FINAL

COUNTY COUNCIL OF ANNE ARUNDEL COUNTY, MARYLAND

Legislative Session 2015, Legislative Day No. 40

Bill No. 123-15

Introduced by Mr. Fink, Chairman
(by request of the County Executive)

By the County Council, December 21, 2015

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Introduced and first read on December 21, 2015
Public Hearing set for and held on February 1, 2016
Bill Expires March 25, 2016

By Order: Elizabeth E. Jones, Administrative Officer

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A BILL ENTITLED

AN ORDINANCE concerning: Construction and Property Maintenance Codes – Codes and Supplements

FOR the purpose of adopting and amending certain construction codes; modifying notice provisions for enforcement of construction codes; making certain technical corrections to construction codes; and generally relating to construction codes.

BY repealing and reenacting, with amendments: §§ 15-2-101; 15-2-102; 15-2-103; 15-2-202(a); 15-2-301; 15-2-402(a); 15-2-502(a); and 15-5-103
Anne Arundel County Code (2005, as amended)

BY adding: §§ 15-2-104
Anne Arundel County Code (2005, as amended)

BY repealing and reenacting, with amendments: Construction Code, Introduction; Construction Code, Chapter 1, §§ 101.2.1, 101.2.2, 101.4.1 through 101.4.7, 105.3.4, 106.1.5.2, 107.3, 108.2.1.2, 108.2.1.3, 109.5.2, 109.5.3, and 113.7.2; International Building Code Amendments, Introduction and Items (3), (9), (10), (14), (16), (22), and (23); International Residential Code Amendments, Introduction and Items (3), (4), (6), (7), (8), (9), (11) through (33); Energy Conservation Code Amendments, Introduction; Electrical Code Amendments, Introduction; Fuel Gas Code Amendments, Introduction; Mechanical Code Amendments, Introduction and Item(4); Plumbing Code Amendments, Introduction and Items (7) through (18)

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EXPLANATION: CAPITALS indicate new matter added to existing law.
[Brackets] indicate matter stricken from existing law.

Anne Arundel County Construction and Property Maintenance Codes Supplement, October 1, 2005 (as amended)

BY adding: Construction Code, Chapter 1, § 109.5.2; International Residential Code Amendments, Items (12), (13), and (28); International Existing Building Code Amendments, Introduction and Items (1) and (2); Plumbing Code Amendments, Items (7) and (10)
Anne Arundel County Construction and Property Maintenance Codes Supplement, October 1, 2005 (as amended)

SECTION 1. *Be it enacted by the County Council of Anne Arundel County, Maryland,* That Section(s) of the Anne Arundel County Code (2005, as amended) read as follows:

## ARTICLE 15. CONSTRUCTION AND PROPERTY MAINTENANCE CODES

## TITLE 2. CONSTRUCTION CODES

### 15-2-101. Building Code.

The "[2012] 2015 International Building Code", as published by the International Code Council, Inc., is adopted by reference as the Building Code for the County with the additions, insertions, omissions, and changes set forth in the Supplement.

### 15-2-102. International Residential Code.

The "[2012] 2015 International Residential Code for One- and Two-Family Dwellings", as published by the International Code Council, Inc., is adopted by reference as part of this Building Code for buildings described in section 101.2 of "Chapter 1 - Construction Code Administrative Provisions" as set forth in the Supplement.

### 15-2-103. Energy Conservation Code.

The "[2012] 2015 International Energy Conservation Code", as published by the International Code Council, Inc., is adopted by reference as part of this Building Code with the additions, insertions, omissions, and changes set forth in the Supplement.

### 15-2-104. International Existing Building Code.

THE "2015 INTERNATIONAL EXISTING BUILDING CODE", AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL, INC., IS ADOPTED BY REFERENCE AS PART OF THIS BUILDING CODE WITH THE ADDITIONS, INSERTIONS, OMISSIONS, AND CHANGES SET FORTH IN THE SUPPLEMENT.

### 15-2-202. National Electrical Code.

(a) **Adoption.** The "National Electrical Code (NFPA 70)", [2011] 2014 Edition, as published by the National Fire Protection Association, is adopted by reference as the Electrical Code for the County, with the additions, insertions, omissions, and changes set forth in the Supplement.

**15-2-301. Adoption.**

The "[2012] 2015 International Fuel Gas Code", as published by the International Code Council, Inc., is adopted by reference as the Fuel Gas Code for the County, with the additions, insertions, omissions, and changes set forth in the Supplement.

**15-2-402. Mechanical Code.**

(a) **Adoption.** The "[2012] 2015 International Mechanical Code", as published by the International Code Council, Inc., is adopted by reference for the control of matters pertaining to the designing, installing, servicing, altering, remodeling, or repairing of heating systems, cooling systems, or refrigeration systems, as the Mechanical Code for the County, with the additions, insertions, omissions, and changes set forth in the Supplement.

**15-2-502. Plumbing Code.**

(a) **Adoption.** The "[2012] 2015 International Plumbing Code", as published by the International Code Council, Inc., is adopted by reference as the Plumbing Code for the County with the additions, insertions, omissions, and changes set forth in the Supplement.

## TITLE 5. ENFORCEMENT

**15-5-103. Civil fine notice provisions.**

[(a) **Building Code.** Except for violations of Chapter 1 of the 2012 International Building Code, as amended, written notice shall be given to the violator 14 days before a civil fine is assessed to allow for correction of the violation.

(b) **Fuel Gas Code.** Except for violations of Chapter 1 of the 2012 International Fuel Gas Code, written notice shall be given to the violator 14 days before a civil fine is assessed to allow correction of the violation.

(c) **Mechanical Code.** Except for violations of Chapter 1 of the 2012 International Mechanical Code, as amended, written notice shall be given to the violator 14 days before a civil fine is assessed to allow for correction of the violation.

(d) **Plumbing Code.** Except for violations of Chapter 1 of 2012 International Plumbing Code, as amended, written notice shall be given to the violator 14 days before a civil fine is assessed to allow for correction of the violation.]

