 square feet or less.
(16)	In determining the number of required fixtures for numbers of persons that fall in the "each additional (xx) over (xx) listings, the requirement applies to fractions of the listed group.
(17)	Laboratories in higher education facilities shall have safety showers as required by ANSI Z358.1.
(18)	Warehouse storage area requirements shall be permitted to be met by providing a facility centrally located within the storage area. The maximum travel distance to the facility shall not exceed 500 feet.
(19)	The requirements for multiple individual self-storage areas shall be permitted to be met by fixtures located in

 the facility's administration building. The administration office must be accessible during normal businesshours.
(20) Showers may be omitted in recreational facilities without locker rooms when approved by the Authority Having Jurisdiction.
(21) Service sinks shall not be required on floor levels where housekeeping is not required (7.21.5.d). Service sinks shall be permitted to serve two adjacent floors (above and below) where there is service elevator access.

(2004 Code, § 97-7.2) (Ord. 2011-10, passed 11-10-2011; Ord. 2015-05, passed 6-25-2015) APPENDIX B: SOLAR PANELS



(Ord. 2015-05, passed 6-25-2015)