EXCEPT FOR VIOLATIONS OF THE ANNE ARUNDEL COUNTY CONSTRUCTION AND PROPERTY MAINTENANCE CODES SUPPLEMENT, CONSTRUCTION CODE, CHAPTER 1 – CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS, AS AMENDED, WRITTEN NOTICE SHALL BE GIVEN TO THE VIOLATOR OF ANY PROVISION OF THE BUILDING CODE, FUEL GAS CODE, MECHANICAL CODE, PLUMBING CODE, OR ELECTRICAL CODE 14 DAYS BEFORE A CIVIL FINE IS ASSESSED TO ALLOW FOR CORRECTION OF THE VIOLATION.

SECTION 2. *And be it further enacted*, That the Anne Arundel County Construction and Property Maintenance Codes Supplement, October 1, 2005 (as amended) read as follows:

## CONSTRUCTION AND PROPERTY MAINTENANCE CODES SUPPLEMENT

## CONSTRUCTION CODE

The following "Chapter 1 – Construction Code Administrative Provisions" is intended to replace Chapter 1 of each of the following adopted codes: the [2012] 2015 International Building Code, the [2012] 2015 International Residential Code for One- and Two-Family Dwellings, the [2012] 2015 International Energy Conservation Code, the [2012] 2015 International Fuel Gas Code, the [2012] 2015 International Mechanical Code, and the [2012] 2015 International Plumbing Code. This chapter is also intended to replace Article 80 of the National Electrical Code, [2011] 2014 edition.

### Chapter 1
### Construction Code Administrative Provisions

**Section 101**
**Administration**

**101.2.1 Detached one- and two-family dwellings and multiple single-family dwellings.** Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the [2012] 2015 International Residential Code.

**101.2.2 Existing Buildings.** Existing buildings undergoing repair, alterations or additions, and change of occupancy shall be permitted to comply with the [2012] 2015 International Existing Building Code.

**101.4.1 Building.** The provisions of the [2012] 2015 International Building Code shall apply to the design and the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures. The following appendices are adopted as part of the building code: Appendix C "Group U-Agricultural Buildings", Appendix E "Supplementary Accessibility Requirements", Appendix F "Rodentproofing", Appendix G "Flood-Resistant Construction", and Appendix I "Patio Covers".

**101.4.2 Electrical.** The provisions of the National Electrical Code, [2011] 2014 edition (NFPA 70), shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and appurtenances thereto.

**101.4.3 Gas.** The provisions of the [2012] 2015 International Fuel Gas Code shall apply to the installation of gas piping from the point of delivery, gas appliances, and related accessories as covered in the Construction Code. These requirements apply to

gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories. The following appendices are adopted as part of the Fuel Gas Code: Appendix A (IFGS) "Sizing and Capacities of Gas Piping", Appendix B (IFGS) "Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I Appliances, and Appliances Listed for Use with Type B Vents", and Appendix C (IFGS) "Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems".

**101.4.4 Mechanical.** The provisions of the [2012] 2015 International Mechanical Code shall apply to the installation, alterations, repairs, and replacement of mechanical systems, including equipment, appliances, fixtures, fittings, and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators, and other energy-related systems. The following appendix is adopted as part of the Mechanical Code: Appendix A "Combustion Air Openings and Chimney Connector Pass-Throughs".

**101.4.5 Plumbing.** The provisions of the [2012] 2015 International Plumbing Code shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system, and all aspects of a medical gas system. The following appendices are adopted as part of the Plumbing Code: Appendix B "Rates of Rainfall for Various Cities", Appendix C "Gray Water Recycling Systems", Appendix D "Degree Day and Design Temperatures", Appendix E "Sizing of Water Piping System", and Appendix G "Vacuum Drainage System". The provisions of the Anne Arundel County Private Sewage Disposal and Well Code shall apply to private sewage disposal systems.

**101.4.6 Energy.** The provisions of the [2012] 2015 International Energy Conservation Code shall apply to all matters governing the design and construction of COMMERCIAL buildings for energy efficiency.

**101.4.7 Residential.** The provisions of the [2012] 2015 International Residential Code for One- and Two-Family Dwellings shall apply to all matters governing the design and construction of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures. The following appendices are adopted as part of the Residential Code: Appendix A "Sizing and Capacities of Gas Piping", Appendix B "Sizing of Venting Systems Serving Appliances Equipped with Draft Hoods, Category I "Appliances, and Appliances Listed for Use with Type B Vents", Appendix C "Exit Terminals of Mechanical Draft and Direct-Vent Venting Systems", Appendix E "Manufactured Housing Used as Dwellings", Appendix G ["Swimming Pools, Spas and Hot Tubs"] "PIPING STANDARDS FOR VARIOUS APPLICATIONS", Appendix H "Patio Covers", [Appendix I "Private Sewage Disposal",] Appendix K "Sound Transmission", Appendix N "Venting Methods", [Appendix O "Gray Water Recycling Systems", and Appendix Q "ICC International Residential Code Electrical Provisions/National Electrical Code Cross-Reference"] AND APPENDIX P "SIZING OF WATER PIPING SYSTEM".

**Section 105**
**Permits**

**105.3.4 Time limitation of application.** An application for a permit for any proposed work shall be deemed to have been abandoned AND MAY BE CANCELLED BY THE DEPARTMENT OF INSPECTIONS AND PERMITS 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued, except that the Code Official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and good cause shown.

**Section 106**
**Construction Documents**

**106.1.5.2** The elevation of the proposed lowest floor, including basement; in areas of shallow flooding (AO zones AND COASTAL A ZONES), the height of the proposed lowest floor, including basement, above the highest adjacent grade;

**Section 107**
**Temporary Structures and Uses**

**107.3 Temporary power.** The Code Official is authorized to give permission to temporarily supply and use power as part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat, or power in the National Electrical Code, [2011] 2014 edition.

**Section 108**
**Fees**

**108.2.1.2 Government agencies.** A government agency will be issued permits without charge if construction inspection and enforcement is provided by a government agency other than the County. ALL PERMITS WILL BE ISSUED TO ANNE ARUNDEL COUNTY WITHOUT CHARGE.

**108.2.1.3 Churches and other nonprofit agencies.** Churches, parsonages, eleemosynary, and community association facilities, and fire stations on properties owned by a volunteer fire company formed pursuant to § 12-1-201 of this Code shall be charged the minimum fee UNDER 108.2.3, 108.2.4, 108.2.5, AND 108.2.6.

**Section 109**
**Inspections**

**109.5.2 BONDING.** FOR SWIMMING POOLS AND SPAS, A BONDING INSPECTION SHALL BE MADE AFTER ALL STEEL GRILLAGE IS INSTALLED BUT BEFORE PERIMETER DECKING MATERIALS ARE INSTALLED.

**[109.5.2] 109.5.3 Rough-in.** Rough-in inspection shall be made after the structure is watertight and all wiring and other components to be concealed are complete, and prior to the installation of wall or ceiling membranes.

**[109.5.3] 109.5.4 Final electrical inspection.** A final inspection shall be made of the electrical system after all work required by the electrical permit is completed and the system is operational.

**Section 113**
**Violations**

**113.7.2 Use or occupancy prohibited.** A building or structure presumed unsafe under section 113.7.1 may not be used or occupied until a building permit is issued, the building or structure passes all applicable inspections, INCLUDING A FINAL BUILDING INSPECTION, and, if necessary, a separate certificate of occupancy for the building or structure is issued.

## INTERNATIONAL BUILDING CODE AMENDMENTS

The provisions of the [2012] 2015 International Building code are amended, deleted, or corrected as follows and the following provisions shall supersede the part of the text of the [2012] 2015 International Building Code as indicated:

(3) In section 202, after the definition of ["Closed System"] "COASTAL HIGH HAZARD AREA" insert:

"Code Official. The Director of Inspections and Permits, or duly authorized representative, charged with the administration and enforcement of this Code."

(9) In section 1612.5.1.1.1, strike "110.3.3" and substitute "109.3.3", AND STRIKE "110.3.10.1" AND SUBSTITUTE "109.12", and, after the period, insert:

"All buildings and structures erected within a flood hazard area OTHER THAN COASTAL HIGH HAZARD AREAS AND COASTAL A ZONES shall be elevated so that the lowest floor is located a minimum of one foot above the design flood elevation. All basement floor surfaces shall be located a minimum of one foot above the design flood elevation."

(10) In section 1612.5.2.2.1, strike "110.3.3" and substitute "109.3.3", AND STRIKE "110.3.10.1" AND SUBSTITUTE "109.12", and, after the period, insert:

"All buildings and structures erected within [a flood hazard area] COASTAL HIGH HAZARD AREAS AND COASTAL A ZONES shall be elevated so that the lowest [floor] STRUCTURAL MEMBER is located a minimum of one foot above the design flood elevation. All basement floor surfaces shall be located a minimum of one foot above the design flood elevation."

(14) After section 1805.4.3, insert:

"**1805.4.4 Areaway drains.** All open subsurface space adjacent to a building serving as an exit or entrance shall be provided with a drain or drains. [Such areaway drains shall be of approved material in accordance with Chapter 29 of the Building Code and not less than 2 inches in diameter and shall discharge by gravity or mechanical means in accordance with section 1805.4.2. No areaway drain may discharge into a subsoil drain. Areaway drains for areas exceeding 100 square feet shall be sized in accordance with the 2012 International Plumbing Code."] ALL AREAWAY DRAINS SHALL BE SOLID PVC OR EQUIVALENT AND SHALL DISCHARGE DIRECTLY TO A SUMP CROCK, DAYLIGHT, OR OTHER APPROVED MEANS. NO AREAWAY DRAIN MAY DISCHARGE INTO A SUBSOIL DRAIN. DRAINS SERVING AREAWAYS NOT EXCEEDING 100 SQUARE FEET SHALL HAVE A MINIMUM 2-INCH DIAMETER PIPE. AREAWAY DRAINS EXCEEDING 100 SQUARE FEET BUT NOT EXCEEDING 1,000 SQUARE FEET SHALL BE PROVIDED WITH A MINIMUM 3-INCH DIAMETER PIPE. AREAWAY DRAINS EXCEEDING 1,000 SQUARE FEET SHALL BE SIZED IN ACCORDANCE WITH THE 2015 INTERNATIONAL PLUMBING CODE.

**1805.4.5 Window well drains.** Window well areaways shall have drains. Window well areaways 10 square feet or less may discharge to the subsoil drain through a 2 inch minimum diameter pipe. Drains for window well areaways greater than 10 square feet shall be installed in accordance with section [1805.4.2] 1805.4.4.

**1805.4.6 Foundation weep holes.** Where subsoil drains are required by section 1805.4.2, foundations of hollow core masonry shall have foundation weep holes. Weep holes shall be placed a maximum of 4 foot O/C intervals and shall discharge into the aggregate of interior subsoil drainage system.

**1805.4.7 Site grading.** The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than one unit vertical in 12 units horizontal (1:12) for a minimum distance of 5 feet (914 mm) measured perpendicular to the face of the wall or an approved alternate method of diverting water away from the foundation shall be used. Consideration shall be given to the possible additional settlement of the backfill when establishing the final ground level adjacent to the foundation."

(16) After section 1809.8, insert:

"**1809.8.1 Electrode.** In all buildings, a concrete-encases electrode shall be provided prior to placement of concrete in accordance with section 250.52(a)(3) of the National Electrical Code, [2011] 2014 edition."

(22) [In section 3401.1, after "Structures." insert:

"Existing structures shall comply with the 2012 International Existing building code or this chapter."

(23)] After Chapter [35] 33, insert:

"**Chapter [36] 34**

**Grading and Sediment Control**

The Erosion and Sediment Control Ordinance in Article 16, Title 3, of the County Code, is incorporated by reference and made a part of the Building Code. If a conflict arises between the provisions of the Building Code and Article 16, Title 3, the more restrictive provision shall prevail."

## INTERNATIONAL RESIDENTIAL CODE AMENDMENTS

The provisions of the [2012] 2015 International Residential Code for One- and Two-Family Dwellings are amended, deleted, or corrected as follows and the following provisions shall supersede the part of the text of the [2012] 2015 International Residential Code for One- and Two-Family Dwellings as indicated:

(3) In section R202, after the definition of "Closet" insert:

"Code Official. The Director of Inspections and Permits, or duly authorized representative, charged with the administration and enforcement of this Code.";

AND, AFTER THE DEFINITION OF "SWEEP", INSERT:

"SWIMMING POOL. ANY STRUCTURE INTENDED FOR SWIMMING, RECREATIONAL BATHING, OR WADING THAT CONTAINS WATER OVER 24 INCHES (610 MM) DEEP. THIS INCLUDES IN-GROUND, ABOVE-GROUND, AND ON-GROUND POOLS; HOT TUBS; SPAS; AND FIXED-INPLACE WADING POOLS."

(4) In Table R301.2 (1): Under "Ground snow load", insert "25"; under "Speed (mph)", insert ["90"] "115"; under "Topographic effects", insert "no"; UNDER "SPECIAL WIND REGION", INSERT "NO"; UNDER "WIND-BORNE DEBRIS ZONE", INSERT "NO"; under "Seismic design category", insert "A"; under "Weathering", insert "Severe"; under "Frost line depth", insert "30 inches"; under "Termite", insert "Moderate - heavy"; after the column headed "Subject to damage from" add a new column with the heading "Decay" and under that heading insert "Slight - moderate"; under "Winter design temp", insert "17 degrees"; under "Ice barrier underlayment required", insert "Yes"; under "Flood hazards", insert "May 2, 1983"; under "Air freezing index", insert ">1500"; and under "Mean annual temp", insert "55 degrees".

(6) In section R313.1.1, after ["P2904",] "NFPA 13D", insert "[or NFPA 13D], NFPA 13R, or NFPA 13".

(7) In section R313.2, after "Dwellings" at the end of the first sentence, insert "and in existing one- and two-family dwellings where any construction, alteration, enlargement, replacement, or repair constitutes an increase in habitable square footage, which exceeds 50% of the existing habitable square footage, including bathrooms, closets, hallways, storage spaces and utility spaces. IF AN EXISTING STRUCTURE IS CURRENTLY SUPPRESSED, ANY ADDITION, ALTERATION, ENLARGEMENT, OR REPLACEMENT TO THE EXISTING STRUCTURE MUST BE SUPPRESSED IN ACCORDANCE WITH R313.2.1."[ and strike the exception in its entirety and substitute:

**Exception:** An automatic fire sprinkler system shall not be required for new structures or where any construction, alteration, enlargement, replacement, or repair constitutes an increase in habitable square footage, which exceeds 50% of the existing habitable square footage, including kitchens, bathrooms, closets, hallways, storage spaces and utility spaces on lots where the water and sewer plans received approval from the County prior to January 1, 2009.]

(8) In section R322.1.6, in the first sentence, after "[V Zones] R322.2).", insert:

"All electrical panelboards shall be elevated to a minimum of 3 feet above design flood elevation."

(9) In section R322.2.1.1, strike "to or"[ and substitute "1 foot"].

(11) In section R322.3.2.1.1.1, strike ["at or"] "TO OR" [and substitute "1 foot"].

(12) STRIKE SECTIONS R324.7 THROUGH R324.7.2.5 IN THEIR ENTIRETY.

(13) STRIKE SECTION R326.1 IN ITS ENTIRETY AND SUBSTITUTE:

**R326.1 GENERAL.** SWIMMING POOLS SHALL COMPLY WITH THE REQUIREMENTS OF SECTIONS R326.2 THROUGH R326.4 AND OTHER APPLICABLE SECTIONS OF THIS CODE.

**R326.2 DEFINITION.** THE FOLLOWING TERM IS DEFINED IN CHAPTER 2: SWIMMING POOL.

**R326.3 RESIDENTIAL SWIMMING POOLS.** RESIDENTIAL SWIMMING POOLS SHALL BE COMPLETELY ENCLOSED BY A BARRIER COMPLYING WITH SECTIONS R326.4.1 THROUGH R326.4.3.

**EXCEPTION:** A SWIMMING POOL WITH A POWER SAFETY COVER OR A SPA WITH A SAFETY COVER COMPLYING WITH ASTM F 1346 NEED NOT COMPLY WITH THIS SECTION.

**R326.3.1 BARRIER HEIGHT AND CLEARANCES.** THE TOP OF THE BARRIER SHALL BE NOT LESS THAN 48 INCHES (1219 MM) ABOVE GRADE MEASURED ON THE SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL. THE VERTICAL CLEARANCE BETWEEN GRADE AND THE BOTTOM OF THE BARRIER SHALL BE NOT GREATER THAN 2 INCHES (51 MM) MEASURED ON THE SIDE OF THE BARRIER THAT FACES AWAY FROM THE SWIMMING POOL. WHERE THE TOP OF THE POOL STRUCTURE IS ABOVE GRADE, THE BARRIER IS AUTHORIZED TO BE AT GROUND LEVEL OR MOUNTED ON TOP OF THE POOL STRUCTURE, AND THE VERTICAL CLEARANCE BETWEEN THE TOP OF THE POOL STRUCTURE AND THE BOTTOM OF THE BARRIER SHALL BE NOT GREATER THAN 4 INCHES (102 MM).

**R326.3.2 WIDELY SPACED HORIZONTAL MEMBERS.** WHERE THE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTAL MEMBERS IS 45 INCHES (1143 MM) OR MORE, SPACING BETWEEN VERTICAL MEMBERS SHALL BE NOT GREATER THAN 4 INCHES (102 MM). WHERE THERE ARE DECORATIVE CUTOUTS WITHIN VERTICAL MEMBERS, SPACING WITHIN THE CUTOUTS SHALL BE NOT GREATER THAN 13/4 INCHES (44 MM) IN WIDTH.

**R326.3.3 CHAIN LINK DIMENSIONS.** MESH SIZE FOR CHAIN LINK FENCES SHALL BE NOT GREATER THAN A 2 AND 1/4-INCH SQUARE (57 MM SQUARE) UNLESS THE FENCE IS PROVIDED WITH SLATS FASTENED AT THE TOP OR THE BOTTOM THAT REDUCE THE OPENINGS TO NOT MORE THAN 1 AND 3/4 INCHES (44 MM).

**R326.3.4 DIAGONAL MEMBERS.** WHERE THE BARRIER IS COMPOSED OF DIAGONAL MEMBERS, THE OPENING FORMED BY THE DIAGONAL MEMBERS SHALL BE NOT GREATER THAN 1 AND 3/4 INCHES (44 MM).

**R326.3.5 GATES.** ACCESS DOORS OR GATES SHALL COMPLY WITH THE REQUIREMENTS OF SECTIONS 3109.4.1.1 THROUGH 3109.4.1.6 OF THE INTERNATIONAL BUILDING CODE AND SHALL BE EQUIPPED TO ACCOMMODATE A LOCKING DEVICE. PEDESTRIAN ACCESS DOORS OR GATES SHALL OPEN OUTWARD AWAY FROM THE POOL AND SHALL BE SELF-CLOSING AND HAVE A SELF-LATCHING DEVICE. DOORS OR GATES OTHER THAN PEDESTRIAN ACCESS DOORS OR GATES SHALL HAVE A SELF-LATCHING DEVICE. RELEASE MECHANISMS SHALL BE IN ACCORDANCE WITH SECTIONS 1010.1.9 AND 1109.13 OF THE INTERNATIONAL BUILDING CODE. WHERE THE RELEASE MECHANISM OF THE SELF-LATCHING DEVICE IS LOCATED LESS THAN 54 INCHES (1372 MM) FROM THE BOTTOM OF THE DOOR OR GATE, THE RELEASE MECHANISM SHALL BE LOCATED ON THE POOL SIDE OF THE DOOR OR GATE 3 INCHES (76 MM) OR MORE BELOW THE TOP OF THE DOOR OR GATE, AND THE DOOR OR GATE AND BARRIER SHALL BE WITHOUT OPENINGS GREATER THAN 1/2 INCH (12.7 MM) WITHIN 18 INCHES (457 MM) OF THE RELEASE MECHANISM.

**R326.3.6 DWELLING WALL AS A BARRIER.** WHERE A WALL OF A DWELLING SERVES AS PART OF THE BARRIER, ONE OF THE FOLLOWING SHALL APPLY:

1. DOORS WITH DIRECT ACCESS TO THE POOL THROUGH THAT WALL SHALL BE EQUIPPED WITH AN ALARM THAT PRODUCES AN AUDIBLE WARNING WHEN THE DOOR OR ITS SCREEN, IF PRESENT, ARE OPENED. THE ALARM SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 2017. IN DWELLINGS NOT REQUIRED TO BE ACCESSIBLE UNITS, TYPE A UNITS, OR TYPE B UNITS, THE DEACTIVATION SWITCH SHALL BE LOCATED 54 INCHES (1372 MM) OR MORE ABOVE THE THRESHOLD OF THE DOOR. IN DWELLINGS REQUIRED TO BE ACCESSIBLE UNITS, TYPE A UNITS, OR TYPE B UNITS, THE DEACTIVATION SWITCH SHALL BE LOCATED NOT HIGHER THAN 54 INCHES (1372 MM) AND NOT LESS THAN 48 INCHES (1219 MM) ABOVE THE THRESHOLD OF THE DOOR.

2. THE POOL SHALL BE EQUIPPED WITH A POWER SAFETY COVER THAT COMPLIES WITH ASTM F 1346.

**R326.3.7 POOL STRUCTURE AS BARRIER.** WHERE AN ABOVE-GROUND POOL STRUCTURE IS USED AS A BARRIER OR WHERE THE BARRIER IS MOUNTED ON TOP OF THE POOL STRUCTURE, AND THE MEANS OF ACCESS IS A LADDER OR STEPS, THEN THE LADDER OR STEPS EITHER SHALL BE CAPABLE OF BEING SECURED, LOCKED OR REMOVED TO PREVENT ACCESS, OR THE LADDER OR STEPS SHALL BE SURROUNDED BY A BARRIER THAT MEETS THE REQUIREMENTS OF SECTIONS 3109.4.1.1 THROUGH 3109.4.1.8 OF THE INTERNATIONAL BUILDING CODE. WHEN THE LADDER OR STEPS ARE SECURED, LOCKED, OR REMOVED, ANY OPENING CREATED SHALL NOT ALLOW THE PASSAGE OF A 4-INCH-DIAMETER (102 MM) SPHERE.

**R326.4 INDOOR SWIMMING POOLS.** WALLS SURROUNDING INDOOR SWIMMING POOLS SHALL NOT BE REQUIRED TO COMPLY WITH SECTION 3109.4.1.8 OF THE INTERNATIONAL BUILDING CODE.

**R326.5 PROHIBITED LOCATIONS.** BARRIERS SHALL BE LOCATED SO AS TO PROHIBIT PERMANENT STRUCTURES, EQUIPMENT, OR SIMILAR OBJECTS FROM BEING USED TO CLIMB THE BARRIERS.

**R326.6 ENTRAPMENT AVOIDANCE.** SUCTION OUTLETS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ANSI/APSP-7.

[(12)] (14) After section [R323] R326, insert:

"**Section [R324] R327**
**Driveway Aprons and Driveways and Fences**

**[R324.1] R327.1 Driveway aprons.** Driveway aprons shall extend from street or alley pavements to the lot line and shall be constructed in accordance with the provisions of the standard specifications and details issued by the Department of Public Works.

**[R324.2] R327.2 Driveways.** Driveways shall extend from the lot line to the garage, carport, or parking space, and shall measure at least 9 feet in width. The maximum gradient change at vertical transitions shall be 20%. Vertical transitions shall be designed to prevent the undercarriage or bumper of a standard size car from contacting the driveway surface. Alignment shall be safe and convenient to back a car out, or an adequate turnaround shall be provided. No portion of the driveway shall exceed 14% gradient from the horizontal.

**[R324.3] R327.3 Driveway construction.** Driveways shall be constructed of concrete, blacktop, or other approved material to prevent spalling, erosion, and cracking.

**[R324.4] R327.4 Parking pads.** Two off-street parking pads shall be provided for each detached single-family home as defined by section 101.2.1 of the Construction Code. The minimum size per parking space is 9 feet in width and 18 feet in length.

**[R324.5] R327.5 Exception.** The provisions of this section do not apply to lots one acre or larger.

**[R324.6] R327.6 Fences.** All fences located on corner lots shall maintain a 25- foot setback from the apex of the intersecting streets."

[(13)] (15) In section R401.3 strike "The grade shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048 mm)." and substitute:

"The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than one unit vertical in 12 units horizontal (1:12) for a minimum distance of 5 feet (914 mm) measured perpendicular to the face of the wall or an approved alternate method of diverting water away from the foundation shall be used. Consideration shall be given to the possible additional settlement of the backfill when establishing the final ground level adjacent to the foundation."

[(14)] (16) In the exception to section R401.3, strike "6 inches (152 mm)" and substitute "5 inches" and strike "10 feet (3048 mm)" and substitute "5 feet".

[(15)] (17) In section R403.1, after "ACI332." insert "In all buildings a concrete-encased electrode shall be provided prior to the placement of concrete in accordance with section 250.52(a)(3) of the National Electrical Code, 2011 edition.

[(16)] (18) In section R403.1.4.1 Exceptions: 1., strike "600 square feet (56 m2)" and substitute "400 square feet".

[(17)] (19) After section R405.1, insert:

"**R405.1.1 Subsoil drainage systems.** Subsoil drains shall be required for all buildings having basements, cellars, crawl spaces, or floors below grade. Subsoil drains shall be located inside and outside of the foundation and shall be installed at or below the area to be protected. Drains shall discharge by gravity or mechanical means into an approved drainage system in accordance with section R405.1.2. Drains shall be perforated or open joint approved drain tile not less than 3 inches in diameter and be placed in gravel, slag, or crushed rock or other approved material at least one sieve size larger than the tile joint opening or perforations with a minimum of 4 inches surrounding the drain tile or pipe on all sides. Exterior drains shall have an approved filter material placed on top of the required gravel stone or crushed rock.

**R405.1.2 Sump pumps and pits.** Where subsoil drains do not discharge by gravity, the drains shall discharge to an accessible sump pit with an automatic electric pump. The sump pit shall be a minimum of 18 inches in diameter and 24 inches in depth, and be provided with a fitted cover. The sump pump shall have adequate capacity to discharge all water coming into the sump as it accumulates but in no case shall the capacity of the pump be less than 15 gallons per minute. The discharge from the pump shall be a minimum of 1 1/4 inches and shall have a union in the discharge piping to make the pump accessible for servicing. When not serving a continuous flowing spring or ground water the sump pump may discharge onto a splash block not less than 24 inches in length. The discharge pipe shall be located within 4 inches of the splash block and positioned to divert the flow parallel to the splash block. Subsoil drains and sump pump discharge may discharge to a properly graded open area provided the point of discharge is 5 feet from any property line. Where a continuous flowing spring or groundwater is encountered, subsoil and sump pump discharge lines must be piped to a storm drain or approved water course. When piped to a storm drain all drainage lines shall be provided with an accessible backwater valve.

**R405.1.3 Areaway drains.** All open subsurface space adjacent to a building serving as an exit or entrance shall be provided with a drain or drains. [Such areaway drains shall be of approved material in accordance with Chapter 30 of the Building Code and not less than 2 inches in diameter and shall discharge by gravity or mechanical means in accordance with section R405.1.2. No areaway drain may discharge into a subsoil drain. Areaway drains for areas exceeding 100

square feet shall be sized in accordance with the 2012 International Plumbing Code.] ALL AREAWAY DRAINS SHALL BE SOLID PVC OR EQUIVALENT AND SHALL DISCHARGE DIRECTLY TO A SUMP CROCK, DAYLIGHT, OR OTHER APPROVED MEANS. NO AREAWAY DRAIN MAY DISCHARGE INTO A SUBSOIL DRAIN. DRAINS SERVING AREAWAYS NOT EXCEEDING 100 SQUARE FEET SHALL HAVE A MINIMUM 2-INCH DIAMETER PIPE. AREAWAY DRAINS EXCEEDING 100 SQUARE FEET BUT NOT EXCEEDING 1,000 SQUARE FEET SHALL BE PROVIDED WITH A MINIMUM 3-INCH DIAMETER PIPE. AREAWAY DRAINS EXCEEDING 1,000 SQUARE FEET SHALL BE SIZED IN ACCORDANCE WITH THE 2015 INTERNATIONAL PLUMBING CODE.

**R405.1.4 Window well drains.** Window well areaways shall have drains. Window well areaways 10 square feet or less may discharge to the subsoil drain through a 2-inch minimum diameter pipe. Drains for window well areaways greater than 10 square feet shall be installed in accordance with section [R405.1.2] R405.1.3.

**R405.1.5 Foundation weep holes.** Where subsoil drains are required by section R405.1.1, foundations of hollow core masonry shall have foundation weep holes. Weep holes shall be placed a maximum of 4 foot O/C intervals and shall discharge into the aggregate of the interior subsoil drainage system."

[(18)] (20) In section R405.1.1, strike "R405.1.1" and substitute "R405.1.6" and strike "either" and, after "interior", strike "or" and substitute "and".

[(19)] (21) In section R406.1 after "enclose", insert "non-habitable and non-usable".

[(20)] (22) In section R406.2, strike "In areas where a high water table or other severe soil-water conditions are known to exist," and capitalize "exterior".

[(21)] (23) In section M1305.1.3, in the last sentence, after "appliance.", insert:

"Access to the attic opening shall be provided by a permanent or pull down stairway in all new construction."

[(22)] (24) In section M1307.5, strike "Chapters 14, 15, 19, 20, and 34 through 43 of this Code" and substitute "the National Electrical Code, [2011] 2014 edition".

[(23)] (25) After section M1307.5 insert:

"**M1307.5.1 Final disconnect means for central heating and air conditioning systems.** Central heating or central air conditioning systems shall be wired through a final disconnect means. The final disconnect means shall be located at the equipment being installed."

[(24)] (26) In section P2603.5, strike "not less than 12 inches (305 mm) deep and not less than".

[(25)] (27) In section P2603.5.1, in the third line, strike "[number] inches (mm)" and substitute "12 inches" and, in the fifth line, strike "[number] inches (mm)" and substitute "18 inches".

(28) AFTER SECTION P2604.2.4, INSERT:

"**P2604.3 TRACER WIRE.** NONMETALLIC SANITARY SEWER AND NONMETALLIC WATER SUPPLY PIPING THAT CONNECTS TO PUBLIC SYSTEMS SHALL BE LOCATABLE. AN INSULATED COPPER TRACER WIRE, 10 AWG MINIMUM IN SIZE AND SUITABLE FOR DIRECT BURIAL OR AN EQUIVALENT PRODUCT SHALL BE UTILIZED. THE WIRE SHALL BE INSTALLED IN THE SAME TRENCH AS THE SEWER OR WATER SUPPLY PIPING WITHIN 12 INCHES (305 MM) OF THE PIPING AND SHALL BE INSTALLED FROM WITHIN FIVE FEET OF THE BUILDING WALL TO THE POINT WHERE THE BUILDING SEWER OR WATER SUPPLY SYSTEM CONNECTS WITH THE PUBLIC SYSTEM. AT A MINIMUM, ONE END OF THE WIRE SHALL TERMINATE ABOVE GRADE IN AN ACCESSIBLE LOCATION THAT IS RESISTANT TO PHYSICAL DAMAGE, SUCH AS WITH A CLEANOUT OR AT THE BUILDING WALL."

[(26)] (29) In P2903.4, after ["P2903.4.1."] "P2903.4.2.", insert:

"Thermal expansion shall be provided for all closed potable water systems."

[(27)] (30) After section ["P2903.4.1"] "P2903.4.2", insert:

"**[P2903.4.2] P2903.4.3 Non-pressurized expansion tanks.** Non-pressurized expansion tanks shall be securely fastened to the structure and supported to carry twice the weight of the tank filled with water. Provisions shall be made for draining non-pressurized tanks without emptying the system.

**[P2903.4.3] P2903.4.4 Pressurized expansion tanks.** Pressurized expansion tanks shall be consistent with the volume and capacity of the system. Tanks shall be capable of withstanding a hydrostatic test pressure of two and one-half times the allowable working pressure of the system.

**[P2903.4.4] P2903.4.5 Minimum capacity.** The minimum capacity of expansion tanks shall be determined from the manufacturer's specifications."

[(28)] (31) After section [P2905.4] P2906.5, insert:

"Underground water service piping for public water systems shall be Type L copper. Private water service piping shall be Type K underground and Type L for above ground installations."

[(29)] (32) After section [P2905.4.2] P2906.5, insert:

"**[P2905.4.3] P2906.5.1 Water distribution piping.** Inaccessible water distribution piping under slabs shall be copper water tube minimum Type L for public water systems and Type K for private water systems, brass, ductile iron pressure pipe, cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pressure pipe, chlorinated polyvinyl chloride (CPVC) or polybutylene (PB) or cross-linked polyethylene (PEX) plastic pipe or tubing, all

to be installed with approved fittings or bends. The minimum pressure rating for plastic pipe or tubing installed under slabs shall be 100 psi at 180 F (689k Pa at 82 C)."

[(30)] (33) After section P3007.1, insert:

"**P3007.1.1 Dwellings.** Dwellings served entirely by pumping systems shall use [alternating duplex] SIMPLEX pumping equipment with an integral alarm system."

[(31)] (34) Strike Chapters 34 through 43 in their entirety.

[(32)] (35) Appendix I Chapter 44 under ICC Strike "International Private Sewage Disposal Code" and substitute "Anne Arundel Private Sewage Code and Well Code".

[(33)] (36) In section AI101.1, strike "International Private Sewage Disposal Code" and substitute "the Anne Arundel County Private Sewage Disposal and Well Code".

## ENERGY CONSERVATION CODE AMENDMENTS

The provisions of the [2012] 2015 International Energy Conservation Code are amended, deleted, or corrected as follows and the following provisions shall supersede the part of the text of the [2012] 2015 International Energy Conservation Code as indicated:

### INTERNATIONAL EXISTING BUILDING CODE AMENDMENTS

THE PROVISIONS OF THE INTERNATIONAL EXISTING BUILDING CODE, 2015 EDITION, ARE AMENDED, DELETED, OR CORRECTED AS FOLLOWS, AND THE FOLLOWING PROVISIONS SHALL SUPERSEDE THE PART OF THE TEXT OF THE INTERNATIONAL EXISTING BUILDING CODE, 2015 EDITION, AS INDICATED:

(1) STRIKE CHAPTER 1 IN ITS ENTIRETY AND SUBSTITUTE "CHAPTER 1 – CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS".

(2) IN SECTION 202, IN THE DEFINITION OF "CODE OFFICIAL", STRIKE "THE OFFICER OR OTHER DESIGNATED AUTHORITY CHARGED WITH THE ADMINISTRATION AND ENFORCEMENT OF THIS CODE, OR A DULY AUTHORIZED REPRESENTATIVE" AND SUBSTITUTE "THE DIRECTOR OF INSPECTIONS AND PERMITS, OR DULY AUTHORIZED REPRESENTATIVE, CHARGED WITH THE ADMINISTRATION AND ENFORCEMENT OF THIS CODE".

## ELECTRICAL CODE AMENDMENTS

The provisions of the National Electrical Code, [2011] 2014 edition, are amended, deleted, or corrected as follows and the following provisions shall supersede the part of the text of the National Electrical Code, [2011] 2014 edition, as indicated:

## FUEL GAS CODE AMENDMENTS

The provisions of the [2012] 2015 International Fuel Gas Code are amended, deleted, or corrected as follows and the following provisions shall supersede the part of the text of the [2012] 2015 International Fuel Gas Code as indicated:

## MECHANICAL CODE AMENDMENTS

The provisions of the [2012] 2015 International Mechanical Code are amended, deleted, or corrected as follows and the following provisions shall supersede the part of the text of the [2012] 2015 International Mechanical Code as indicated:

(4) In section 202, after the definition of ["Direct-Vent Appliances"] "DISCRETE PRODUCT", insert:

"**Domestic Refrigeration.** A refrigeration system having a rating of less than five horsepower."

## PLUMBING CODE AMENDMENTS

The provisions of the [2012] 2015 International Plumbing Code are amended, deleted, or corrected as follows and the following provisions shall supersede the part of the text of the [2012] 2015 International Plumbing Code as indicated:

(7) AFTER SECTION 306.4, INSERT:

"**306.5 TRACER WIRE.** NONMETALLIC SANITARY SEWER AND NONMETALLIC WATER SUPPLY PIPING THAT CONNECTS TO PUBLIC SYSTEMS SHALL BE LOCATABLE. AN INSULATED COPPER TRACER WIRE, 10 AWG MINIMUM IN SIZE AND SUITABLE FOR DIRECT BURIAL OR AN EQUIVALENT PRODUCT SHALL BE UTILIZED. THE WIRE SHALL BE INSTALLED IN THE SAME TRENCH AS THE SEWER OR WATER SUPPLY PIPING WITHIN 12 INCHES (305 MM) OF THE PIPING AND SHALL BE INSTALLED FROM WITHIN FIVE FEET OF THE BUILDING WALL TO THE POINT WHERE THE BUILDING SEWER OR WATER SUPPLY SYSTEM CONNECTS WITH THE PUBLIC SYSTEM. AT A MINIMUM, ONE END OF THE WIRE SHALL TERMINATE ABOVE GRADE IN AN ACCESSIBLE LOCATION THAT IS RESISTANT TO PHYSICAL DAMAGE, SUCH AS WITH A CLEANOUT OR AT THE BUILDING WALL."

[(7)] (8) In section 309.2, strike "3. Covers on potable water wells shall be sealed, except where the top of the casing well or pipe sleeve is elevated to at least 1 foot (305 mm) above the design flood elevation."

[(8)] (9) After section 403.5, insert:

"403.6 Public swimming pools and spas. Public swimming pools and spas shall conform to this Code and the requirements set forth in COMAR, 10.17.01 and Article 11, Title 14, of the County Code."

(10) IN SECTION 410.4, DELETE "NOT MORE THAN 50 PERCENT OF".

[(9)] (11) In section 417.3, strike "1 1/2 inches (38 mm)" and substitute "2 inches".

[(10)] (12) After section 504.7.2, insert:

"**504.8 Thermal expansion.** Thermal expansion shall be provided for all closed potable water systems.

**504.8.1 Non-pressurized expansion tanks.** Non-pressurized expansion tanks shall be securely fastened to the structure and supported to carry twice the weight of the tank filled with water. Provisions shall be made for draining non-pressurized tanks without emptying the system.

**504.8.2 Pressurized expansion tanks.** Pressurized expansion tanks shall be consistent with the volume and capacity of the system. Tanks shall be capable of withstanding a hydrostatic test pressure of 2 1/2 times the allowable working pressure of the system.

**504.8.3 Minimum capacity.** The minimum capacity of expansion tanks shall be determined from the manufacturer's specifications."

[(11)] (13) In section 602.3.3, strike "connection to the plumbing system" and substitute "the issuance of the certificate of occupancy".

[(12)] (14) After section 605.3, insert:

"Underground water service piping for public water systems shall be Type L copper. Private water service piping shall be Type K underground and Type L for above ground installations."

[(13)] (15) After section 605.4, insert:

"**Section 605.4.1 Under concrete slabs.** Inaccessible water distribution piping under slabs shall be copper water tube minimum Type L for public water systems and Type K for private water systems, brass, ductile iron pressure pipe, galvanized steel pipe, chlorinated polyvinyl chloride (CPVC) or crosslinked polyethylene (PEX) plastic pipe or tubing - all to be installed with approved fittings or bends. The minimum pressure rating for plastic pipe or tubing installed under slabs shall be 100 PSI at 180°F (689 KPA at 82°C)."

[(14)] (16) Strike section 608.17 AND TABLE 608.17.1 [its] IN THEIR entirety.

[(15)] (17) In section 701.2, strike "International Private Sewage Disposal Code" and substitute "the Anne Arundel County Private Sewage Disposal and Well Code".

[(16)] (18) After section 712.4.2, insert:

"**712.4.3 Structures.** Structures served entirely by pumping systems shall use alternating duplex pumping equipment with an integral alarm system."

[(17)] (19) In section 903.11 insert "6" in the space indicated and strike "(mm)".

[(18)] (20) After section 1003.3.5, insert:

"**1003.3.6 Location.** All grease [traps] INTERCEPTORS shall be located outside the building served and shall be accessible for servicing."

SECTION 3. *And be it further enacted*, That this Ordinance shall take effect 45 days from the date it becomes law.

READ AND PASSED this 1st day of February, 2016

By Order:

Elizabeth E. Jones
Administrative Officer

PRESENTED to the County Executive for his approval this 2nd day of February, 2016

Elizabeth E. Jones
Administrative Officer

APPROVED AND ENACTED this 3 day of February, 2016

Steven R. Schuh
County Executive

EFFECTIVE DATE: March 19, 2016

**I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT COPY OF BILL NO. 123-15. THE ORIGINAL OF WHICH IS RETAINED IN THE FILES OF THE COUNTY COUNCIL.**

**Elizabeth E. Jones**
**Administrative Officer**